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ABSTRACT

A COMPUTER-ASSISTED APPROACH TO
MICRO-ANALYSIS OF MELODIC LINES

by

David Alan Stech

The purpose of this thesis was to explore one approach to micro-analysis of melodic lines through the development and use of a computer program which would help the analyst locate specific types of melodic patterns. The program also provided supplementary information about the frequency-of-occurrence of each melodic interval from the unison through two octaves.

Specifically, the program designated the location of any of the following types of melodic patterns depending upon which of twenty-six optional analyses were selected by the program user:

- 1) intervallically exact Original (O), Inversion (I), Retrograde (R), and Retrograde-Inversion (RI) pitch relationships;
- 2) tonal (i.e., direction only) O, I, R, and RI pitch relationships;
- 3) O or R rhythm regardless of pitch content (limited to analysis of rational rhythms only); and,
- 4) O or R rhythm appearing with any of the pitch relationships described in (1) or (2).

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The program analyzed melodic excerpts by first assigning identification numbers to various notes of the melody. These numbers were then used to designate the location of related melodic events in pattern-statements which used the following format:

"NOTES A TO B RELATED TO NOTES C TO D, TEST X, LENGTH Y,"

where A and B, and C and D, designated the beginning and end points of two melodic events contained in the music excerpt under analysis, X designated the relationship selected by the program user, and Y designated the number of notes contained in each event. The program was able to locate nearly all of the relationships fitting the criteria for each of twenty-six analyses regardless of length of pattern, and regardless of notational differences which might have caused certain relationships to go unnoticed by a music analyst. The number of pattern-statements located for each analysis depended upon the length of the excerpt, the melodic construction of the excerpt itself, and the level of sophistication of the patterns selected by the program user.

The results of each computer analysis were presented in two ways: first, in a series of lists which presented the pattern-statements in order of increasing length from three notes to as long as was necessary to accommodate the lengthiest pattern; and second, in a format which showed the subpatterns which appeared most frequently within the lengthiest pattern (or patterns) found in the analysis.

Melodic pattern analysis was chosen as the subject for development of the program, because the importance of perception of melodic events to both the listener and the composer has been suggested by composers, music analysts, and other investigators. It seemed likely, therefore,

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that the development of a computer program to assist in identifying certain types of melodic patterns might be of value to a number of areas of study.

The program was written in the FORTRAN IV program language. Since none of the existing methods used for converting music to computer input data was found to be applicable to this project, another encoding procedure was developed especially for use with this program. A source listing of the program, as adapted for use on an IBM 360 computer, was included with the thesis.

The thesis was limited to this one approach of analyzing melodic lines. The program was limited in the following ways:

- 1) it was limited to the analysis of strictly linear music;
i.e., music in which a fixed number of voices was defined;
- 2) no vertical or harmonic analysis was attempted; and
- 3) the program was not designed to read or analyze irrational rhythms.

Music examples by Varèse, Hindemith, and Dunstable were encoded and analyzed in order to illustrate the type of information which the program provided and how the music of different stylistic periods could be analyzed with the program.

**A COMPUTER-ASSISTED APPROACH TO
MICRO-ANALYSIS OF MELODIC LINES**

by

David Alan Stech

A DISSERTATION

Submitted to

Michigan State University

in partial fulfillment of the requirements

for the degree of

DOCTOR OF PHILOSOPHY

Department of Music

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I gratefully acknowledge the Computer Institute for Social Science Research at Michigan State University, and its former Director, Dr. Charles O. Wrigley, for providing financial support during the early stages of the research, and, Mr. Ivan Frohne, for providing me with a great deal of assistance during the latter stage of the computer program development at the University of Alaska, Fairbanks.



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CHAPTER I

INTRODUCTION

Statement of the problem

Analyzing and defining the factors which affect the succession of tonal events in a musical composition is a complex task. It requires the analyst to evaluate particular musical events within the context of the prevailing musical style and, as best he can, abstract those elements which appear to affect significantly the aural logic of the composition. Through such a method, the analyst hopes to define more clearly, in his own mind, how successfully the composer develops his musical material without violating his own sense of musical logic or order.

The depth of study required for a musical analysis is determined by the particular goals of the analyst. If the analyst wishes to draw a few general conclusions concerning a large number of compositions, then he may not need to analyze each work in detail to complete his task. If, however, his task is to analyze a particular composition with respect to its formal structure as well as its harmonic and thematic content, then a more detailed analytical approach will be required. The analyst who wishes to delve still further into the smaller determinations of musical style will probably draw his conclusions after examining still smaller harmonic and melodic usages. It is this most detailed form of analysis, or micro-analysis, with which this study is concerned.

Music micro-analysis brings with it a number of problems, some of which are so great a burden that this type of analysis is not frequently

employed. The most serious problem associated with such an approach is the extraordinary amount of time needed. Granted the fact that all detailed music analysis requires time, a music excerpt of moderate size can suddenly appear enormous when the analytical process requires the examination and labeling of many small bits of information. Another problem associated with these time requirements is that such a minute and detailed examination of music is a physically tiring process. As a consequence, fatigue can affect the accuracy of the analysis. A third problem which must be considered has to do with the musical literacy of the analyst. If, for example, the analyst is attempting to tabulate some frequently-used rhythmic patterns from the Baroque era, his knowledge of Baroque music can both help and hinder his ability to conduct the analysis. If he has examined a great deal of Baroque music, he may be able to tabulate relatively quickly the patterns which are most familiar to him. However, rhythmic patterns which are not so familiar may be harder for him to locate, or may possibly escape his notice altogether.

With respect to the first two problems, it is clear that unless the analyst has an extraordinary amount of time and energy at his disposal, micro-analytical studies cannot be undertaken unless the amount of music to be studied is kept small. In addition, such analyses must have a great enough probability for obtaining usable results to warrant such projects; speculative or exploratory analysis, in which the outcome is less than certain, cannot be undertaken, if the likelihood of positive results appears too insignificant to justify the effort.

Many prominent authors commenting on music have pointed out the relative importance of smaller musical patterns and their structural

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importance to the composition in which they are found. Some psychologists have also commented upon the importance of small musical patterns and their possible effect upon our perception of larger tonal groupings. Considering the potential importance of such patterns, it would seem likely that if some of the practical problems associated with locating such patterns could be reduced, further exploration in this area could be undertaken.

The application of computer technology to this task can provide assistance with respect to some of the problems previously mentioned. The ability of a computer to process numeric or symbolic information quickly and accurately is well known. However, there are very few computer programs presently available to provide assistance to those who wish to explore the potential of music micro-analysis. The purpose of this thesis, then, is to provide the music analyst with a computer program which will assist him in exploring one possible approach to the problem of abstracting information concerning certain types of melodic patterns in linear musical compositions.

The computer program designed for this thesis performs a number of different analytical tasks. Through his selection of twenty-six different options, the program user may call for lists of identical or similar repeated melodic patterns which show the following relationships to a prior statement of the pattern: original, inversion, retrograde, or retrograde inversion. The computer program not only lists the number of events for the specified category, but also indicates precisely where each of the patterns was found. The user may also determine the locations of patterns which exhibit (within limitation) the presence of exact rhythm or exact rhythm retrograde. It is also possible

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for the analyst to request locations of combinations of rhythmic and tonal elements within one group if he suspects that such patterns may exist; e.g., call for a list of melodic patterns which exhibit both exact rhythms and exact melodic inversion with respect to a previously stated pattern. In addition to these options, each analysis provides tables which list the frequency-of-occurrence of melodic intervals from the unison through two octaves.

The program has been designed so that no computer programming experience is needed to use it. In addition, the process of translating the musical score into the form needed for computer input may be accomplished by anyone with a knowledge of the fundamentals of music. It is hoped that the availability of this program will, in part:

- 1) assist and encourage the music analyst to employ micro-analysis in his study of melody by reducing some of the time and accuracy limitations which have previously hindered such analysis;
- 2) provide the analyst with an analytical tool which has sufficient flexibility to justify the amount of time needed to prepare the musical score for computer input; and
- 3) provide a tool which will locate musical patterns without requiring any prior analysis by the music analyst, so that a user's unfamiliarity with a particular musical style will not adversely affect the result of the pattern search.

Limitations of study

The thesis is limited in the following ways:

- 1) It explores only one possible approach to the task of analyzing

- melodic lines; no vertical or harmonic analysis is attempted.
- 2) The computer program is designed to analyze linear music only; i.e., music in which a precise number of voice parts is defined.
 - 3) The computer program is limited as to the complexity of the rhythms it can accept for analysis. These limitations are defined later in the thesis.
 - 4) The computer program locates musical patterns only if they fit the exact category of physical construction specified by the program. No measurement or simulation of aural perception is attempted.
 - 5) The computer program is limited with respect to the amount of data it can process, and also with respect to the thoroughness of the pattern analyses it performs. These limitations are described later in the thesis.

Definition of terms

Encoding refers to the process of translating the musical score into a form suitable for computer input.

Computer refers to a high-speed electronic machine which processes numeric or symbolic data according to directions specified by a computer program.

Computer program is an ordered list of instructions which generate a sequence of machine instructions to achieve a specified result. Computer programs are sometimes referred to as algorithms.

Irrational rhythm refers to rhythms which are not normal subdivisions

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of the prevailing meter; e.g., in simple meter, subdivisions of 3, 6, 7, or 13 are considered irrational subdivisions; similarly, in compound meter, 2, 4, 7, or 13 would also be considered irrational subdivisions.

Linear musical composition is defined, for purposes of this thesis, as a work in which a precise number of voice parts is present throughout the work.

Music micro-analysis refers to the process of abstracting information about musical style by means of analysis of small musical occurrences.

The importance of small repeated musical patterns

It is not yet possible to define accurately the mental processes used by music analysts or to predict the precise outcome of their analytical studies. This is at least partly due to the fact that each analyst is influenced not only by his own perception of the music under current study but also by his perception of music literature which he has previously studied. When music analysts subject a given work to detailed examination, they frequently note what they perceive to be similarities or contrasts in musical usage. Such an analytical approach would seem to be based on their experience that musical compositions which sound logically organized consist, not of a great number of totally unrelated musical statements, but rather of a more limited number of ideas which tend to reappear in reshaped forms.

Again, given the uniqueness of each musical analyst, it is impossible to predict with precision which tonal relationships he will perceive as transformed, developed, or other modified versions of earlier

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heard musical material. It is clear, however, that any perceived transformation, development, or other musical variant of some earlier musical fragment implies repetition of some similar musical element. In the case of melodic writing, Heinrich Schenker believed that such repetition must occur within close proximity to the first musical occurrence of a pattern to be perceived as a motif:

Any series of tones may become a motif. However, it can be recognized as such only where its repetition follows immediately. As long as there is no immediate repetition, the series in question must be considered as dependent part of a greater entity

Only by repetition can a series of tones be characterized as something definite. Only repetition can demarcate a series of tones and its purpose. Repetition thus is the basis of music as art. It creates musical form, just as the association of ideas from a pattern in nature creates the other forms of art.¹

The Hungarian composer Alois Hába consciously attempted to compose music in such a manner to avoid musical repetition of any type. Karl Eschman commented upon one such attempt:

Let us consider . . . Alois Hába's claim that in his Second String Quartet he has arrived at a style distinguished by "free arrangement of the thoughts, by the complete lack of repetition or of transposition of shorter fractional parts." When we examine his Quartet we find, nevertheless, that repetition is present both in the use of rhythmic figures and of melodic fractions. In the sixty-two measures of this movement Hába uses quarter-tones throughout a range extending from c to g' — perhaps in an effort to avoid repetition. The quarter-tones, however, merely double the material available and do not solve the formal problem of constructing a melody without some repetition in design.²

¹Heinrich Schenker, Harmony, trans. by Elisabeth Mann Borgese (Chicago: University of Chicago Press, 1954), pp. 4-5.

²Karl Eschman, Changing Forms in Modern Music (Boston: E. C. Schirmer Music Company, 1945), pp. 19-20.

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Eschman later concluded: "There remain the two requirements for the production of any form: some differentiation of materials, and some relation of these differentiated materials by repetition."³

It is not the purpose of this thesis to suggest that composers of well-organized music consciously attempt to construct their thematic or rhythmic variants, although such an approach would certainly be possible. It seems more likely that small musical patterns may frequently occur as a result of unconscious effort within a larger structure, such as a musical phrase. Rudolph Reti speculated upon how he believed a composer varied his materials:

. . . [T]he composer, of course, does not produce such a feature "theoretically," first deciding, as it were, upon an "inversion" and then trying to find out how it should read. No, whenever a theme rises in the ear of a structurally trained composer, all kinds of possible transformations will at once flash across his mind. If among these, as in this individual instance, the inversion seems the most fitting, he would accept it as a basis but then shape the new theme as freely as his imagination requires, not caring, indeed, not wishing, that the detail of the second theme should strictly correspond to the first.⁴

Psychologists Herbert Simon and Richard Sumner are conducting research into the development of a pattern-description language. They anticipate using such a language to acquire information useful for a number of areas of study. Their goals reflect a psychologist's view of the importance of musical patterns:

One of the purposes of analyzing musical structure and form is to discover the patterns that are explicit or implicit in musical works. Pattern in music is generally described

³Ibid., p. 23.

⁴Rudolph Reti, The Thematic Process in Music (London: Faber and Faber, 1961), p. 70.

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific information required.

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in ordinary language, supplemented by technical musical terms: for example, "the movement is in sonata form," . . . "the chord is a G seventh," "the slow movement is written in 3/4 time." The pattern description language . . . may prove useful both in psychology and in music theory. As a tool in psychology, it can be used to try to arrive at an understanding of the cognitive activity of the music listener. As a tool in music theory, it may be used to provide rigorous descriptions of musical pattern as a prerequisite for the characterization and comparison of style.⁵

There are several published comments which seem to support the need for analysis of small musical patterns. Béla Bartók believed that such analysis was essential for a complete understanding of folk music:

Only a systematically scientific examination of the morphological aspects of folk music material (consisting first of grouping the material according to certain methods, and then, of describing the typical forms and structures which will appear in a material thus grouped) will enable us to determine clearly the types and to draw various conclusions concerning transformation, migration of melodies, their connection with foreign materials, etc. . . .⁶

Herbert Eimert has also recognized the need for such analysis in twelve-tone music: "It will be clear that the interval and row analysis does not say anything about the musical meaning of the piece. . . . [T]he row analysis must be supplemented by motivic and thematic analysis."⁷

Louis Milic has commented upon the importance of smaller patterns to study in the arts and letters and how the computer may be useful in such studies:

⁵ Herbert A. Simon and Richard K. Sumner, "Pattern in Music," in Formal Representation of Human Judgment, ed. by Benjamin Kleinmuntz (New York: John Wiley and Sons, Inc.: 1968), p. 219, p. 250.

⁶ Béla Bartók, Rumanian Folk Music, ed. by Benjamin Suchoff (3 vols.: The Hague: Martinus Nijhoff, 1967), back portion of dust cover.

⁷ Herbert Eimert, Lehrbuch der Zwölftontechnik (Wiesbaden: Breitkopf and Haertel, 1952), as cited by Heinrich Lemacher and Hermann Schroeder, Musical Form, trans. by Robert Kolben (Cologne: Musikverlag Hans Gerig, 1967), p. 100.

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. . . [U]nderstanding in the arts and letters is based upon perception, identification, and recognition of patterns. But the patterns must be small and traditional enough to be perceived by the human apparatus. . . . Unlike the human perceiver, however, the computer can be made to detect the longest and best-concealed pattern, no matter how random an appearance it presents to the human eye. Thus we must learn to ask it larger questions than we can answer and to detect what escapes our un-aided senses. This may involve not only proposing old questions in new ways but even thinking up new questions. The computer can be made an extension of man only if it opens avenues we have not suspected the existence of.⁸

It seems logical to conclude that further research into the nature of small musical patterns may give us insight into the mental processes of both the listener and the composer.

Related research

Various pieces of related research have been examined in connection with this thesis. This research was studied for the following reasons:

- 1) to gain an overview of the current state of progress with respect to computer-assisted studies in micro-analysis;
- 2) to see how the musical data were prepared for use with such studies; and
- 3) to gain an insight into the problems and limitations of micro-analytical study and to determine some of the types of musical conclusions which may be drawn from such methods.

This section will begin with a brief examination of some of the research material considered relevant to this study. Conclusions and observations will then be made considering the points previously mentioned. It should be noted that not all of the studies examined were computer-assisted,

⁸ Louis T. Milic, "The Next Step," Computers and the Humanities, Vol. 1, No. 1 (September, 1966), pp. 4-5.

and only a small part of the research examined will be discussed below.

In 1937, Otto Ortmann conducted a study which seems to have gone unnoticed by recent scholars.⁹ He examined the vocal melodies of Schumann, Brahms, and Richard Strauss to determine whether the frequency-of-occurrence for various melodic intervals was a determinant of their vocal melodic style (independent of rhythm and text considerations). He conducted his study on 48 songs of Schumann, 38 songs of Brahms, and 40 songs of Strauss. His conclusions were that a composer's style is partially reflected by the frequency with which various intervals were used. He noted that Schumann's melodies were characterized by a high frequency of unisons, an absence of wide intervals, an absence of chromatic inflection, and a frequency order (from most to least frequent) of unison, major second, and minor second; that Brahms' melodies employed a low frequency of unisons, a preference for thirds, a relatively high frequency of chromatic inflection, and a frequency order of major second, minor second, and unison; and that Strauss' melodies exhibited a high frequency of wide intervals and a lack of uniformity in any frequency order.¹⁰

This type of interval study has been repeated by later researchers with different types of music; however, Ortmann's insight into the problem was impressive, considering the year in which the study was conducted. He noted that, since an interval profile for any composer would be influenced by the type of instrumentation used, and since vocal melodies would be influenced by the text, it would be necessary to use

⁹Otto Ortmann, "Interval Frequency as a Determinant of Melodic Style," *Peabody Bulletin* (December, 1937).

¹⁰Ibid., p. 10.

large samples of music for such studies. He also stated that a high frequency-of-occurrence for a particular interval did not necessarily mean that the interval had the strongest musical effect. This, he believed, would be dependent upon the distribution of the prominent interval throughout the excerpt. He also noted that the high frequency-of-occurrence of smaller intervals over larger ones could not be attributed to any particular composer, but was instead a characteristic of the vocal style of the period. The strength of Ortmann's study lies in his realization of its limitations:

The individuality or style of a composer is necessarily contained in the melodic, harmonic, and rhythmic elements of his works, although to these should be added any characteristic tempi, phrasings and dynamics. Melody, harmony, and rhythm -- since they are simultaneously present -- must be interactive, and for any adequate study of style all three must be analyzed. Any attempt, therefore, to trace style in a single element must remain a partial analysis, giving but an incomplete picture. Nevertheless, such an analysis will show to what extent the particular element studied contributes to the style.¹¹

A much more familiar study appeared in 1947 as part of Allen McHose's text, The Contrapuntal Harmonic Technique of the 18th Century.¹²

Since this text is well known, the principles and conclusions contained in it need not be repeated here. It should be pointed out, however, that the research results upon which the book was based were obtained through methods which required the statistical tabulation of different types of root movements, harmonic inversions, chord doublings, and voice-leading as exhibited in the chorales of J. S. Bach and other

¹¹ Ibid., p. 3.

¹² Allen Irvine McHose, The Contrapuntal Harmonic Technique of the 18th Century (New York: Appleton Century Crofts, Inc., 1947).

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composers. On the basis of this analysis, which certainly took many man-hours to complete, McHose was able to formulate his principles and conclusions concerning Bach's contrapuntal-harmonic style. The pedagogical influence of this text and McHose's conclusions concerning Bach's chorale style are well established; the purpose of mentioning his work in this study is to remind the reader that his results were based upon one of the most successful micro-analytical studies ever conducted.

While the McHose study limited itself to the task of defining the most characteristic elements of Bach's harmonic style, it has since been shown that it is possible to measure changes within a harmonic style through the use of such procedures. Dean Wilson demonstrated this possibility in his study of the harmonic content of the six symphonies of Carl Nielsen.¹³ The task, which required the detailed analysis of twenty-two separate movements, resulted in the labeling of more than 12,000 chords and 10,000 root movements as well as further subclassification of these entities according to their construction and type of movement, respectively. By comparing the frequency with which various sonorities and root movements appeared in each symphony, Wilson was able to notice the gradual dissolution of some prominent characteristics of Nielsen's harmonic style as well as the simultaneous emergence of new harmonic characteristics in his style. He noted, for instance, the decrease in the use of major-minor and fully diminished seventh chords, and an increase in the use of the diminished-minor seventh chord from the

¹³Dean C. Wilson, "An Analytical and Statistical Study of the Harmony in Carl Nielsen's Six Symphonies" (Unpublished Ph.D. dissertation, Michigan State University, 1967).

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first through the fourth symphonies.¹⁴ He further observed how certain non-harmonic tones in the early symphonies eventually emerged as part of a quartal harmonic usage,¹⁵ and how other non-harmonic tones involving cross-relations appeared as constituent parts of a more complex harmonic language in later symphonies.¹⁶

While the process of labeling and categorizing specific chords and root movements must have been a lengthy one for this study, such an organized and thorough approach provided the analyst with a strong statistical base from which a more objective and detailed measure of the composer's change in harmonic style could be measured. Studies such as this, which base their conclusions upon many specific observations, are more preferable to some scholars than analytical studies which base their conclusions upon a less rigorous and more cursory examination of the music.

In contrast to the studies previously mentioned, from which conclusions concerning specific stylistic traits were derived, William Paisley, a communications specialist, conducted a study in which he attempted to distinguish between the styles of composers without attempting to define particular stylistic traits.¹⁷ The premise of his study was the belief, shared with other scholars, that clues to

¹⁴Ibid., p. 393.

¹⁵Ibid., p. 391.

¹⁶Ibid., p. 393.

¹⁷William J. Paisley, "Identifying the Unknown Communicator in Painting, Literature, and Music: The Significance of Minor Encoding Habits," Journal of Communication, Vol. 14, No. 4 (December, 1964), pp. 219-237.

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identifying the style of a work are contained, not in the most prominent aspect of the work, but rather in the "minor encoding habits which are inconspicuous in the work and do not carry any burden of meaning"¹⁸; e.g., an author's preference for using particular conjunctions more than others, or the way in which an artist sketches in the background or filler material.

The purpose of his study was to see whether it would be possible to identify with probable certainty the composer of an "unknown" musical excerpt given the fact that the excerpt was written by one of seven composers. The identification method required that the statistical characteristics of the unknown excerpt be compared with that of the known excerpt to see whether they had similarity to indicate probable authorship. Statistical tests (measuring pitch changes only) were conducted upon melodic excerpts of Bach, Handel, Haydn, Mozart, Beethoven, Mendelssohn, and Brahms which were randomly drawn from Barlow and Morgenstern's Dictionary of Musical Themes. In one of the analyses, unknown excerpts (actually written by Handel, Mozart, Beethoven, and Mendelssohn) were compared with known excerpts of Bach, Haydn, Mozart, Beethoven, and Brahms. The results showed that each composer was given at least a 50-50 chance of having written his own excerpt but that the odds that the same composer did not write the known sample of the other composers exceeded 1,000 to 1. The strongest statistical distinctions occurred between Bach and Brahms, and Haydn and Beethoven. Distinctions between Haydn and Mozart could be determined at odds of success at no less than

¹⁸Ibid., p. 220.

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The success of this study was extraordinary, considering the many musical variables not measured and the source of the musical excerpts used. Considering the limitations upon the study, Mendel commented upon the potential of future investigations:

Working with data like this [sic], [Paisley] nevertheless succeeded in identifying with enormous probability the author of his samples. . . . [I]t must tell us something about the constituent style if you can tell the composers apart. It tells Haydn and Mozart apart with chances of more than 1,000 to one. It therefore must tell us something we didn't know. . . . This is a remarkable example of the naivete that afflicts these investigations and at the same time, of their remarkable possibilities.²⁰

A computer-assisted study of some of Ockeghem's music was completed by Curry in 1969.²¹ The computer program used for this study was designed, in part, to measure the size of harmonic intervals which appeared above the lowest sounding voice, followed by an analysis of the types of melodic movement into and out of these intervals. It was also designed to provide information concerning the resolution of certain vertical sonorities found in the selected compositions. Since few music examples were provided to illustrate precisely how a musical event would be interpreted by the computer program, it was difficult to determine how the computer results would reflect changes in the many variables which would affect such a two-dimensional analysis. It was also

¹⁹Ibid., p. 234.

²⁰ Arthur Mendel, quoted in Barry S. Brook, ed., Musicology and the Computer (New York: City University of New York Press, 1970), p. 41.

²¹ Jerry L. Curry, "A Computer-aided Analytical Study of Kyries in Selected Masses of Johannes Ockeghem" (unpublished Ph.D. dissertation, University of Iowa, 1969).

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unfortunate that Curry chose not to discuss in more detail some of the musical considerations which prompted him to use his particular analytical approach; however, the study seemed successful in that he was able to make many observations with respect to Ockeghem's use of vertical sonorities and the type of melodic movement related to these sonorities.

The use of computer-assisted methods has also been applied to the analysis of serial compositions. In 1969, Donald Pederson completed the development of a computer program which was designed to identify related versions of a tone row after the original row was manually defined and submitted to the computer along with the music to be analyzed.²² The program, which was used to analyze some works of Webern, was also able to detect subsets related to the original row as well as subsets which were independent. It was also able to note the relationship between octave placement and use of the row.

One of the computer-generated graphs used with the study "displays pitch patterns within each instrumental line and shows interaction of line patterns."²³ This graph is especially important with respect to the present study. It was constructed so that all of the pitches found in the music under study were plotted over a time-line designated periodically by measure numbers, and might be further described as a computer-generated condensed score. In his interpretation of some of the graphic results, Pederson commented: "It should be apparent from [the

²²Donald M. Pederson, "Some Techniques for Computer-aided Analysis of Musical Scores" (unpublished Ph.D. dissertation, University of Iowa, 1968).

²³Ibid., p. 35.

example shown] that each instrumental line has a distinct pattern or shape, and that each line contains subpatterns."²⁴ While this graph did display the interaction of each voice part to a certain extent, it did not define or indicate specific melodic patterns as his statement implied. The reader was required to abstract these patterns for himself just as if he were analyzing a score. The type of graph previously described was useful in that it presumably provided a clearer representation of the interweaving of melodic lines than might be found in the original score; it was not, however, designed to abstract or define particular pitch patterns. This study was interesting because it showed some of the possibilities for applying computer-assisted methods to the analysis of serial music; unfortunately, it was written in such an uncompromising style of theoretical jargon that many scholars may be discouraged from reading it.

Also in 1969, Jens Hanson attempted to determine the extent to which repeated rhythmic patterns corresponded to divisions of formal structure.²⁵ The study was based upon the analysis of selected string quartets of Haydn, Mozart, and Beethoven. The analytical procedure used for the study required that the rhythmic content of each measure first be compressed into a composite rhythm representation which Hanson referred to as a "pattern of signals." The pattern of signals for each measure was then compared with the pattern of signals for the next adjacent measure to determine whether they were identical. Successive

²⁴ Ibid., p. 63.

²⁵ Jens L. Hanson, "An Operational Approach to Theory of Rhythm" (unpublished Ph.D. dissertation, Yale University, 1969).

measures with identical patterns of signals were noted and later compared with the manually conducted formal analysis to determine whether the changes in the rate of repetition were related to the formal divisions as determined by the manual analysis.

An examination of the results showed that the computer program used for the study did not detect many instances where adjacent measures exhibited identical patterns of signals. Those instances where identical patterns were located seemed to show a very slight consistency in the way they related to the formal analysis provided with the study. Possibly because so few patterns were discovered, Hanson described his results in terms of nonrepetition rather than repetition:

From the graphs. . . it can be seen that there is a close agreement between the changes in rate of nonrepetition and formal structure. That is, without exception each formal division contains a rate which is different from the one that precedes or follows it. Since the rate of repetition is related to the rate of nonrepetition, we may say that changes in the rate of repetition of the measures in a pattern of signals correspond to changes in formal structure in these five examples. Since a change in the rate of repetition is effected by the introduction of new measures in the pattern of signals, we may generalize to say that the rate at which new patterns of signals are introduced is an indicator of the form.²⁶

The relationship of repeated patterns of signals to formal structure was never clearly defined:

1. The rate of repetition is used primarily to indicate that a formal section is continuing even though the music may have changed considerably. A new rate of repetition is associated with any new formal section.

2. The rate of repetition is not used to define the precise boundary of a formal section. Changes in rate occur near a boundary of course, but the exact boundary is indicated

²⁶Ibid., pp. 123-124.

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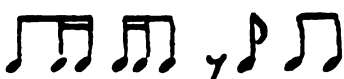




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by a detail such as a change in harmony, a cadence, a silence, or the reappearance of a characteristic theme. A change in rate of repetition will not be interpreted as a formal boundary and this is the special importance of the rate of repetition as an indicator of formal structure. Without such an indicator every change in harmony, every cadence, every silence, or every reappearance of a theme would be a new formal division.²⁷

There were, at least, two possible reasons why Hanson's computer program did not reveal some rhythmic patterns which were clearly visible to the eye.²⁸ One reason may have been that the practice of compressing all of the attack points within a measure to one composite representation may have caused enough rhythmic information to be lost that, in some instances, obvious rhythmic similarities became unrecognizable to the computer. Such a possibility is illustrated in the following examples:

Voice 1		Voice 1	
Voice 2		Voice 2	
Voice 3		Voice 3	
Voice 4		Voice 4	
Composite Rhythm		Composite Rhythm	

²⁷Ibid., p. 158.

²⁸For a discussion of some of these instances, see ibid., pp. 138-156.

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Note that, although the individual voice lines for each example are nearly identical with respect to rhythmic content, the composite attack-point representation for each example is different, and is therefore totally dissimilar according to the definition used by the computer program.

Another reason why some rhythmic patterns were not detected may have been due to the fact that the barline was used to define pattern length. The reasons given for this approach were not clear. In his discussion of the problem, Hanson first implied that barline placement may have had structural importance in the music analyzed, but later suggested that convenience may have been the reason for this procedure:

In order to examine repetitions in the pattern of signals, some segment of that pattern must be selected so that different segments can be compared. The segments should be comparable in size, and although completely arbitrary segments might be workable, segments which have the possibility of being structurally important would be better. . . . Formal divisions tend to coincide with measure divisions. Furthermore, the content and the boundaries of each measure can be defined. The measure, then, will give us a segment of the pattern which will meet all of our requirements.

The use of measure segments is not meant to imply that the measures are heard as a unit by any listener. That may or may not be the case. The measure is used not because it is known to have any special significance but because it meets the requirements of definability, comparability, and convenience for the operands in our study.²⁹

The question of alleged structural importance of the barline aside, it seemed that the use of one arbitrary unit of pattern length limited the effectiveness of the computer program in that such a procedure prevented the recognition of any rhythmic pattern which did not rigidly correspond to placement of the barline. For instance, rhythmic patterns

²⁹Ibid., p. 78.

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which contained upbeats were not detected due to this reason.³⁰ Despite these restrictions, however, Hanson's method of analysis apparently revealed enough information to support some of the assertions made in the study, and did demonstrate the possible use of computers for such analysis. In addition, it also demonstrated some of the problems and complexities associated with translating an analytical concept into an equivalent computer program.

In 1969, Stephan Kostka completed a study of the Hindemith string quartets which illustrated how many types of stylistic information could be obtained through the use of computer-assisted methods.³¹ Because of the length of the study, only the procedures and conclusions most relevant to this thesis will be described.

The study began with the usual interval analysis. The results were listed in tabular form according to interval size and direction, and again grouped according to Hindemith's classification of intervals. Kostka noted, in part, that "in both early and late quartets seconds of all kinds form the most common group of intervals, followed by thirds and then perfect fourths. Most seconds are minor with major seconds outranking the next most common group, the minor third. Sixths, sevenths, and tritones are uncommon throughout. . . ."³²

Since the frequent use of the perfect fourth interval is associated with Hindemith's musical style, the study attempted to measure this

³⁰Ibid., p. 78.

³¹Stephan M. Kostka, "The Hindemith String Quartets: A Computer-Assisted Study of Selected Aspects of Style" (unpublished Ph.D. dissertation, University of Wisconsin, 1969).

³²Ibid., p. 263.

characteristic in his melodic style by using the computer to measure the number of occurrences of the melodic pattern C - F - B-flat and its inversion C - G - D in any transposition or octave disposition. These constructions occurred 123 times (mostly in the later quartets); however, Kostka noted that their placement within the melodic line would also have to be considered in assessing their overall aural importance upon Hindemith's melodic style.³³

Another analysis designed to determine whether Hindemith preferred to use intervals in root position or inversion³⁴ showed that root-position intervals were used more frequently than their inverted forms. The perfect fifth, major third, minor seventh, and major seventh intervals were used more frequently than their inverted forms: perfect fourth, minor sixth, major second, and minor second, respectively.³⁵

A number of analyses were conducted to gain insight into the nature of Hindemith's harmonic style. One analysis was used to determine which sonorities were most commonly used (assuming all tones to be harmonic and excluding octave duplication). This analysis yielded thirty-five different sonorities from which Kostka chose to report only those chords which occurred at least two percent of the time in at least one quartet. These sonorities were described as mildly dissonant, and many consonant intervals were frequently employed.³⁶ It was also determined that,

³³Ibid., pp. 264-265.

³⁴As described in Paul Hindemith, The Craft of Musical Composition, trans. by Otto Ortmann (New York: Associated Music Publishers, 1941), p. 87.

³⁵Kostka, "Hindemith String Quartets," p. 274.

³⁶Ibid., p. 280.

according to the limitations specified by the computer program, the early quartets most frequently employed tertial harmony, the middle-period quartets used predominantly two-note and whole-tone sonorities, and the late quartets were characterized by the use of two-note sonorities as well as tertial, whole-tone, and quartal harmony.³⁷ The study further determined that Hindemith employed Class III harmonies³⁸ more than any other harmonic classification, and that Class II and Class IV harmonies were used more frequently than Class I harmonies in the early quartets, but the reverse was true for the later quartets.³⁹ Another analysis, which was conducted to determine the number of different pitches (ignoring unison and octave doublings) contained in these sonorities, showed that the earlier quartets most frequently employed chords consisting of four, three, and two different pitches (listed in descending order of frequency), but later quartets consisted predominantly of chords with three, two, and four different pitches.⁴⁰

Additional analyses were conducted for the purpose of gaining information about the frequency of root occurrences; however, these results were inconclusive. With the exception of these latter analyses, Kostka stated: "All of the remaining areas of inquiry seem from the results to have been successful in that definite stylistic consistencies,

³⁷Ibid., p. 274-275.

³⁸Hindemith, Craft, pp. 94-108.

³⁹Kostka, "Hindemith String Quartets," p. 274.

⁴⁰Ibid., p. 285.

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trends, or discontinuities could be noted."⁴¹

The purpose of examining these (and other) research studies was previously described as an attempt to assess the progress of computer-assisted studies in music micro-analysis, to determine how the data were prepared for computer input, and to assess the problems and limitations of micro-analytical study. On the basis of the research examined for this study, the following conclusions and observations are made.

An examination of some of the computer-assisted research related to music analysis showed that there are nearly as many areas of investigation as there are investigators, and that the effectiveness of many of the most recently reported studies cannot be determined since they are still in progress. In addition, the studies examined varied widely with respect to the program languages used and the program methods employed.

There are apparently several reasons why such diversity exists. First of all, while micro-analytical studies have been employed in other areas of the humanities for many years (linguistics studies of this type date from 1851),⁴² such applications to music research have been developed only recently. Most computer-assisted approaches to this problem have also been developed within the last decade. The result has been that many researchers are still using the computer to help define some of their most basic analytical procedures with sufficient precision to allow them to develop more effective computer programs. Consequently, the answers to specific musical questions have not appeared as quickly as

⁴¹Ibid., p. 286.

⁴²Richard W. Bailey, "Statistics and Style: A Historical Survey," in Statistics and Style, ed. by Lubomir Dolezel and Richard W. Bailey (New York: American Elsevier Publishing Co., Inc., 1969), p. 217.

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researchers originally had hoped.

Another problem which has slowed the progress of such study has been that most music analysts have been forced to write their computer programs with program languages which are not designed for such purposes. This has caused many researchers to realize their analytical intentions by using rather circuitous program techniques which, in turn, have caused delays in program development and inefficiency in program design. Although new program languages are currently being designed for musical applications, they are not yet generally available or as fully supported as the older, more scientifically-oriented languages.

The problem of preparation of the musical score for computer input has yet to be satisfactorily solved. Currently, the most frequently used approach requires that the scores be encoded by means of various alpha-numeric systems and then punched onto cards or some similar device which can be used to transfer the data to the computer for processing.⁴³ There are many encoding systems currently in use, each of them, in the words of Kostka, "conceived by a scholar whose appreciation of conventional notation has probably increased immensely from the experience."⁴⁴ The encoding systems which seemed to appear most frequently were the Ford-Columbia system, also referred to as DARMS (Digital Analogue Representation of Musical Symbols) developed by Bauer-Mengelberg,⁴⁵

⁴³For a list of music already prepared for such use, see "Music in Machine-Readable Form," Computers and the Humanities, Vol. 6, No. 3 (January, 1972), pp. 176-178.

⁴⁴Kostka, "Hindemith String Quartets," p. 112.

⁴⁵A brief discussion of this system is found in Pederson, "Techniques," pp. 4-15.

ALMA (Alphanumeric Language for Musical Analysis) by Gould and Logemann,⁴⁶ ANON by Jackson,⁴⁷ and CLML (Chicago Linear Music Language) by Bernstein and Olive.⁴⁸ There would not yet seem to be any best or universally accepted music encoding system. Hopefully, this time-consuming task will eventually be reduced or eliminated entirely with the development of optical readers,⁴⁹ which will be able to convert automatically the printed score to a form suitable for computer input.

With the possible exception of interval analysis, there seemed to be few analytical techniques common to most micro-analytical studies, although many of these studies showed some similarities. They most frequently used linear music as the subject for their analyses (possibly to avoid the many encoding problems associated with music which contained an indefinite number of voice parts). Repetition appeared to be the most frequent indicator of importance as far as analytical procedure was concerned. Such an indicator can be misleading if it is assumed that the frequency of occurrence of an item is the only measure of its aural significance. It appeared, however, that the practice was used for lack of a better method, in the hope that it would prove to be a valuable tool for providing the music analyst with the first fragmentary

⁴⁶Murray Gould and George W. Logemann, An Alphanumeric Language for Music Analysis (ALMA) (New York University Institute for Computer Research in the Humanities, 1966).

⁴⁷Kostka, "Hindemith String Quartets," pp. 112-146.

⁴⁸Lawrence F. Bernstein and Joseph P. Olive, "Computers and the 16th-Century Chanson: A Pilot Project for the University of Chicago," Computers and the Humanities, Vol. 3, No. 3 (January, 1969), pp. 153-160.

⁴⁹R. S. Morgan, "Optical Readers," Computers and the Humanities, Vol. 3, No. 1 (September, 1968), pp. 61-62.

pieces of information needed to frame the more complex questions relating to musical style and the human listening process.

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CHAPTER II

DESCRIPTION OF THE MUSIC ANALYSIS PROGRAM

Preface

It was stated earlier that the purpose of this thesis was to provide the music analyst with a computer program which would assist him in locating certain types of melodic patterns which might be present in linear musical compositions. The purpose of this chapter is to show the musician the analytical capabilities of the program. Each of the program's analyses is individually described and illustrated so that the reader will not only be able to understand the type of information it provides, but also understand its limitations as well.

The computer program was written in the FORTRAN IV language, a language which is found on nearly all of the computer installations in the United States; however, no attempt will be made to discuss the specific computer programming techniques used to achieve the different types of analytical results.

Preliminary considerations

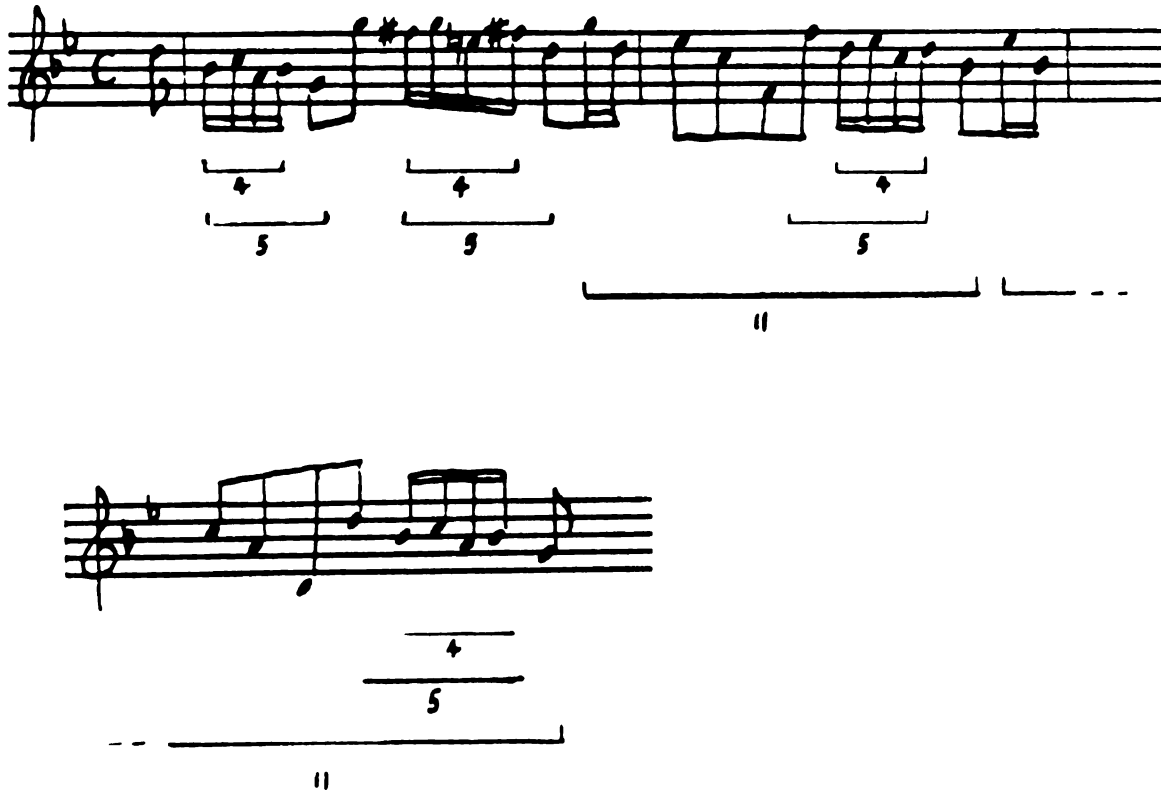
Computers can only assist music analysts by relieving them of the burden of identifying and tabulating objectively defined musical events; they cannot be used to measure subjectively described musical relationships. The approach used for this thesis was, therefore, to

design a computer program which was capable of identifying a variety of objectively defined melodic relationships. This was done with the assumption that the results of these analyses would be subsequently evaluated with the musical score to determine their aural and/or structural importance according to the broader and more subjective musical goals of the analyst.

Three of the research studies described earlier in this thesis employed some type of computer-assisted musical pattern analysis as part of their studies. The scope of these methods was limited because they were designed to obtain highly specific information concerning music written by either one composer, or by a closely related group of composers. It became clear that if the program to be developed for this thesis were to be used to analyze linear music by more than one composer or stylistic period, some of the limitations shown in the previous studies would have to be reduced considerably, and a number of other analytical processes would have to be developed to provide the analyst with the flexibility needed to explore a more general approach to the problem.

There were three major limitations found in the Curry, Hanson, and Kostka studies which required that alternative methods be explored. The first limitation had to do with the practice of arbitrarily establishing one fixed length of musical pattern for an entire analysis. Such a procedure was far too limited to take into account the many different ways which melodies can be aurally interpreted. The following musical excerpt has been analyzed to show some of the many different sizes of repeated melodic patterns which some analysts might believe to be aurally or structurally significant. The brackets indicate

similar pitch and rhythm content; the numbers found beneath each bracket indicate the number of notes contained within each pattern.



It can be seen that the patterns illustrated not only appear in many different sizes but sometimes overlap each other as well, and do not necessarily conform to the barline. The complexity of the pattern analysis problem, as partially reflected in this example, required that any procedure to be used for melodic analysis be able to detect patterns of many different sizes, regardless of their interaction with other patterns, or their location within the measure.

A second limitation (observed only in the Kostka study) had to do with the practice of specifying in advance the pitch or rhythm content of the pattern. While such a procedure may be sufficient for a highly specific type of analysis, it might not be satisfactory for a more

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general type of analysis, because such a practice limits the thoroughness of the computer analysis to the perceptual limitations of the analyst. As a result, a considerable amount of important information might remain undiscovered. It was decided that another approach should be implemented, whereby the computer program would be designed to conduct a number of different types of musical pattern analyses from which the user could select his choice depending upon his particular analytical goal. The advantages of such an approach were two-fold in that (1) the specific musical content of the patterns would be defined by the musical composition itself, and (2) there would be less chance of overlooking other similarly constructed patterns. The disadvantage was that such a method would generate a great deal of output, some of which might be of little value to the analyst. It was decided that it would be better for the music analyst to discard unnecessary information than for him to try to define the specific musical content of the pattern and thereby limit the potential of the computer-assistance.

The third limitation observed in the previous studies had to do with the method used to report the results. The most frequently used approach was to list the total number of appearances for the particular event. By presenting the results only in such a manner, it was extremely difficult, if not impossible, for the analyst to compare specific computer-derived patterns with their occurrence in the original score for the purpose of evaluating their aural importance with respect to the surrounding musical context. It was therefore decided that it would be better to design the program so that it would list the precise musical location of each event cited in the course of the analysis.

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In summary, it was decided, after an examination of some other studies using pattern analysis, that the analytical approach to be used for this thesis would be such that:

- 1) the computer program would be able to detect all possible sizes of melodic pattern regardless of their location within the measure;
- 2) the precise musical content of the patterns would not be specified; instead, a number of different categories of melodic patterns would be defined from which the music analyst could select one or more analyses which would retrieve the patterns most appropriate to his needs; and
- 3) with the exception of two-note patterns, the location of nearly all melodic patterns fitting the criteria for the specified analysis would be listed to facilitate evaluation of the results.

Description of the program's different analyses

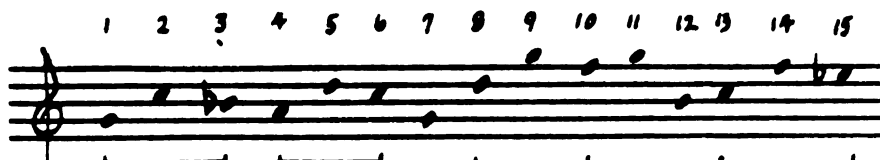
The computer program consisted of twenty-six different melodic analyses or tests; each test was designed to locate a particular type of objectively defined melodic relationship. These relationships were chosen because of their familiarity to music analysts, and also because they could be precisely defined to both the music analyst and the computer. They may be divided into three general categories: the first category (as defined in Tests 1 through 8) consisted of tests that located melodic relationships defined by pitch alone; the second category (as defined in Tests 9 and 10) was designed to locate melodic relationships defined by rhythm alone; the last category (as defined

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in Tests 11 through 26) consisted of tests that located melodic patterns containing combinations of those melodic patterns defined by the first two categories of tests. The pitch relationships selected were based upon the following familiar melodic relationships: Original (O), Inversion (I), Retrograde (R), and Retrograde-Inversion (RI). The rhythmic relationships used were (1) repetition of an original rhythmic pattern, and (2) use of rhythm retrograde.

Since these melodic relationships cannot exist alone (they can only be described with reference to some other pattern) it was necessary to list the location of the first appearance of the original pattern along with subsequent locations of the appropriate O, I, R, or RI pitch patterns or rhythmic patterns as the requirements of the analysis dictated. This reporting procedure is illustrated below:



Pattern	Notes	Related to	Notes	Test	Length
1	1 to 3		4 to 6	2	3
2	1 to 3		8 to 10	2	3
3	1 to 3		13 to 15	2	3

The numbers placed over the note-heads were assigned by the computer Program so that precise identification of melodic excerpts would be possible. Three pattern-statements are shown beneath the music example. From left to right, each statement consists of an identification number (found under "Pattern"), the beginning and ending notes of the two melodic excerpts which are related to each other, the nature of the

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relationship (found under "Test"), and the number of attack-points contained in each excerpt (found under "Length"). The program user must specify which test he wishes to use for each computer analysis; the program then supplies the rest of the information found in each pattern-statement.

Each of the twenty-six different tests available to the program user is described individually below. Each description begins with a small music example which has been analyzed by the computer for purposes of illustration. Each example is, in turn, followed by a partial listing of some of the melodic pattern-relationships found by the computer analysis. (A complete listing of all of the patterns located for each example, as well as listings for the input data submitted for each test, is found in Appendix A.) It is suggested that the reader compare the musical score with each of the sample patterns shown so it can be seen how the pattern-relationship specified as the criterion for each test was reported by the computer program.

Tests 1 through 8 identified pitch relationships only. Since none of these tests analyzed rhythm content, no rhythm has been specified for the following music examples. (Any rhythmic information included with the input data is disregarded by the program when any of Tests 1 through 8 are specified for use.) Each of the pitch relationships is defined below:

TEST 2 -- EXACT CONTOUR (ORIGINAL)



Pattern	Notes	Related to	Notes	Test	Length
6	3 to 6		8 to 11	2	4
7	3 to 6		15 to 18	2	4
9	3 to 7		15 to 19	2	5

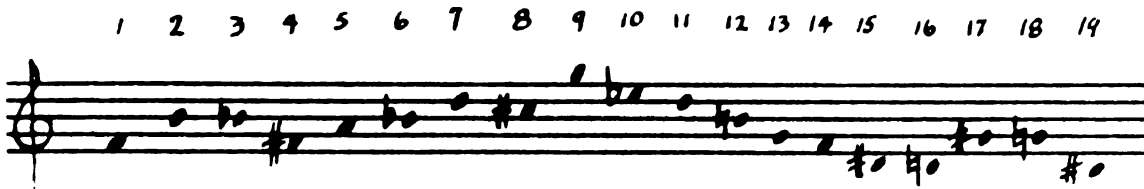
TEST 4 -- EXACT INVERSION



Pattern	Notes	Related to	Notes	Test	Length
1	1 to 3		6 to 8	4	3
2	1 to 3		9 to 11	4	3
3	1 to 3		13 to 15	4	3
7	1 to 4		9 to 12	4	4
8	1 to 4		13 to 16	4	4
10	1 to 5		13 to 17	4	5



TEST 6 -- EXACT RETROGRADE



Pattern	Notes	Related to	Notes	Test	Length
5	4 to 7		9 to 12	6	4
6	4 to 7		12 to 15	6	4

TEST 8 -- EXACT RETROGRADE INVERSION



Pattern	Notes	Related to	Notes	Test	Length
2	2 to 4		14 to 16	8	3
5	6 to 8		9 to 11	8	3
6	6 to 8		13 to 15	8	3
9	5 to 8		9 to 12	8	4
10	4 to 8		9 to 13	8	5

The two melodic excerpts listed in each of the pattern-statements shown above displayed the exact intervallic relationship with respect to its mate. This is a very strict approach to melodic analysis; it guarantees that only excerpts which exhibit the specific intervallic relationship with respect to each other will be listed. Because this approach cannot be used to locate similar patterns which may contain some small variant in interval size (such as might be noticed if real and tonal statements of a fugue subject are closely compared) another

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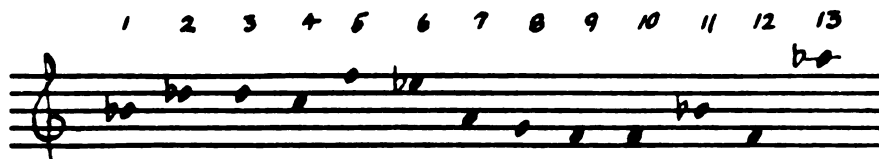
series of tests was provided which allowed for tonal modifications in the O, I, R, and RI patterns. The second set of tests (numbered 1, 3, 5, and 7) used intervallic direction as the only criteria for locating these pitch patterns. This modified approach was found to be very useful for locating and grouping similar but not necessarily intervallically identical patterns. Tests 1, 3, 5, and 7 are illustrated below:

TEST 1 -- TONAL CONTOUR (ORIGINAL)



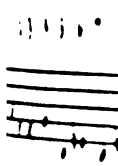
Pattern	Notes	Related to	Notes	Test	Length
1	1 to 3		5 to 7	1	3
2	1 to 3		9 to 11	1	3
3	1 to 3		12 to 14	1	3
4	1 to 3		14 to 16	1	3
8	1 to 4		9 to 12	1	4
9	1 to 4		14 to 17	1	4
13	1 to 5		9 to 13	1	5
14	8 to 12		13 to 17	1	5

TEST 3 -- TONAL INVERSION

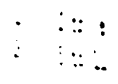


Pattern	Notes	Related to	Notes	Test	Length
2	2 to 4		9 to 11	3	3
6	2 to 5		9 to 12	3	4
10	1 to 6		8 to 13	3	6

22



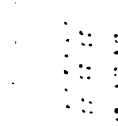
23



24



25



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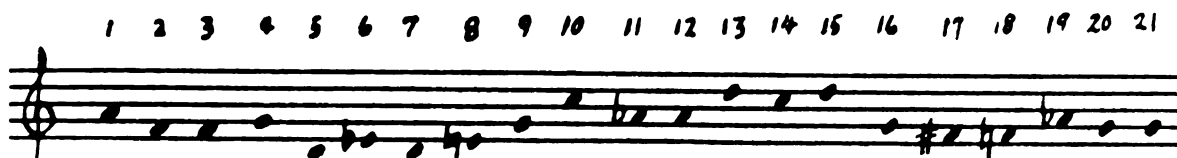
30

31

32

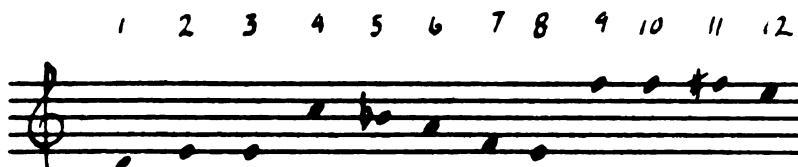
33

TEST 5 -- TONAL RETROGRADE



Pattern	Notes	Related to	Notes	Test	Length
21	2 to 6		17 to 21	5	5
28	5 to 11		14 to 20	5	7

TEST 7 -- TONAL RETROGRADE INVERSION



Pattern	Notes	Related to	Notes	Test	Length
3	3 to 5		7 to 9	7	3
6	2 to 5		7 to 10	7	4
10	1 to 6		6 to 11	7	6

Tests 1, 3, 5, and 7 defined melodic patterns in terms of pitch directions only; therefore, specific interval sizes did not need to be identical as were the cases with Tests 2, 4, 6, and 8. However, Tests 1, 3, 5, and 7 allowed only for expansion and contraction of interval size; no further modifications of the original event could be detected by these analyses.

Tests 9 and 10 identified rhythm relationships only. Since neither of these tests analyzed pitch content, pitch has not been specified for the following musical examples. (Any pitch information included

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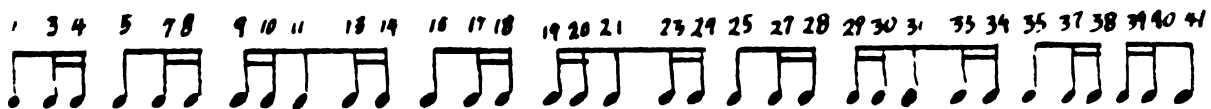
11. 11.

with the input data is disregarded by the computer program when either Test 9 or 10 is selected for use.)

Rhythms consisting totally of one continually repeated duration were intentionally deleted from the computer output for Tests 9 and 10. The reasons for this omission are discussed later in this chapter in the section entitled "Selected pattern deletions."

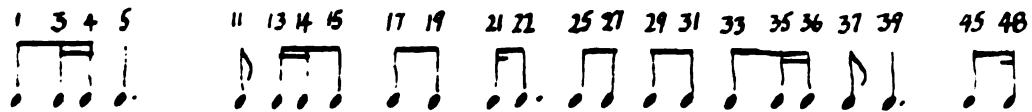
Tests 9 and 10 are illustrated below:

TEST 9 -- EXACT RHYTHM



Pattern	Notes	Related to	Notes	Test	Length
1	1 to 4		5 to 8	9	3
2	1 to 4		11 to 14	9	3
73	5 to 11		15 to 21	9	6
74	5 to 11		25 to 31	9	6
103	1 to 10		11 to 20	9	8
104	1 to 10		21 to 30	9	8
171	1 to 20		21 to 40	9	16

TEST 10 -- EXACT RHYTHM RETROGRADE



Pattern	Notes	Related to	Notes	Test	Length
1	1 to 4		13 to 15	10	3
7	5 to 14		35 to 39	10	4
8	11 to 15	(SYM)	33 to 37	10	4
11	5 to 15		33 to 39	10	5
16	5 to 19		29 to 39	10	7

Pattern 8, shown above, includes the additional designation: "SYM." This indicates that the rhythm identified in the pattern-statement was symmetrically constructed, and therefore sounds the same whether performed forward or backward. (Such a rhythm is frequently described as a "non-retrogradable rhythm.") The computer program added this designation to all symmetrically constructed rhythms whenever retrograde rhythm was to be used for all or part of the criteria for analysis, as was the case for Test 10, and Tests 19 through 26.

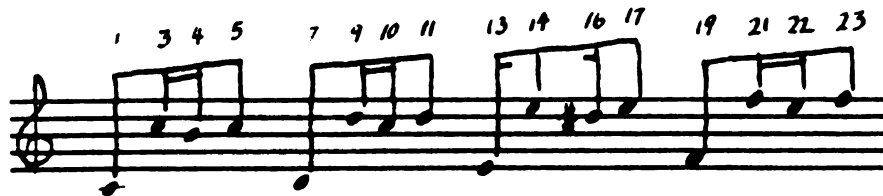
The tests requiring rhythmic analysis were limited primarily because the method used to encode music data was not designed to encode irrational rhythms or other rhythmic information, such as barline placement, meter signatures, or different types of accents. The program was capable of identifying repeated rhythmic patterns (as defined by position of attack-points) in passages containing rational rhythm only.

These were necessary limitations, because expansion of the encoding process to allow encoding of most irrational rhythms and other data

associated with rhythm notation, would have been an enormous task, and was beyond the scope of this study. In addition, there was little or no specific information about the effect of barline placement, meter signatures, or rhythmic accents upon our perception of rhythm. Consequently, there was no basis upon which to incorporate the effect of these variables into the study.

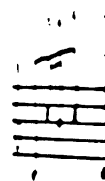
The remaining tests found in the program were designed so that it would be possible to locate melodic patterns which contained combinations of rhythm relationships shown in Tests 9 and 10, and pitch relationships shown in Tests 1 through 8. These tests are illustrated below in the same manner as has been done previously:

TEST 11 -- EXACT RHYTHM WITH TONAL CONTOUR (ORIGINAL)

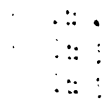


Pattern	Notes	Related to	Notes	Test	Length
1	1 to 4		7 to 10	11	3
2	1 to 4		19 to 22	11	3
3	3 to 5		9 to 11	11	3
4	3 to 5		21 to 23	11	3
9	1 to 5		7 to 11	11	4
10	1 to 5		19 to 23	11	4

21-22.1



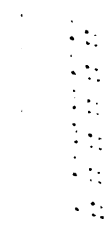
23-24.1



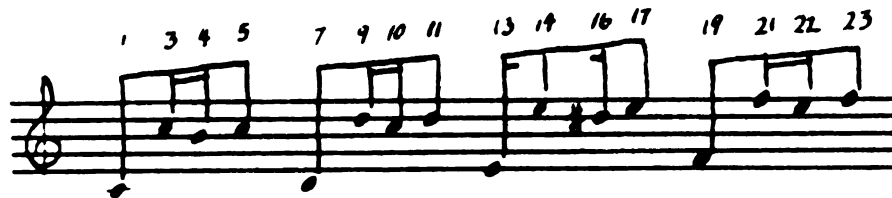
25-26.1



27-28.1

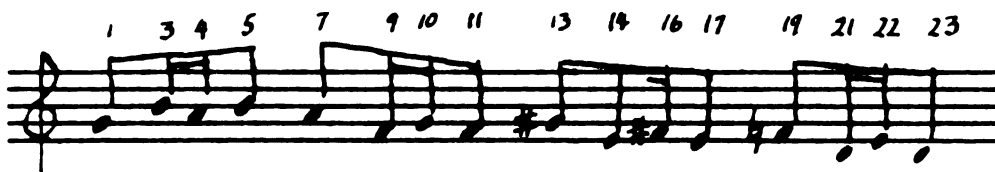


TEST 12 -- EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)



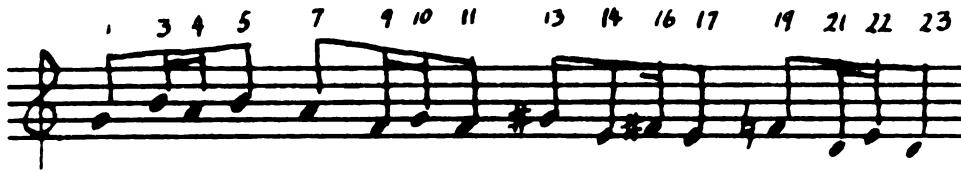
Pattern	Notes	Related to	Notes	Test	Length
1	1 to 4		19 to 22	12	3
2	3 to 5		21 to 23	12	3
3	1 to 5		19 to 23	12	4

TEST 13 -- EXACT RHYTHM WITH TONAL INVERSION



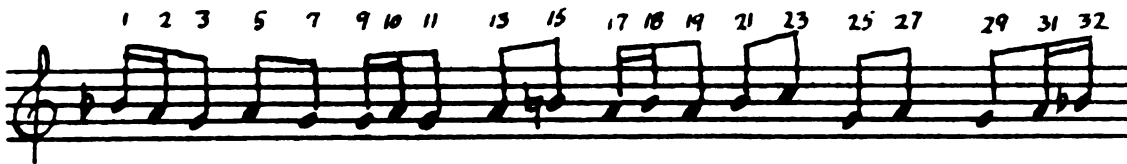
Pattern	Notes	Related to	Notes	Test	Length
1	1 to 4		7 to 10	13	3
2	1 to 4		19 to 22	13	3
3	3 to 5		9 to 11	13	3
4	3 to 5		21 to 23	13	3
6	1 to 5		7 to 11	13	4
7	1 to 5		19 to 23	13	4

TEST 14 -- EXACT RHYTHM WITH EXACT INVERSION



Pattern	Notes	Related to	Notes	Test	Length
1	1 to 4		7 to 10	14	3
2	3 to 5		9 to 11	14	3
4	1 to 5		7 to 11	14	4

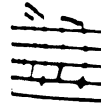
TEST 15 -- EXACT RHYTHM WITH TONAL RETROGRADE



Pattern	Notes	Related to	Notes	Test	Length
5	1 to 7		9 to 15	15	5
6	1 to 7		17 to 23	15	5

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TEST 16 -- EXACT RHYTHM WITH EXACT RETROGRADE



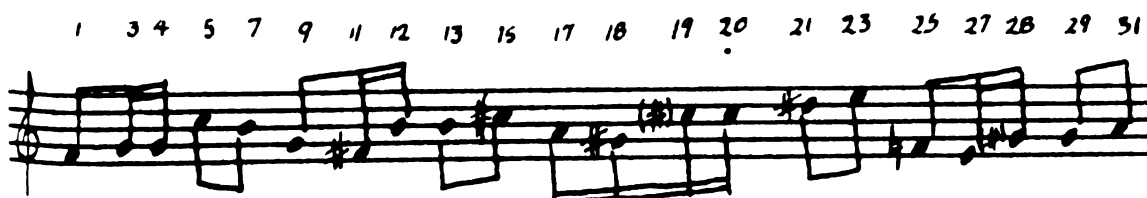
Pattern	Notes	Related to	Notes	Test	Length
4	1 to 7		17 to 23	16	5

TEST 17 -- EXACT RHYTHM WITH TONAL RETROGRADE INVERSION




Pattern	Notes	Related to	Notes	Test	Length
4	1 to 7		9 to 15	17	5
5	1 to 7		25 to 31	17	5

TEST 18 -- EXACT RHYTHM WITH EXACT RETROGRADE INVERSION



Pattern	Notes	Related to	Notes	Test	Length
1	3 to 5		11 to 13	18	3
3	1 to 7		9 to 15	18	5

100



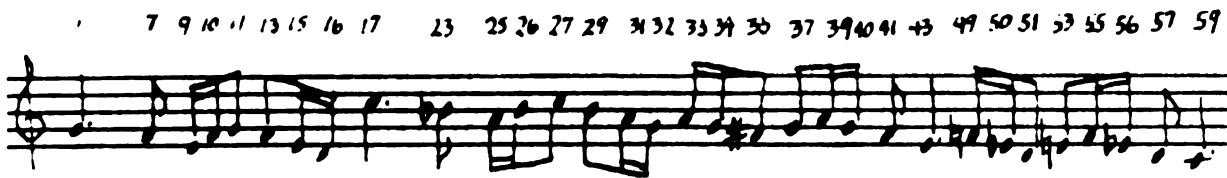
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TEST 19 -- EXACT RHYTHM RETROGRADE WITH TONAL CONTOUR (ORIGINAL)



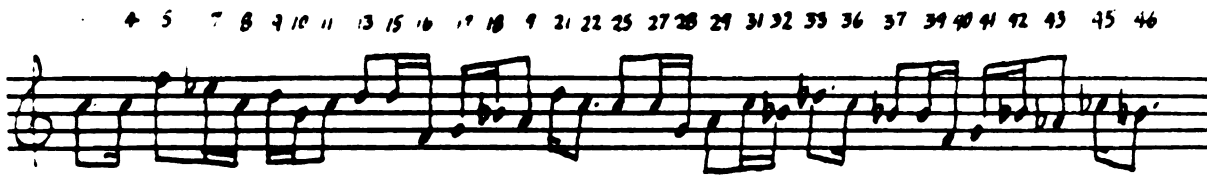
Pattern	Notes	Related to	Notes	Test	Length
1	7 to 11	(SYM)	23 to 27	19	4
11	1 to 16		33 to 43	19	8
12	1 to 16		49 to 59	19	8
18	1 to 32		33 to 59	19	16

TEST 20 -- EXACT RHYTHM RETROGRADE WITH EXACT CONTOUR (ORIGINAL)



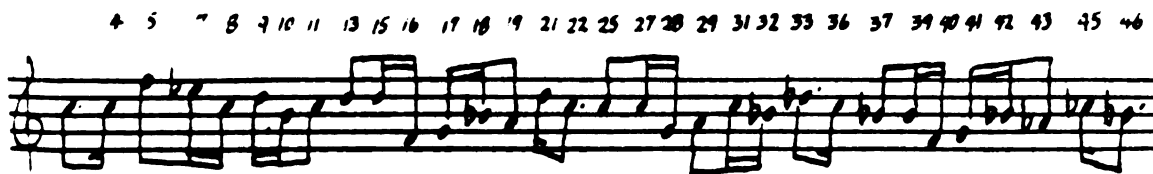
Pattern	Notes	Related to	Notes	Test	Length
1	9 to 13		35 to 40	20	4
3	1 to 16		33 to 43	20	8

TEST 21 -- EXACT RHYTHM RETROGRADE WITH TONAL INVERSION



Pattern	Notes	Related to	Notes	Test	Length
1	4 to 7		18 to 21	21	3
2	4 to 7		42 to 45	21	3
8	1 to 11		13 to 22	21	8
9	1 to 11		37 to 46	21	8

TEST 22 -- EXACT RHYTHM RETROGRADE WITH EXACT INVERSION



Pattern	Notes	Related to	Notes	Test	Length
4	1 to 11		37 to 46	22	8

TEST 23 -- EXACT RHYTHM RETROGRADE WITH TONAL RETROGRADE



Pattern	Notes	Related to	Notes	Test	Length
19	1 to 6	(SYM)	19 to 24	23	5
20	1 to 6	(SYM)	43 to 48	23	5
37	1 to 12		13 to 24	23	8
38	1 to 12		37 to 48	23	8

TEST 24 -- EXACT RHYTHM RETROGRADE WITH EXACT RETROGRADE



Pattern	Notes	Related to	Notes	Test	Length
18	1 to 7		41 to 48	24	6
23	1 to 12		37 to 48	24	8

TEST 25 -- EXACT RHYTHM RETROGRADE WITH TONAL RETROGRADE INVERSION



Pattern	Notes	Related to	Notes	Test	Length
45	1 to 11		13 to 22	25	8
46	1 to 11		37 to 46	25	8

TEST 26 -- EXACT RHYTHM RETROGRADE WITH EXACT RETROGRADE INVERSION



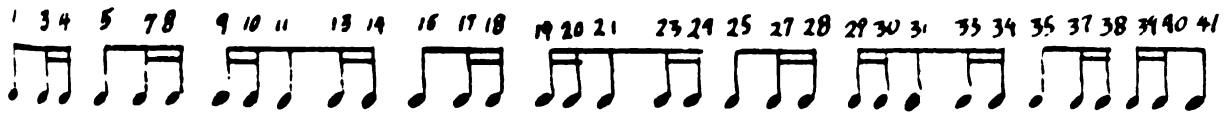
Pattern	Notes	Related to	Notes	Test	Length
26	1 to 11		37 to 46	26	8

The examples shown above were written specifically for the purpose of illustration. In many cases, only a few of the musical patterns located by the computer analyses were listed in this chapter.

An examination of the complete listings (as found in Appendix A) will show that some of the analyses located many patterns which fit the requirements of the specified test, but seemed to show relatively little motivic importance. These patterns could not be automatically eliminated from the computer output because it would have been extremely difficult to invent any practical criteria which would have distinguished

without fail between relatively important melodic motives and relatively unimportant melodic motives. In fact, the development and adoption of such procedures was never contemplated, not only for this reason, but because such methods could seriously impair the effectiveness of the analysis program by excluding patterns which other analysts might consider musically important. Such a procedure would also have prohibited use of the program with music of different stylistic periods. However, the results of thorough testing of the program did reveal three very limited and specific types of melodic occurrence which caused the program to list relationships which were either too ambiguous with respect to some of the other available tests, or too obvious, to justify their inclusion as part of the pattern lists. A detailed discussion of each of these situations as well as the procedures subsequently adopted to eliminate these undesirable patterns is found in the section titled "Selected pattern deletions."

As has been previously shown, the computer program normally listed the resulting patterns in order of increasing pattern length. This arrangement of patterns has been designated as a "Type-I Listing." Another arrangement of selected patterns was also created to isolate smaller patterns (or subpatterns) which were found within the lengthiest patterns. This form of output (designated as a "Type-II Listing") presented individually each of the lengthiest patterns followed by the most frequently occurring subpatterns contained within them. Such a listing was found to be particularly valuable for analyzing music which contained lengthy patterns. The following example of such a list resulted from an analysis of the excerpt used previously to illustrate Test 9:



		LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	NOTES	1 TO 21	2	17
SUBPATTERN	NOTES	1 TO 11	4	9
SUBPATTERN	NOTES	5 TO 11	4	6
SUBPATTERN	NOTES	1 TO 5	4	4

The complete list may be found with Test 9 in Appendix A.

The Type-II listing is much more limited in the type of information it provides than is the Type-I listing. The purpose of the Type-I listing is to provide the user with a relatively complete listing of the pattern relationships which fit the given criteria for the specified test. The purpose of the Type-II listing is to provide an analysis of the lengthiest pattern (or patterns) found in the Type-I listing by showing those subpatterns which appear relatively frequently within the large pattern. The Type-II listing was an experimental attempt to delete infrequently appearing subpatterns on the premise that some significant smaller patterns were found more frequently than other less frequently appearing subpatterns. Obviously such a premise cannot apply to all musical compositions and may not be acceptable to some music analysts. However, the list was provided as an experimental tool which, it is hoped, will indicate in a clearer manner some of the more prevalent subpatterns

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ASCENDING AND DESCENDING INTERVALS¹
(INCLUDING ENHARMONIC EQUIVALENTS)

	TOTAL OCCURRENCES	PERCENTAGE OF OCCURRENCE
MINOR 2	3	15.0
MAJOR 2	2	10.0
MINOR 3	2	10.0
MAJOR 3	0	0.0
PERF. 4	1	5.0
TRITONE	2	10.0
PERF. 5	0	0.0
MINOR 6	2	10.0
MAJOR 6	1	5.0
MINOR 7	2	10.0
MAJOR 7	1	5.0
OCTAVE	1	5.0
MINOR 9	0	0.0
MAJOR 9	0	0.0
MINOR 10	1	5.0
MAJOR 10	1	5.0
PERF. 11	0	0.0
COMP. TT	0	0.0
PERF. 12	0	0.0
MINOR 13	0	0.0
MAJOR 13	0	0.0
MINOR 14	0	0.0
MAJOR 14	0	0.0
TWO OCT.	0	0.0
UNISON	1	5.0
INTERVALS EXCEEDING TWO OCTAVES	0	0.0

20 INTERVALS COUNTED

¹ This table also contains unisons.

**ASCENDING INTERVALS
(INCLUDING ENHARMONIC EQUIVALENTS)**

	TOTAL OCCURRENCES	PERCENTAGE OF OCCURRENCE
MINOR 2	1	10.0
MAJOR 2	1	10.0
MINOR 3	2	20.0
MAJOR 3	0	0.0
PERF. 4	1	10.0
TRITONE	1	10.0
PERF. 5	0	0.0
MINOR 6	1	10.0
MAJOR 6	1	10.0
MINOR 7	0	0.0
MAJOR 7	1	10.0
OCTAVE	0	0.0
MINOR 9	0	0.0
MAJOR 9	0	0.0
MINOR 10	0	0.0
MAJOR 10	1	10.0
PERF. 11	0	0.0
COMP. TT	0	0.0
PERF. 12	0	0.0
MINOR 13	0	0.0
MAJOR 13	0	0.0
MINOR 14	0	0.0
MAJOR 14	0	0.0
TWO OCT. INTERVALS	0	0.0
EXCEEDING TWO OCTAVES	0	0.0

10 ASCENDING INTERVALS COUNTED

**DESCENDING INTERVALS
(INCLUDING ENHARMONIC EQUIVALENTS)**

	TOTAL OCCURRENCES	PERCENTAGE OF OCCURRENCE
MINOR 2	2	22.2
MAJOR 2	1	11.1
MINOR 3	0	0.0
MAJOR 3	0	0.0
PERF. 4	0	0.0
TRITONE	1	11.1
PERF. 5	0	0.0
MINOR 6	1	11.1
MAJOR 6	0	0.0
MINOR 7	2	22.2
MAJOR 7	0	0.0
OCTAVE	1	11.1
MINOR 9	0	0.0
MAJOR 9	0	0.0
MINOR 10	1	11.1
MAJOR 10	0	0.0
PERF. 11	0	0.0
COMP. TT	0	0.0
PERF. 12	0	0.0
MINOR 13	0	0.0
MAJOR 13	0	0.0
MINOR 14	0	0.0
MAJOR 14	0	0.0
TWO OCT. INTERVALS	0 0	0.0 0.0
EXCEEDING TWO OCTAVES		

9 DESCENDING INTERVALS COUNTED.

The type of interval analysis shown above automatically appeared with any use of Tests 1 through 26. However, the analyst could use the interval analysis portion of the program alone (without any further pattern analysis) by requesting that Test 0 be conducted.

The purpose of this section of the thesis has been to describe and illustrate the different types of analytical information which may be obtained from the music analysis program. The program is capable of locating twenty-six different types of melodic relationship as well as information concerning melodic interval usage. These relationships are generally defined according to pitch content alone, rhythmic content alone, or a combination of both pitch and rhythmic relationships. The program user selects the appropriate relationship according to his own analytical goals and then indicates his choice by submitting the appropriate test number with the computer input data. The different types of melodic relationships and their individual test numbers are summarized below:

Test 0 -- Interval analysis only

Test 1 -- Tonal contour (original)

Test 2 -- Exact contour (original)

Test 3 -- Tonal inversion

Test 4 -- Exact inversion

Test 5 -- Tonal retrograde

Test 6 -- Exact retrograde

Test 7 -- Tonal retrograde inversion

Test 8 -- Exact retrograde inversion

Test 9 -- Exact rhythm

Test 10 -- Exact rhythm retrograde

Test 11 -- Exact rhythm with tonal contour (original)

Test 12 -- Exact rhythm with exact contour (original)

Test 13 -- Exact rhythm with tonal inversion

Test 14 -- Exact rhythm with exact inversion

Test 15 -- Exact rhythm with tonal retrograde

Test 16 -- Exact rhythm with exact retrograde

- Test 17 -- Exact rhythm with tonal retrograde inversion
- Test 18 -- Exact rhythm with exact retrograde inversion

- Test 19 -- Exact rhythm retrograde with tonal contour (original)
- Test 20 -- Exact rhythm retrograde with exact contour (original)
- Test 21 -- Exact rhythm retrograde with tonal inversion
- Test 22 -- Exact rhythm retrograde with exact inversion
- Test 23 -- Exact rhythm retrograde with tonal retrograde
- Test 24 -- Exact rhythm retrograde with exact retrograde
- Test 25 -- Exact rhythm retrograde with tonal retrograde inversion
- Test 26 -- Exact rhythm retrograde with exact retrograde inversion

The format used to report pattern relationships has been illustrated and remains the same for each of the available analyses. Two different types of pattern listings were provided with each pattern analysis.

The number of patterns listed varied depending upon the amount of data submitted and the particular test specified. Type-I listings displayed all of the patterns found for the analysis specified, while Type-II listings displayed each of the largest patterns with their respective subpatterns which occurred more than two times within each statement of the larger pattern. Suggestions for interpretation and use of the computer results are found in the next chapter of the thesis.

Selected pattern deletions

The computer program was originally designed to list all of the patterns located by the various tests; however, experimentation with the original program revealed that there were three particular types of melodic construction which caused it to list patterns which were technically accurate but either redundant, or ambiguous, with respect to other analyses available within this program. Because it was possible to define and exclude these undesirable pattern-statements, the program was subsequently modified so that such statements would not appear in the listings.

The three types of melodic constructions which caused these unnecessary patterns to be listed were:

- 1) extended reiteration of pitches;
- 2) melodic contours exhibiting no change-of-direction; and
- 3) ambiguous rhythmic figures.

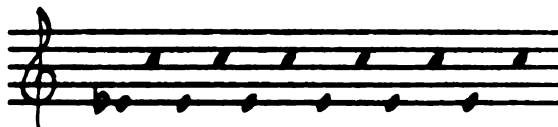
Each of these melodic occurrences is described below. Examples of the types of pattern which were subsequently deleted from the computer analyses are also shown.

Extended reiteration of pitches. A melodic line containing an extended series of notes which alternated between two pitches would normally cause the program to include the following patterns (or similar types) to be listed as part of the output:



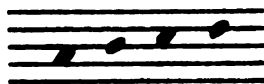
Pattern	Notes	Related to	Notes	Test	Length
1	1 to 3		3 to 5		3
2	1 to 3		5 to 7		3
3	1 to 3		7 to 9		3
4	1 to 3		9 to 11		3
5	2 to 4		4 to 6		3
6	2 to 4		6 to 8		3
7	2 to 4		8 to 10		3
8	2 to 4		10 to 12		3
9	1 to 4		5 to 8		4
10	1 to 4		7 to 9		4
11	1 to 4		9 to 12		4
12	2 to 5		6 to 9		4
13	2 to 5		8 to 11		4
14	1 to 5		5 to 9		5
15	1 to 5		7 to 11		5
16	2 to 6		6 to 10		5
17	2 to 6		8 to 12		5
18	1 to 6		7 to 12		6

All of the patterns shown above are accurate, but they add little useful information to the analysis because they are redundant; i.e., they reflect the inner workings of a reiterated figure. To eliminate these pattern-statements, the program was altered so that those patterns which consisted entirely of an extended reiteration of pitches (i.e., longer than four notes) were not listed regardless of any accompanying rhythm. Pattern-statements caused by extended reiteration of any other interval, such as



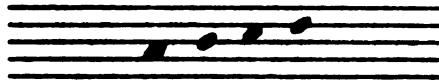
were also deleted from the computer output.

Melodic contours exhibiting no change-of-direction. Redundant pattern-statements also resulted when the data included a melodic contour which exhibited no change-of-direction. For example, any continually rising melodic contour, such as



would normally cause the program to indicate that the example showed the following relationships with respect to each of the following contours:

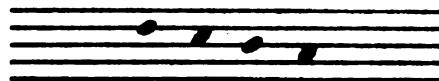
1) original contour



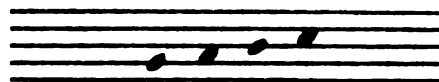
2) inverted contour



3) retrograded contour



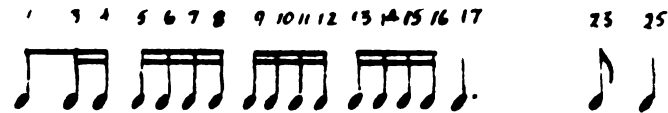
4) retrograded and
inverted contour



After considerable use of the program, it was decided that the first and second type of pattern statements were too obvious to add significantly to their respective analyses. It was also determined that the third and fourth types of pattern statement were also of little value because they were indistinguishable from the contours identified in the second and first examples, respectively. Because of these characteristics, pattern-statements reflecting such relationships were not listed with tests which analyzed contour as part or all of their criteria for analysis, regardless of accompanying rhythm. Those tests affected were numbers 1, 3, 5, 7, 11, 13, 15, 17, 19, 21, 23, and 25.

Ambiguous rhythmic figures. Rhythmic figures in which the adjacent attack-points were equidistant from adjacent attack-points (such as would be caused by a succession of notes of the same duration) would

normally cause undesirable pattern-statements to be listed, as can be seen in the following example:



Pattern	Notes	Related to	Notes	Test	Length
1	3 to 5		5 to 7	9	3
2	3 to 5		6 to 8	9	3
3	3 to 5		7 to 9	9	3
		(etc.)			
7	3 to 6		6 to 9	9	4
8	3 to 6		7 to 10	9	4
9	3 to 6		8 to 11	9	4
		(etc.)			
29	5 to 11		11 to 17	9	7

Since the rhythms indicated by these statements have no identifying change-of-duration contained within them, they add little to the analysis of rhythm. For this reason, listings of this type were deleted from Tests 9 and 10 (where rhythm was the only criterion for identification).

The general type of statement described above was permanently deleted from the computer output only after a thorough testing of the program showed that such a practice did not otherwise limit the completeness of the computer analyses nor prohibit use of the program with music of different stylistic periods.

Table 1 summarizes when the three types of undesirable statement are deleted from the different pattern analyses. A description of the types of pattern deleted from any analysis is

also printed on the computer output to remind the user which types of patterns were intentionally being deleted.

TABLE I

PATTERN DELETIONS IN EFFECT

Test	Extended Reiteration of Pitches ^a	Contours Lacking Change-of-Direction ^a	Ambiguous Rhythmic Figures ^b
1	X	X	
2	X		
3	X	X	
4	X		
5	X	X	
6	X		
7	X	X	
8	X		
9			X
10	X		X
11	X	X	
12	X		
13	X	X	
14	X		
15	X	X	
16	X		
17	X	X	
18	X		
19	X	X	
20	X		
21	X	X	
22	X		
23	X	X	
24	X		
25	X	X	
26	X		

^a Regardless of rhythm content.

^b Regardless of pitch content.

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CHAPTER III

SUGGESTIONS FOR INTERPRETATION OF THE COMPUTER OUTPUT

Introduction

The purpose of this chapter is to demonstrate how the music pattern analysis program was used to locate structurally related melodic patterns in the following three musical compositions: Density 21.5 by Edgard Varèse, "Fuga nona in B-flat" from Ludis Tonalis by Paul Hindemith, and the isorhythmic motet Veni Sancte Spiritus by John Dunstable. Each composition was encoded in its entirety, keypunched onto data cards, and then processed a number of times using various pattern analyses developed for this thesis. The specific analyses selected for use with each composition were chosen because they seemed appropriate to the style of the composition.

A description of the different types of computer output generated from these analyses is presented in this chapter along with suggestions for the most effective use of these materials.

Density 21.5¹ was chosen as the primary example to illustrate the use of the different types of computer output. It was chosen for analysis

¹The work was composed for solo flute by Edgard Varèse, the contemporary French composer who died in 1965. A brief note on the first page of the score states that the work was written in January 1936 at the request of Georges Barriere for the inauguration of his platinum flute. 21.5 is the density of platinum.

1900

1901

1902

1903

1904

1905

1906

1907

1908

1909

1910

1911

1912

1913

1914

1915

1916

1917

1918

1919

1920

1921

1922

1923

1924

1925

because the style seemed typical of much twentieth-century instrumental composition, in that it exhibited a wider range and a greater use of non-vocal melodic leaps than is characteristic of more vocally-oriented music. The work also demonstrated these characteristics while retaining fairly traditional notational methods. Further, the melodic patterns contained in the work were probably not so familiar to most music analysts as were melodic patterns found in music chronologically closer to the common-practice period; therefore, computer-assistance in identifying structurally similar melodic patterns seemed appropriate for this work. Other reasons why the work was chosen were that it was entirely linear in construction, and that it was small enough to be used for illustrative purposes.

Tests 1 through 26 produced four types of printed output. These were:

- 1) a complete listing of the input data along with reference numbers which were assigned by the computer program to each pitch for purposes of pattern identification;
- 2) melodic interval tables;
- 3) Type-I pattern listings (where all patterns of the type requested were listed in order of increasing length); and
- 4) Type-II pattern listings (where the longest patterns were analyzed to reveal frequently-appearing subpatterns).

The computer output for Test 0 consisted of only the first two types of output described above; the remaining tests consisted of all four types of output.

List of input data and computer-assigned reference numbers

Measures 1 through 8 of Density 21.5 are shown in Figure 1 with the numeric pitch representations written above each note-head.²

This figure also shows how the numeric representations were consecutively punched on data cards, and the manner which the program listed these data and their respective sequence numbers:

²This and all other excerpts of Density 21.5 reproduced courtesy of Colfranc Music Publishing Corp., copyright owners. The trill in measure 20 was encoded as if performed in the following manner:

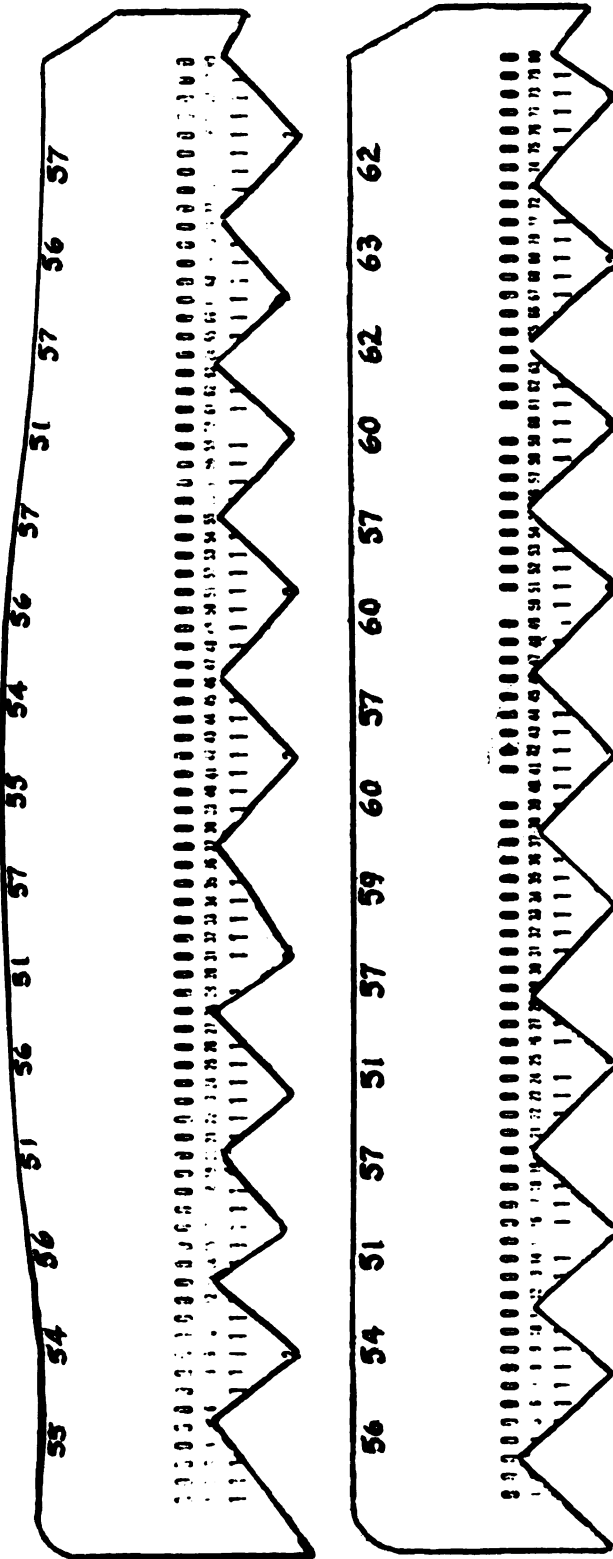


The figure displays three staves of musical notation, each with pitch representation numbers written above the notes. The first staff contains measures 53, 54, 55, 56, 57, and 58. The second staff contains measures 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000. The third staff contains measures 57, 60, 62, and 63. Dynamic markings include *mf*, *f*, *p*, *f* > *p*, and *p subito*.

Courtesy of Colfranc Music Publishing Corp., copyright owners.

Figure 1. An excerpt from Density 21.5 by Edgard Varèse with pitch representation numbers shown, followed by those same numbers placed on punched cards, in turn, followed by computer reference number assignment for the same data.





For example, Figure 1 illustrated how the third note-head in the second measure was assigned the number "56" for purposes of identification.

All of the music examples shown in this chapter have the computer-assigned reference numbers above the affected note-heads, so that the reader will be able to compare more quickly the computer output with these examples. These numeric designations remain the same for any data deck regardless of the test to be conducted.³

Melodic interval tables

There were three types of interval tables provided; ascending and descending intervals (with unisons included), ascending intervals alone, and descending intervals alone. Each table listed the frequency of occurrence for interval sizes from the unison or minor second through two octaves, and listed the percentage of occurrence for each interval size with respect to other intervals listed upon the same table. These tables provided a basic source of information about a composer's use of melodic intervals and can be useful when comparing styles of different works by the same composer, or when comparing works by different composers. The interval tables for the Varèse, Dunstable, and Hindemith works analyzed may be found in Appendix B beginning on pages 204, 479, and 587, respectively.

³ During this phase of the program, each data card is also checked for simple keypunch errors. If any errors are found, appropriate error messages are written and the computer run is terminated. Further details concerning the encoding system used for this program may be found in Appendix C, beginning on page 743.

1. The first step is to identify the problem or goal. This involves understanding the current situation and what needs to be achieved.

2. Next, it's important to gather relevant information and data. This can be done through research, interviews, or observation.

3. Once you have the information, you should analyze it to identify the root causes of the problem and potential solutions.

4. After analysis, you should develop a plan or strategy to address the problem. This plan should be realistic and achievable.

5. The next step is to implement the plan. This involves putting the strategy into action and monitoring progress.

6. Finally, you should evaluate the results of your efforts. This allows you to see if you have achieved your goal and learn from any mistakes.

Type-I and Type-II pattern listings

The Type-I pattern listings appeared immediately following the melodic interval tables on the computer output. "Type-I" is used here as a collective designation for a series of smaller lists which organize and present the individual pattern statements according to their length. An examination of any of the Type-I listings found in Appendix B shows that the first of the smaller lists contains three note patterns and that each subsequent list contains patterns of one note greater length than the preceding list. The program will produce as many lists as needed until no lengthier patterns are located. The individual statements contained on these lists have been illustrated in the previous chapter; each statement consists of the exact location of two specific melodic excerpts which are related in the manner defined by the given computer test.

Because such a list might contain hundreds of patterns (depending upon the length and the construction of the work under analysis), it would be unrealistic to expect an analyst to compare each pattern listed with the score in the hope that he might uncover a melodically significant event. A more practical approach might be for the analyst to conduct his analysis by first transferring the computer-assigned reference numbers to the score (as has been done for these examples), and then use the musical score as the primary object of study. The computer output could then be used as reference material which would help the analyst confirm or reject any ideas or suspicions he might have concerning the melodic style of the work under study.

An extended excerpt from Varèse's Density 21.5 is found in Figure 2.

(The complete work may be found in Appendix B.)

DENSITY 21.5

Flute Solo $\text{♩} = 78^{\text{oo}}$

EDGARD VARÈSE

1 2 3 4 5 6 7 8 9 10

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

27 28 29 30 31 32 33 34 35 36 37 38 39 40

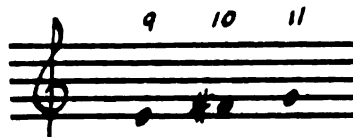
Courtesy of Colfranc Music Publishing Corp., copyright owners.

Figure 2. An excerpt from Density 21.5 by Edgard Varèse with computer-assigned reference numbers shown.

Figure 2, continued.

Using this example for reference, consider the following examples of how the computer results might be used:

EXAMPLE 1: If, after conducting a Test-2 analysis of Density, the analyst examines the score and decides that the following intervallic pattern (or enharmonic equivalent):



may be significant to the structure of the composition, he can look up this pattern in the Type-I listing to determine if other statements of the pattern were located, and if so, where. This is done by first determining the length of the pattern--in this case, the pattern consists of three notes--and then looking for the pattern in that portion of the list which contains events of that length. If the pattern was located in an intervallically exact form in some other part of the work, each of the locations will be listed. The following excerpt from the Test-2 analysis⁴ shows that there were three intervallically-exact duplicates of the original pattern, of which the first two may be seen in Figure 2:

Pattern	Notes	Related to	Notes	Test	Length
13	9 to 11		21 to 23	2	3
14	9 to 11		27 to 29	2	3
15	9 to 11		241 to 243	2	3

⁴ See Appendix B, p. 254.

EXAMPLE 2: If the analyst wishes to locate the pitch pattern:



elsewhere in the composition, an examination of the same listing shows no other statement beginning with that specific location; however, the following cross-reference does appear⁵:

*** For 93 to 95 see 56 to 58 above ***

This statement informs the user that the identical intervallic pattern was located earlier in the composition and that he should look up the pattern beginning with notes 56 to 58 for subsequent statements of the pattern⁶:

Pattern	Notes	Related to	Notes	Test	Length
87	56 to	58	90 to	92	2
88	56 to	58	93 to	95	2
89	56 to	58	179 to	181	2
80	56 to	58	192 to	194	2

This example illustrates how cross-referencing of patterns is indicated. Cross-referencing of patterns is provided for patterns of three-, four-, five-, and six-note patterns.

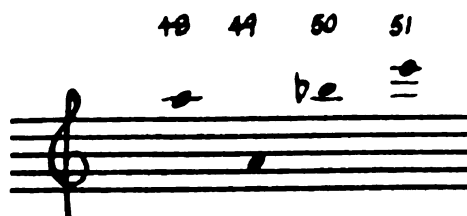
⁵ Appendix B, p. 257.

⁶ Appendix B, p. 256.

1

2

EXAMPLE 3: If the user wishes to locate the intervallic pattern found from notes 48 through 51:



elsewhere in the composition, an examination of four-note patterns shows no reference or cross-reference to this pattern. This means that no repetition of the pattern was located.

Each of the previous examples used the Test-2 analysis for reference. Other analyses may be used in the same manner, as the following examples illustrate:

EXAMPLE 4: Tests 1, 3, 5, and 7 use melodic contour as the criterion for Pattern identification. If the analyst wishes to locate the inverted contour of the following melodic fragment, he can do so by examining the output for the Test-3 analysis. It indicates⁷:



*** For 44 to 47, see 8 to 11 above ***

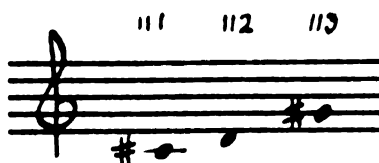
⁷Appendix B, p. 287.

Notes 8 through 11 have the same contour (one descending interval followed by two ascending intervals) as shown in notes 44 through 47.

The inversion of this contour is shown in those patterns beginning at 337, the first five of which may be seen in Figure 2⁸:

Pattern	Notes	Related to	Notes	Test	Length
337	8 to 11		14 to 17	3	4
338	8 to 11		39 to 42	3	4
339	8 to 11		50 to 53	3	4
340	8 to 11		61 to 64	3	4
341	8 to 11		86 to 89	3	4

EXAMPLE 5: To locate an exact retrograde of the following pitches:



the analyst would look at the portion of the Test-6 analysis which shows three-note patterns. It indicates the following retrogrades of this pattern⁹:

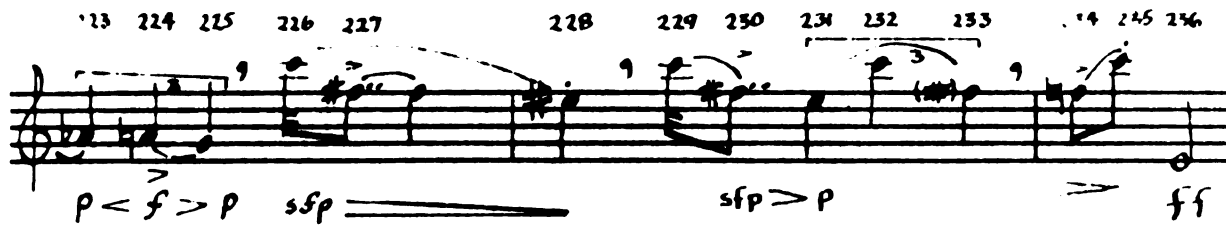
Pattern	Notes	Related to	Notes	Test	Length
99	111 to 113		226 to 228	6	3
100	111 to 113		229 to 231	6	3
101	111 to 113		232 to 234	6	3

These musical events (not shown in Figure 2) are:

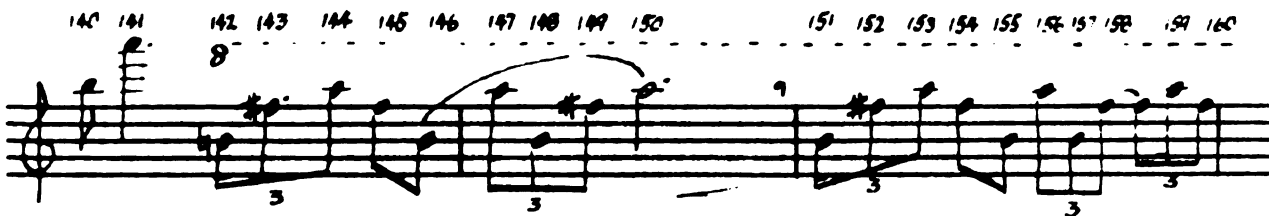
⁸ Appendix B, p. 286.

⁹ Appendix B, p. 385.

THE



Retrograde was not used extensively in the Varèse work. There were a few instances where the program located lengthier retrogrades; however, in those instances, Varèse was employing repetitive symmetrical formations such as can be seen in measures 32 through 34:



These figures and some other reiterated figures, such as those seen in measured 9 and 10 (shown in Figure 2), caused the program to designate these instances as retrograde.

It was suggested earlier that the user examine the lengthiest patterns located by the computer analysis to see whether they might be significant. The lengthiest pattern found for the Test-2 analysis of the Varèse work was¹⁰:

Pattern	Notes	Related to	Notes	Test	Length
241	28 to 29		76 to 87	2	12

¹⁰ Appendix B, p. 370.

1111

These two fragments are shown below; they both consist of reiterations of a minor second interval, terminated by an ascending major second.



The Type-II pattern listing was designed to provide additional information about the largest patterns by listing some of the frequently occurring subpatterns contained within them. For this listing, each one of the largest patterns was successively designated as an original pattern. The location of the first statement of the first pattern was printed, along with its length, and the number of times it appeared. Beneath this pattern was a list of the first locations of each subpattern which was found more than three times within the location of the original pattern shown above it. Along with these locations were the total number of appearances of the subpatterns (including all other statements of the subpattern within the excerpt), and the length of the subpatterns. If any subpattern did not appear at least three or more times within the original pattern, it was not printed. After all qualifying subpatterns had been printed, the next of the largest patterns was printed along with its subpatterns. The procedure was repeated until all of the lengthiest patterns were processed.

For the Type-II listings, only the first location of each pattern and subpattern was printed. If he desires, the user may find the locations of subsequent statements by referring to the Type-I listing for the same analysis. The Type-II listing was not intended to uncover any new patterns; it consists of a rearrangement of the previously discovered Type-I patterns in order to show frequently appearing subpatterns. For the large Varese pattern cited above, the Type-II listing did not reveal any significant subpatterns, perhaps because the large pattern consisted mostly of an extended reiteration of pitches.

Limitations on the thoroughness of the pattern analyses¹¹

There were two limitations on the thoroughness of the pattern analyses. The first limitation was that cross-referencing of patterns was only available for patterns having less than seven notes. This limitation was necessarily adopted to make the pattern analysis reasonably cost-efficient; further cross-referencing would have driven the cost of using the program higher than the amount of additional information would justify.

The second limitation arose from the fact that the musical location listed on the right-hand side of each pattern-statement always appeared after the musical location given on the left-hand side of the statement, such as:

¹¹ Because these limitations can best be understood after the reader has seen the suggestions on how the program might best be used, they have been placed here rather than at the end of the previous chapter.

"PATTERN 1, NOTES 25 TO 31 RELATED TO NOTES 46 TO 50"

It was not possible for the program to locate patterns occurring before the location stated on the left-hand side of a pattern-statement, such as:

"PATTERN 1, NOTES 25 TO 31 RELATED TO NOTES 7 TO 14"

The reason for this was that the program only analyzed the data from the end of the left-hand location (note 31 in the example shown above) to the end of the data deck.

For some of the most useful tests, such as 1, 2, 9, 11, and 12, this was not a serious limitation, because both locations in any statement were always identical in content, and the left-hand location was always the first appearance of the stated melodic pattern; but for other tests where the right-hand location was a variant of the left-hand location (such as inversion, retrograde, or retrograde-inversion), there could be a significant number of variants found before the original pattern. In other words, a melodic variant would not be detected if it appeared before the original location indicated on the left-hand side of the pattern statement. The impact of this limitation varied depending upon where in the data deck the original event was found. If a one-hundred-measure excerpt was analyzed and the first location of a desired pattern was found in measure five, then only appropriate variants found in measures six through one hundred would be identified, but variants present in measures one through four would not be listed. The loss of information for such an instance would be small. However, if the first location of the same pattern was found

in measure fifty, the loss of information might be considerable, because variants present in measures one through forty-nine could not be identified.

This potential loss of information was found to be substantially reduced by the user if he rearranged the data deck, so that the melodic materials of most interest to him appeared near the beginning of the data deck. For example, if the user wished to check an excerpt for variants of original material found in measures fifty through fifty-five, he could do so by rearranging the data deck, so that measures fifty through one hundred appeared at the beginning of the data deck followed by measures one through forty-nine. While such an arrangement of musical information may seem inconsistent with methods used in traditional analysis, it nearly eliminates the loss of information when used with this computer program.

This practice of rearranging the data deck when necessary also considerably reduced the other limitation related to cross-referencing. Obviously, if the most interesting original patterns were placed near the beginning of the data deck, the need for cross-referencing to earlier pattern-statements would be reduced.

In summary, there were two limitations on the thoroughness of the pattern analysis. The first limitation was the availability of cross-reference statements for patterns of less than seven notes only; the second limitation was the incapability of the program to locate variants of a melodic pattern which were present in the data deck before the indicated location of the original pattern.

Neither of these limitations was found to affect seriously the thoroughness of the pattern analysis if the analyst rearranged his data

(when necessary) so that the melodic material most interesting to him appeared near the beginning of the data deck.

Analysis of the Dunstable and Hindemith examples

The music of Dunstable and Hindemith was chosen to show how the computer program was used to provide information about compositions written in two other musical styles. These particular examples were chosen because they contained patterns of extended length which made them ideal for demonstrating the more sophisticated pattern analyses available with the program.

The procedure for encoding a polyphonic composition was nearly the same as that used for encoding the monophonic Varèse work. Each voice was encoded separately and then submitted in succession as one data deck. The program then analyzed this succession of voices as if it were one extended monophonic excerpt. The program only identified patterns contained within a given melodic line; it could not identify patterns occurring vertically between voices of a contrapuntal composition.

For the Dunstable example, all of the voice-parts were included for the pattern-analysis; while for the Hindemith example, only the bottom-sounding voice-part was analyzed for melodic patterns. All of the relationships listed by the program were identified without any prior analysis by the program user.

Selected results from each analysis are presented as they were shown with the Varèse analyses. The complete results for each analysis are shown in Appendix B along with the complete musical score for each excerpt. Computer-assigned reference numbers have been copied to these

1911-12

1912-13

1913-14

1914-15

1915-16

1916-17

1917-18

1918-19

1919-20

1920-21

1921-22

1922-23

1923-24

1924-25

1925-26

1926-27

1927-28

1928-29

1929-30

1930-31

1931-32

1932-33

1933-34

1934-35

1935-36

1936-37

1937-38

1938-39

scores, so that the reader may examine any of the patterns shown in the appendix.

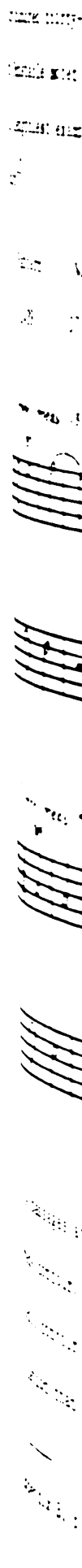
Some of the results from these analyses are presented below.

Selected results from analyses of Dunstable's isorhythmic motet, Veni Sancte Spiritus. The motet was written in three voices. Since the shortest duration used in the work was the sixteenth-note, this duration was adopted as the unit value for encoding purposes. The work was encoded, so that one measure of a voice-part would appear on a data card. Therefore, those passages written in $\frac{3}{4}$ time were encoded so that a total of twelve sixteenth-durations appeared on each card, while passages written in $\frac{2}{4}$ time were encoded so that a total of eight sixteenth-durations appeared on each card.

The interval analysis tables which preceded each pattern analysis¹² showed that the major second was the most frequently used melodic interval, followed (in descending order of frequency) by the minor second, minor third, perfect fourth, unison, major third, perfect fifth, and octave. Tritones, sixths, and sevenths were never used as melodic intervals in any voice. The tables which listed the intervals separately according to their direction did not reveal many associations of particular intervals with any specific direction. They did show, for instance, that the octave always occurred in an ascending direction.

The purpose of the Test-5 analysis was to locate melodic fragments which contained identical retrograde contours (in other words, a retrograde of the directional contour of the melody). One thousand

¹² Appendix B, pp. 479-481.



four hundred thirty-nine instances of this relationship were found in the Dunstable motet consisting of patterns from three to eleven notes. The lengthiest example of this relationship appeared in the isorhythmic tenor¹³:

Pattern	Notes	Related to	Notes	Test	Length
1439	37 to 241		709 to 853	5	11

Tenor, meas. 13-31



Tenor, meas. 72-91



The passages shown above were related to each other by their tonal retrograde contour. This example also illustrates a situation, where the melodic contour was more useful as a criterion for pattern identification than would have been the more precise intervallic

¹³ Appendix B, p. 533.

32422

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1952

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11. 11. 11.

11-22-22

1994

12-2

1992

2000

12-22-68

12

100

10

4

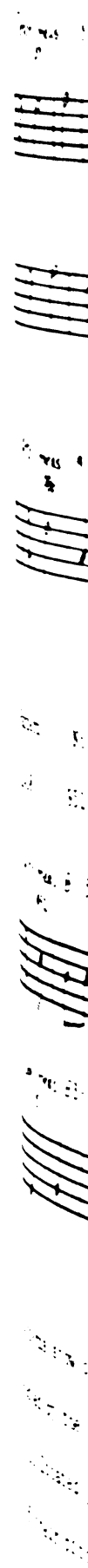
retrograde relationship which is used as the criterion for Test 6. Had this same passage been analyzed using Test 6, only that portion of the passages containing the exact retrograde intervals (measures 13-28 and 80-91, respectively) would have been reported.

The Test-5 analysis used pitch direction as the criterion for pattern identification only; it did not measure the rhythmic content of the motet. However, the example shown above can be used to illustrate a limitation of those tests which locate rhythmic patterns. Had the analyst used the program to locate the retrograde isorhythm which can be seen in the latter passage, the program would not have detected it. The reason for this is that the retrograde isorhythm was presented using a different time signature; consequently, the durations were not exactly retrograded. Since the program identifies rhythm by measuring the distance between consecutive attack-points, this particular instance of rhythm retrograde would not have been detected.

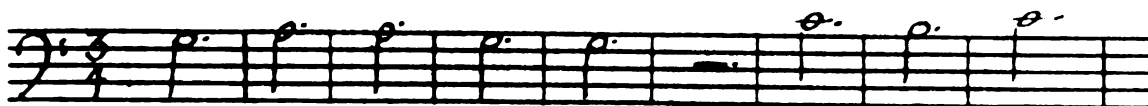
An examination of some of the slightly shorter patterns found in the Test-5 analysis showed some less obvious examples of tonal retrograde contained in other voices of the motet¹⁴:

Pattern	Notes	Related to	Notes	Test	Length
1436	37 to 217		1086 to 1134	5	10

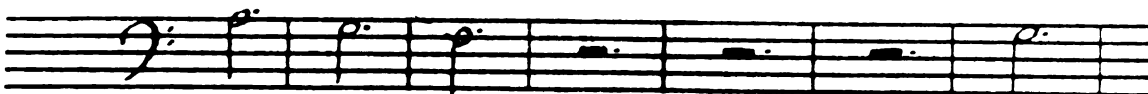
¹⁴Appendix B, p. 532.



Tenor, meas. 13-28
57



217



Alto, meas. 19-23
1086



1134

Pattern	Notes	Related to	Notes	Test	Length
1438	952 to 1014		2751 to 2775	5	10

Alto, meas. 8-13
952



1014

Sop, meas. 83-86
2751



2775

These patterns show other instances of retrograde contour which might
so undetected by the analyst.

Test 13 located patterns which had identical rhythmic content and
a mirror of their pitch contours. This analysis of the Dunstable motet

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yielded 369 such events of which the longest pattern contained twelve notes. Again the longest pattern was found in the tenor voice¹⁵:

Pattern	Notes	Related to	Notes	Test	Length
256	1 to 241		373 to 613	13	12



Examples of some shorter and more obscure patterns are shown below¹⁶:

¹⁵Appendix B, p. 552.

¹⁶Appendix B, p. 546 and p. 545, respectively.

Pattern	Notes	Related to	Notes	Test	Length
235	1314 to 1328		1915 to 1929	13	6

Alto, meas. 38-39



Sop., meas. 6-8



Pattern	Notes	Related to	Notes	Test	Length
218	1626 to 1644		2715 to 2733	13	5

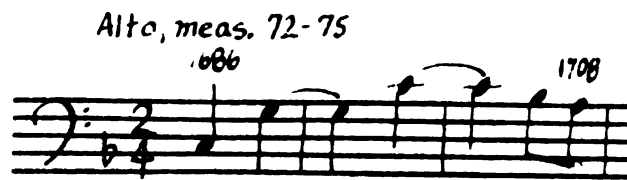
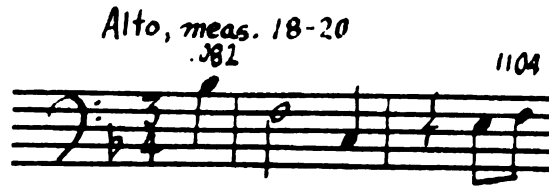
Alto, meas. 64-67



Sop., meas 78-81



Pattern	Notes	Related to	Notes	Test	Length
214	1082 to 1104		1686 to 1708	13	5



At first glance, it might appear that these computer-related passages are rhythmically unrelated; however, a closer examination shows that the distance between the adjacent attack-points for each of the related passages was the same regardless of the prevailing time signature, notational differences, or placement of pattern within the measure. Pattern 214 illustrates particularly well the ability of the computer program to match visually dissimilar patterns.

One other analysis of the Dunstable motet was included with this thesis, and that was Test 12. For this test, the input data was rearranged so that the top voice was submitted first, followed by the middle and bottom voices, respectively. Such restructuring of the data deck caused patterns occurring later in the data deck to be listed in the order of their appearance in the top voice.¹⁷

¹⁷ A score containing these new reference numbers is shown in Appendix B, pp. 556-560.

Test 12 located patterns which contained the same rhythm and interval content. The longest of these patterns consisted of six notes and are shown on the next page¹⁸:

¹⁸Appendix B, p. 583.

Pattern	Notes	Related to	Notes	Test	Length
102	21 to 41		393 to 413	12	6
103	45 to 61		417 to 433	12	6

Sop., meas. 1 - 6

Sop., meas. 32 - 37

12/10/20

12/10/20

12/10/20

12/10/20

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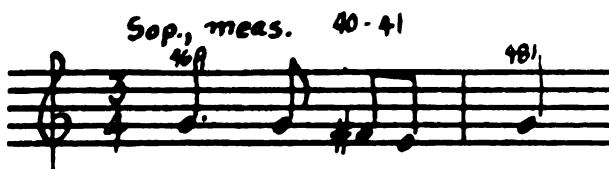
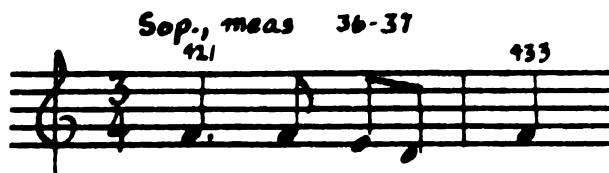
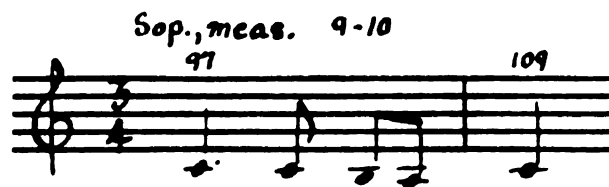
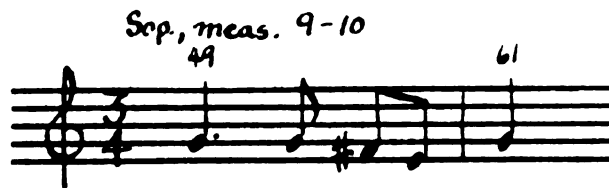
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Smaller frequently used patterns were listed as well. For instance, the following cadence figure (first found in measures 5-6) was reported to have appeared again in measures 9-10, 36-37, and 40-41, respectively¹⁹:

Pattern	Notes	Related to	Notes	Test	Length
99	49 to 61		97 to 109	12	5
100	49 to 61		421 to 433	12	5
101	49 to 61		469 to 481	12	5



¹⁹Appendix B, p. 582.

Selected results from analyses of Hindemith's "Fuga nona in B-flat"
from Ludis Tonalis. Hindemith's Ludis Tonalis consists of twelve fugues for piano, with each fugue separated from each other fugue by an interlude. The entire collection is introduced and concluded with an elaborate prelude and postlude, respectively. The work is subtitled "Studies in Counterpoint, Tonal Organization and Piano Playing," and demonstrates Hindemith's ability to employ successfully many complex contrapuntal techniques with his quartal-harmonic style of composition.

For this chapter, a portion of the "Fuga nona in B-flat" was chosen to illustrate how the program was able to locate original patterns as well as inversions, retrogrades, and retrograde inversions of pitch content. The program was also used to locate rhythm and retrograde rhythm patterns. The complete analyses and copy of the musical score for this fugue are contained in Appendix B.

The fugue was encoded and analyzed in two ways. It was first encoded in its entirety and analyzed using Test 0. This produced an interval analysis for the entire fugue. The bottom-sounding voice of the fugue was then analyzed separately using tests selected to illustrate how the program was able to locate some of the complex relationships contained in this melodic line.

The Test 0 analysis²⁰ requires little explanation. Hindemith used mostly small melodic intervals (from the unison through the minor third) in his writing. Of the remaining larger intervals, the ones which occurred most frequently were the perfect fourth, minor seventh,

²⁰Appendix B, p. 587.

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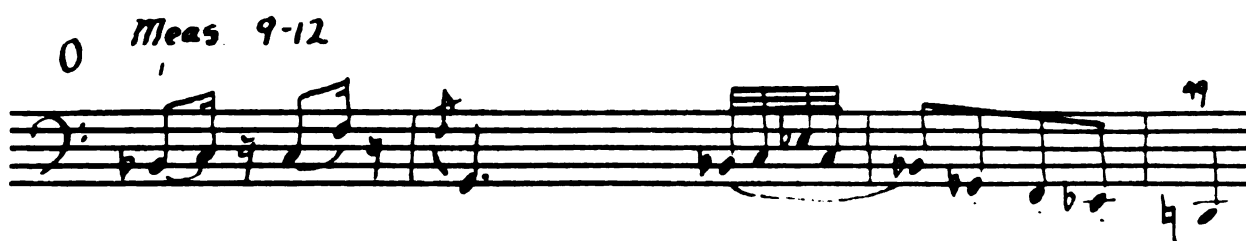
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octave, and perfect fifth. No particular interval size was associated with any particular ascending or descending direction.

As might be expected, the lengthiest melodic patterns located by the computer programs were statements of the fugue subject or variants of it. The Test-2 analysis, which used exact interval contour as the criterion for pattern identification, located two statements of the original subject in the excerpt analyzed. The second appearance of the subject was transposed to E-flat with the duration of each pitch doubly augmented. The Test-2 analysis identified this event on the basis of transposed intervals only; it did not compare the rhythmic content of the two statements:

Pattern	Notes	Related to	Notes	Test	Length
643	1 to 49		737 to 833	2	15



²¹ Appendix B, p. 634. This, and all other excerpts from Ludis Tonalis, reproduced courtesy of Belwin Mills Publishing Corp., Melville, New York, sole agents for the copyright owners.

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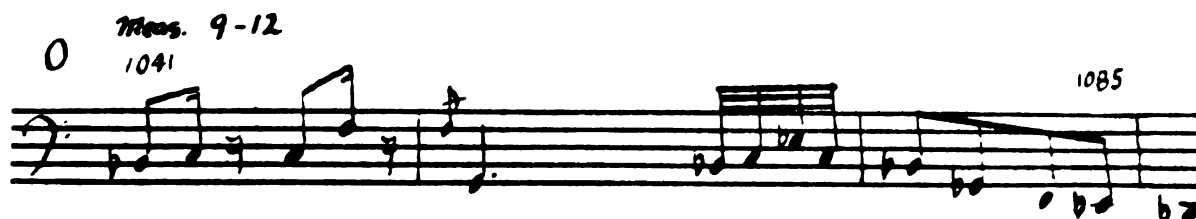
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The third statement of the original subject was only identified through the first fourteen notes in as much as the last pitch was tonally altered²²:

Pattern	Notes	Related to	Notes	Test	Length
636	1 to 45		1041 to 1085	2	14



This analysis also related two melodic events which, coincidentally, were statements of the subject in inversion²³:

Pattern	Notes	Related to	Notes	Test	Length
644	121 to 169		833 to 881	2	15



The data were also analyzed to locate patterns that were exact retrogrades of each other. Examples of retrograde statement of the subject beginning in measures 33 and 38 were identified by pattern

²²Appendix B, p. 633.

²³Appendix B, p. 634.

Handwritten musical notation on a page, including staves and notes, partially visible on the right edge.

statements 535 through 539. Because the last note of the original subject was altered when the subject was presented in retrograde, the beginning and concluding notes of the subject were sometimes not precisely identified by the computer program, as is illustrated below²⁴:

Pattern	Notes	Related to	Notes	Test	Length
535	1 to 45	401 to 445	6	14	

meas. 9-12

0 1 45

R meas. 33-36

401 445

The Test-12 analysis was also used with this excerpt. This test required that patterns not only show the same intervallic relationship as was used for Test 2, but also have identical rhythmic content. Because of the additional criterion added to this latter test, only 488 such relationships were located, which is considerably less than the 642 patterns identified for the less stringent Test-2 analysis. Since the resulting Test-12 patterns look similar to those shown for Test 2, none of them will be illustrated here.

The Test-14 analysis located patterns which were rhythmically identical and also showed exact inversion. One such statement of the subject, as located by the program, is shown below²⁵:

²⁴ Appendix B, p. 666.

²⁵ Appendix B, p. 726.

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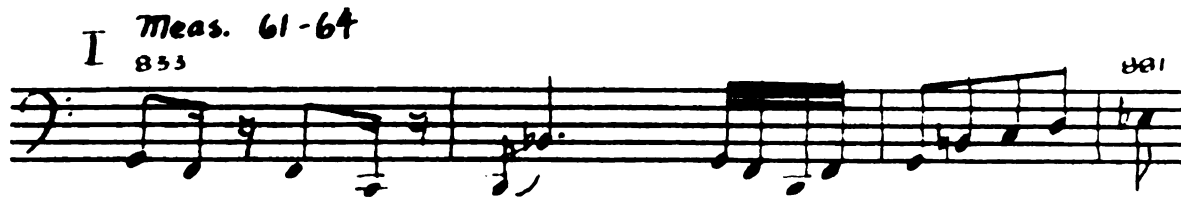
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Pattern	Notes	Related to	Notes	Test	Length
423	1 to 49		833 to 881	14	15



The Test-6 analysis, described earlier, located some complete statements of the subject presented in exact pitch retrograde; however, the Test-24 analysis was unable to locate any complete examples of the subject presented in exact pitch retrograde and with exact rhythm retrograde. The reason for this was that Hindemith slightly altered the rhythmic content of the subject, when he presented it in retrograde. In the following example from the Test-24 analysis, only a portion of the original subject and the retrograde version were related. The point where the rhythms differ between the two versions of the subject is indicated with an arrow²⁶:

Pattern	Notes	Related to	Notes	Test	Length
170	393 to 420		1069 to 1089	24	9

R Meas. 34-36
393

O Meas. 74-77
1069 1089

²⁶Appendix B, p. 744.

Abstract

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The rhythm alteration in the retrograde form, although slight, prevented the program from identifying the complete statements of the subject as being intervallically and rhythmically related in retrograde form. The program will not list any rhythmic deviations or modifications from the designated criterion.

This excerpt did not contain a complete statement of the subject in retrograde inversion. The Test-26 analysis did locate one partial statement (as well as many smaller fragments)²⁷:

Pattern	Notes	Related to	Notes	Test	Length
189	601 to 620		1069 to 1085	26	8

The analysis was able to locate some additional instances of retrograde inversion by matching statements of the subject in retrograde with other statements of the subject in inversion. Such statements do show the retrograde inversion relationship with respect to each other²⁸:

²⁷Appendix B, p. 762.

²⁸Appendix B, p. 762.

Pattern	Notes	Related to	Notes	Test	Length
188	401 to 420		861 to 877	26	8

Meas. 33-36

Meas. 61-64

The purpose of analyzing excerpts by Varèse, Dunstable, and Hindemith for this thesis was not to draw conclusions about the works themselves, but rather to illustrate the type of information available to the analyst through use of the music analysis program. The program was written with the assumption that the analyst would select the test most appropriate to his needs, and then use the results of the analyses to help determine the importance of specific melodic patterns to the work under study. The program draws no conclusions about the importance of the relationships it has located; all aspects of musical and analytical judgment must be supplied by the analyst.

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

A number of problems have been associated with microanalytical study of music. Some of the most difficult problems have been related to the task of gathering complete and accurate information concerning the presence of small, objectively-defined musical events. Such a task is necessary before an analyst can draw conclusions about the smaller elements of musical style of a composer. Prior to the introduction of computer-assistance to this task, the analyst was greatly limited by the slowness of the procedure, the ever-present problem of human error, and the possibility that familiarity with a musical style might influence his ability to collect impartially this information.

The purpose of this thesis was to explore one possible approach to micro-analysis of melodic lines by writing a computer program which would help the analyst locate specific types of melodic patterns. In addition, the program provided supplementary information about the frequency-of-occurrence of each melodic interval from the unison through two octaves.

The program listed the precise location of any of the following types of melodic patterns depending upon which of twenty-six optional tests were chosen by the program user:

- 1) exact O, I, R, and RI pitch relationships;
- 2) tonal (i.e., direction only) O, I, R, and RI melodic relationships;
- 3) O or R rhythm regardless of pitch content (limited to analysis of rational rhythms only); and
- 4) O or R rhythm occurring with any of the pitch relationships described in (1) or (2).

O, I, R, and RI relationships were chosen because music analysts have shown interest in these relationships, and because such patterns can be clearly defined to analysts and the computer.

The subject of melodic patterns was chosen for development of the program because the importance of perception of melodic patterns to both the composer and the listener has been suggested by composers, music analysts, and other investigators. It seemed likely, therefore, that the development of a computer program to assist in identifying certain types of melodic patterns might be of value to a number of areas of study.

The results of each computer test were presented in two ways: first, in a series of lists (collectively designated as a "Type-I listing") which presented the patterns in order of increasing length from three notes in length to as long as was necessary to accommodate the lengthiest patterns; and second, in a format (designated as a "Type-II listing") which showed the subpatterns which occurred most frequently within the lengthiest pattern (or patterns) found in the analysis.

It was originally intended that the program list all of the melodic patterns fitting the criterion for each test; however, testing of the program showed that certain musical passages caused the program to list

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the situation.

2. Once the problem is identified, the next step is to define the objectives and goals of the project. This helps to clarify what is to be achieved and provides a clear direction for the work.

3. The third step is to develop a plan or strategy to address the problem. This involves identifying the resources available, the tasks to be completed, and the timeline for the project.

4. The fourth step is to implement the plan. This involves putting the strategy into action and monitoring progress as the project moves forward.

5. The final step is to evaluate the results of the project. This involves assessing whether the objectives have been met and identifying any lessons learned for future projects.

some patterns which were ambiguous and relatively useless to the program user. After it had been determined that the elimination of these ambiguous patterns would not adversely affect the thoroughness of the pattern analyses, the program was subsequently modified so that they were eliminated from the computer listings. Further testing determined that the program provided the most useful listing of patterns, when the melodic material of most interest to the analyst appeared near the beginning of the data deck.

The program was written in the FORTRAN IV programming language. Since none of the existing systems used for converting music to computer input data was found to be applicable to this project, another encoding procedure was developed especially for use with this program.

Music examples by Varèse, Hindemith, and Dunstable were encoded and analyzed in order to illustrate the type of information which the program provided and how the music of different stylistic periods could be analyzed with the program.

The thesis was limited to this one approach of analyzing melodic lines. The computer program was limited in the following ways:

- 1) it was limited to the analysis of strictly linear music;
i.e., music in which a specified number of voices was defined;
- 2) no vertical or harmonic analysis was attempted; and
- 3) the program was not designed to read or analyze irrational rhythms.

Conclusions and recommendations

The strength of the computer lies in its ability to process large amounts of numeric or symbolic information quickly and accurately.

This computer program was written to save the music analyst time and improve the thoroughness and accuracy in gathering information about the presence of specific melodic patterns. In this respect, it has accomplished its purpose within its stated limitations. The strength of this program, however, is not its ability to shorten the overall amount of time needed to analyze a given work, but rather to shorten the amount of time needed to gather preliminary information, thereby making more time available for the analyst to draw conclusions, both objective and subjective, about the work under study. The many different types of patterns which may be located with this program should allow the user to investigate the importance of many more types of melodic relationships to a wider range of musical styles than has been possible with any previously reported computer program of this type.

It is recommended that investigators interested in exploring the importance of the O, I, R, and RI relationships to linear music implement this program and use its strengths to support their own studies.

It is further recommended that a future study into the problem of pattern perception be directed towards the development of more effective criteria for identifying other structurally important relationships in linear music, and that future investigators determine the effectiveness of these new criteria with programs such as this.

It is also recommended that an encoding system for translating the musical score to computer input data be developed which will bypass use of the punched card or the need for other preliminary encoding procedure. An inexpensive procedure of this type would encourage the development of effective approaches to the computer-assisted analysis of music.

APPENDICES

APPENDIX A

Computer Output for Analyses of Illustrative Music Examples

As was stated earlier in the thesis, each pattern-statement shown in this Appendix designates two specific melodic excerpts which display a previously defined musical relationship.

The reader should refer to the indicated musical example when examining each illustration; the pattern lists cannot be used effectively without reference to the associated musical example.

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 1

TEST REQUESTED 1
UNITS OF DATA PER CARD 15

COMPUTER REFERENCE NUMBER ASSIGNMENT

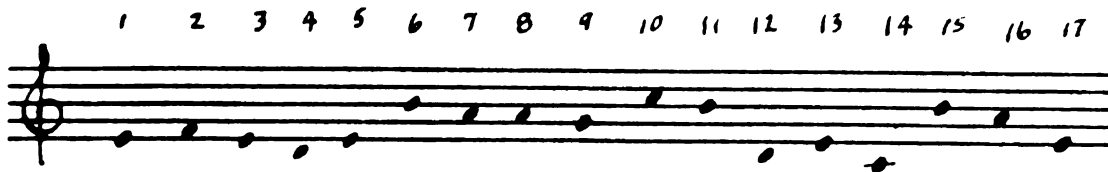
NOTES 1 THROUGH 15
54 55 54 52 54 61 59 57 57 62 61 52 54 50 61

NOTES 16 THROUGH 18
59 54 -99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

PATTERNS WHICH LACK CHANGE-OF-DIRECTION



APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 1

ASCENDING AND DESCENDING INTERVALS*
(INCLUDING ENHARMONIC EQUIVALENTS)

	TOTAL OCCURRENCES	PERCENTAGE OF OCCURRENCE
MINOR 2	3	18.75
MAJOR 2	6	37.50
MINOR 3	0	0.0
MAJOR 3	1	6.25
PERF. 4	2	12.50
TRITONE	0	0.0
PERF. 5	1	6.25
MINOR 6	0	0.0
MAJOR 6	1	6.25
MINOR 7	0	0.0
MAJOR 7	1	6.25
OCTAVE	0	0.0
MINOR 9	0	0.0
MAJOR 9	0	0.0
MINOR 10	0	0.0
MAJOR 10	0	0.0
PERF. 11	0	0.0
COMP. TT	0	0.0
PERF. 12	0	0.0
MINOR 13	0	0.0
MAJOR 13	0	0.0
MINOR 14	0	0.0
MAJOR 14	0	0.0
TWO OCT.	0	0.0
UNISON	1	6.25
INTERVALS EXCEEDING TWO OCTAVES	0	0.0

16 INTERVALS COUNTED

*INCLUDING UNISONS

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 1

ASCENDING INTERVALS
(INCLUDING ENHARMONIC EQUIVALENTS)

	TOTAL OCCURRENCES	PERCENTAGE OF OCCURRENCE
MINOR 2	1	16.67
MAJOR 2	2	33.33
MINOR 3	0	0.0
MAJOR 3	0	0.0
PERF. 4	1	16.67
TRITONE	0	0.0
PERF. 5	1	16.67
MINOR 6	0	0.0
MAJOR 6	0	0.0
MINOR 7	0	0.0
MAJOR 7	1	16.67
OCTAVE	0	0.0
MINOR 9	0	0.0
MAJOR 9	0	0.0
MINOR 10	0	0.0
MAJOR 10	0	0.0
PERF. 11	0	0.0
COMP. TT	0	0.0
PERF. 12	0	0.0
MINOR 13	0	0.0
MAJOR 13	0	0.0
MINOR 14	0	0.0
MAJOR 14	0	0.0
TWO OCT.	0	0.0
INTERVALS EXCEEDING TWO OCTAVES	0	0.0

6 ASCENDING INTERVALS COUNTED

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 1

DESCENDING INTERVALS
(INCLUDING ENHARMONIC EQUIVALENTS)

	TOTAL OCCURRENCES	PERCENTAGE OF OCCURRENCE
MINOR 2	2	22.22
MAJOR 2	4	44.44
MINOR 3	0	0.0
MAJOR 3	1	11.11
PERF. 4	1	11.11
TRITONE	0	0.0
PERF. 5	0	0.0
MINOR 6	0	0.0
MAJOR 6	1	11.11
MINOR 7	0	0.0
MAJOR 7	0	0.0
OCTAVE	0	0.0
MINOR 9	0	0.0
MAJOR 9	0	0.0
MINOR 10	0	0.0
MAJOR 10	0	0.0
PERF. 11	0	0.0
CCMP. TT	0	0.0
PERF. 12	0	0.0
MINOR 13	0	0.0
MAJOR 13	0	0.0
MINOR 14	0	0.0
MAJOR 14	0	0.0
TWO OCT. INTERVALS	0	0.0
EXCEEDING TWO OCTAVES		

9 DESCENDING INTERVALS COUNTED

*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 1

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO 3		5 TO 7	1	3
2	1 TO 3		9 TO 11	1	3
3	1 TO 3		12 TO 14	1	3
4	1 TO 3		14 TO 16	1	3
5	3 TO 5		8 TO 10	1	3
6	3 TO 5		11 TO 13	1	3
7	3 TO 5		13 TO 15	1	3
**** FOR	5 TO 7.	SEE	1 TO 3 ABOVE	****	
**** FOR	8 TO 10.	SEE	3 TO 5 ABOVE	****	
**** FOR	9 TO 11.	SEE	1 TO 3 ABOVE	****	
**** FOR	11 TO 13.	SEE	3 TO 5 ABOVE	****	
**** FOR	12 TO 14.	SEE	1 TO 3 ABOVE	****	
**** FOR	13 TO 15.	SEE	3 TO 5 ABOVE	****	
8	1 TO 4		9 TO 12	1	4
9	1 TO 4		14 TO 17	1	4
10	2 TO 5		10 TO 13	1	4
11	8 TO 11		11 TO 14	1	4
12	8 TO 11		13 TO 16	1	4
**** FOR	9 TO 12.	SEE	1 TO 4 ABOVE	****	
**** FOR	10 TO 13.	SEE	2 TO 5 ABOVE	****	
**** FOR	11 TO 14.	SEE	8 TO 11 ABOVE	****	
13	1 TO 5		9 TO 13	1	5
14	8 TO 12		13 TO 17	1	5
**** FOR	8 TO 12.	SEE	8 TO 12 ABOVE	****	
**** FOR	9 TO 13.	SEE	1 TO 5 ABOVE	****	

END OF TYPE I LISTING. TOTAL OF 14 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 1
TONAL CCNTOUR (ORIGINAL)

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	8 TO 12	2	5
ORIGINAL PATTERN	1 TO 5	2	5
SUBPATTERN	3 TO 5	4	3

**** TEST 1 COMPLETED AT 102 SECONDS INTO EXECUTION ****

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 2

TEST REQUESTED 2
UNITS OF DATA PER CARD 15

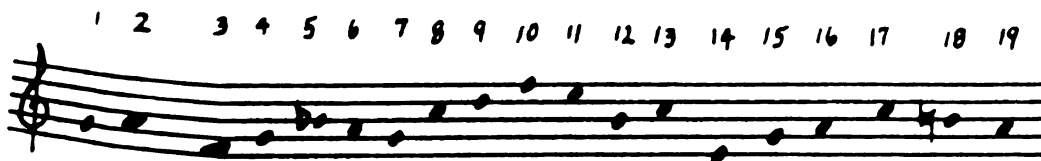
COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 15
57 59 55 57 60 59 57 62 64 67 66 61 62 54 57

NOTES 16 THROUGH 20
59 62 61 59 -99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH



APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 2

ASCENDING AND DESCENDING INTERVALS*
(INCLUDING ENHARMONIC EQUIVALENTS)

	TOTAL OCCURRENCES	PERCENTAGE OF OCCURRENCE
MINOR 2	4	22.22
MAJOR 2	6	33.33
MINOR 3	4	22.22
MAJOR 3	1	5.56
PERF. 4	2	11.11
TRITONE	0	0.0
PERF. 5	0	0.0
MINOR 6	1	5.56
MAJOR 6	0	0.0
MINOR 7	0	0.0
MAJOR 7	0	0.0
OCTAVE	0	0.0
MINOR 9	0	0.0
MAJOR 9	0	0.0
MINOR 10	0	0.0
MAJOR 10	0	0.0
PERF. 11	0	0.0
COMP. TT	0	0.0
PERF. 12	0	0.0
MINOR 13	0	0.0
MAJOR 13	0	0.0
MINOR 14	0	0.0
MAJOR 14	0	0.0
TWO OCT.	0	0.0
UNISON	0	0.0
INTERVALS EXCEEDING TWO OCTAVES	0	0.0

18 INTERVALS COUNTED

*INCLUDING UNISONS

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 2

ASCENDING INTERVALS
(INCLUDING ENHARMONIC EQUIVALENTS)

	TCTAL OCCURRENCES	PERCENTAGE OF OCCURRENCE
MINCR 2	1	10.00
MAJCR 2	4	40.00
MINCR 3	4	40.00
MAJOR 3	0	0.0
PERF. 4	1	10.00
TRITONE	0	0.0
PERF. 5	0	0.0
MINCR 6	0	0.0
MAJCR 6	0	0.0
MINOR 7	0	0.0
MAJOR 7	0	0.0
OCTAVE	0	0.0
MINCR 9	0	0.0
MAJOR 9	0	0.0
MINCR 10	0	0.0
MAJOR 10	0	0.0
PERF. 11	0	0.0
COMP. TT	0	0.0
PERF. 12	0	0.0
MINCR 13	0	0.0
MAJOR 13	0	0.0
MINOR 14	0	0.0
MAJOR 14	0	0.0
TWO OCT.	0	0.0
INTERVALS	0	0.0
EXCEEDING TWO OCTAVES	0	0.0

10 ASCENDING INTERVALS COUNTED

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 2

DESCENDING INTERVALS
(INCLUDING ENHARMONIC EQUIVALENTS)

	TOTAL OCCURRENCES	PERCENTAGE OF OCCURRENCE
MINOR 2	3	37.50
MAJOR 2	2	25.00
MINOR 3	0	0.0
MAJOR 3	1	12.50
PERF. 4	1	12.50
TRITONE	0	0.0
PERF. 5	0	0.0
MINOR 6	1	12.50
MAJOR 6	0	0.0
MINOR 7	0	0.0
MAJOR 7	0	0.0
OCTAVE	0	0.0
MINOR 9	0	0.0
MAJOR 9	0	0.0
MINOR 10	0	0.0
MAJOR 10	0	0.0
PERF. 11	0	0.0
COMP. TT	0	0.0
PERF. 12	0	0.0
MINOR 13	0	0.0
MAJOR 13	0	0.0
MINOR 14	0	0.0
MAJOR 14	0	0.0
TWO OCT.	0	0.0
INTERVALS EXCEEDING TWO OCTAVES	0	0.0

8 DESCENDING INTERVALS COUNTED

*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 2

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	3 TO	5	8 TO	10	2 3
2	3 TO	5	15 TO	17	2 3
3	4 TO	6	9 TO	11	2 3
4	4 TO	6	16 TO	18	2 3
5	5 TO	7	17 TO	19	2 3
**** FCR	8 TO	10.	SEE	3 TO	5 ABOVE ****
**** FCR	9 TO	11.	SEF	4 TO	6 ABOVE ****
**** FOR	15 TO	17.	SEE	3 TO	5 ABOVE ****
6	3 TO	6	8 TO	11	2 4
7	3 TO	6	15 TO	18	2 4
8	4 TO	7	16 TO	19	2 4
**** FOR	8 TO	11.	SEE	3 TO	6 ABOVE ****
9	3 TO	7	15 TO	19	2 5

END OF TYPE I LISTING. TOTAL OF 9 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 2
EXACT CCNTOUR (ORIGINAL)

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	3 TO 7	2	5

**** TEST 2 COMPLETED AT 93 SECONDS INTO EXECUTION ****

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 3

TEST REQUESTED 3
UNITS OF DATA PER CARD 15

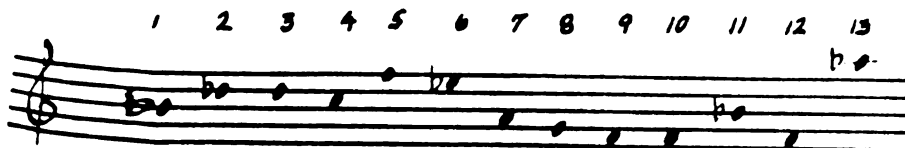
COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 14
60 63 63 62 67 65 59 51 55 55 60 55 70 -99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

PATTERNS WHICH LACK CHANGE-OF-DIRECTION



The **interval** tables appearing with Tests 3 through 26
omitted in **order** to reduce the size of this appendix.

*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 3

PATTERN	NCOTES	RELATED TO	NCOTES	TEST	LENGTH
1	1 TO	3	8 TO 10	3	3
2	2 TO	4	9 TO 11	3	3
3	3 TO	5	10 TO 12	3	3
4	4 TO	6	11 TO 13	3	3
5	1 TO	4	8 TO 11	3	4
6	2 TO	5	9 TO 12	3	4
7	3 TO	6	10 TO 13	3	4
8	1 TO	5	8 TO 12	3	5
9	2 TO	6	9 TO 13	3	5
10	1 TO	6	8 TO 13	3	6

FAC OF TYPE I LISTING. TOTAL OF 10 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 3
TONAL INVERSION

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	1 TO 6	2	6

**** TEST 3 COMPLETED AT 110 SECONDS INTO EXECUTION ****

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 4

TEST REQUESTED 4
UNITS OF DATA PER CARD 15

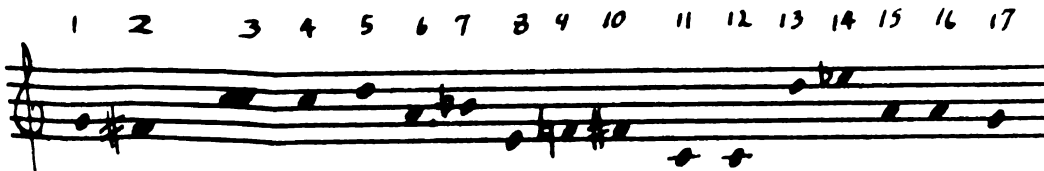
COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 15
57 56 62 62 64 59 60 5+ 55 56 50 50 64 65 59

NOTES 16 THROUGH 18
59 57 -99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 4

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO	3	6 TO 8	4	3
2	1 TO	3	9 TO 11	4	3
3	1 TO	3	13 TO 15	4	3
4	2 TO	4	10 TO 12	4	3
5	2 TO	4	14 TO 16	4	3
6	3 TO	5	15 TO 17	4	3
7	1 TO	4	9 TO 12	4	4
8	1 TO	4	13 TO 16	4	4
9	2 TO	5	14 TO 17	4	4
10	1 TO	5	13 TO 17	4	5

END OF TYPE I LISTING. TOTAL OF 10 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 4
EXACT INVERSION

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	1 TO 5	2	5

**** TEST 4 COMPLETED AT 92 SECONDS INTO EXECUTION ****

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 5

TEST REQUESTED 5
UNITS OF DATA PER CARD 15

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 15
59 55 55 57 52 53 52 54 57 62 58 58 64 62 64

NOTES 16 THROUGH 22
57 56 55 58 57 57 -99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

PATTERNS WHICH LACK CHANGE-OF-DIRECTION



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 5

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO	3	11 TO	13	5 3
2	2 TO	4	10 TO	12	5 3
3	2 TO	4	19 TO	21	5 3
4	3 TO	5	5 TO	7	5 3
5	3 TO	5	9 TO	11	5 3
6	3 TO	5	12 TO	14	5 3
7	3 TO	5	14 TO	16	5 3
8	3 TO	5	18 TO	20	5 3
9	4 TO	6	6 TO	8	5 3
10	4 TO	6	13 TO	15	5 3
11	4 TO	6	17 TO	19	5 3
**** FOR	5 TO	7.	SEE	3 TO	5 ABOVE ****
**** FOR	6 TO	8.	SEE	4 TO	6 ABOVE ****
**** FCR	9 TO	11.	SEE	3 TO	5 ABOVE ****
**** FCR	10 TO	12.	SEE	1 TO	3 ABOVE ****
**** FOR	11 TO	13.	SEE	2 TO	4 ABOVE ****
**** FOR	12 TO	14.	SEE	3 TO	5 ABOVE ****
**** FOR	13 TO	15.	SEE	4 TO	6 ABOVE ****
**** FOR	14 TO	16.	SEE	3 TO	5 ABOVE ****
**** FOR	17 TO	19.	SEE	4 TO	6 ABOVE ****
12	1 TO	4	10 TO	13	5 4
13	2 TO	5	9 TO	12	5 4
14	2 TO	5	18 TO	21	5 4
15	3 TO	6	13 TO	16	5 4
16	3 TO	6	17 TO	20	5 4
17	4 TO	7	12 TO	15	5 4
**** FCR	5 TO	8.	SEE	3 TO	6 ABOVE ****
18	6 TO	9	16 TO	19	5 4
19	8 TO	11	14 TO	17	5 4
**** FOR	10 TO	13.	SEE	1 TO	4 ABOVE ****
**** FOR	11 TO	14.	SEE	2 TO	5 ABOVE ****
**** FOR	12 TO	15.	SEE	3 TO	6 ABOVE ****
**** FOR	13 TO	16.	SEE	4 TO	7 ABOVE ****
20	1 TO	5	9 TO	13	5 5
21	2 TO	6	17 TO	21	5 5
22	3 TO	7	12 TO	16	5 5
23	5 TO	9	16 TO	20	5 5
24	6 TO	10	15 TO	19	5 5
**** FOR	6 TO	10.	SEE	6 TO	10 ABOVE ****
25	7 TO	11	14 TO	18	5 5
**** FOR	10 TO	14.	SEE	1 TO	5 ABOVE ****
**** FOR	11 TO	15.	SEE	2 TO	6 ABOVE ****
**** FOR	12 TO	16.	SEE	3 TO	7 ABOVE ****
26	5 TO	10	15 TO	20	5 6
**** FOR	5 TO	10.	SEE	5 TO	10 ABOVE ****

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
27	6 TO 11		14 TO 19	5	6
28	5 TO 11		14 TO 20	5	7

FAD OF TYPE I LISTING. TOTAL OF 28 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 5
TCNAL RETRCGRADE

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	5 TO 11	2	7

**** TEST 5 COMPLETED AT 128 SECONDS INTO EXECUTION ****

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 6

TEST REQUESTED 6
UNITS OF DATA PER CARD 15

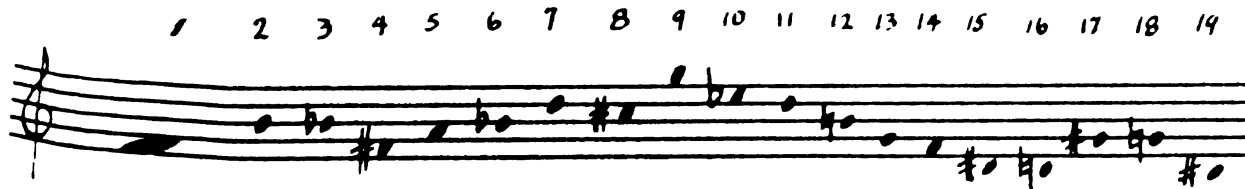
COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 15
55 61 60 56 59 60 64 63 69 65 64 61 57 56 53

NOTES 16 THROUGH 20
52 58 57 53 -99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 6

PATTERN	NOTES	RELATED TC	NOTES	TEST	LENGTH
1	4 TO	6	10 TO 12	6	3
2	4 TO	6	13 TO 15	6	3
3	5 TO	7	9 TO 11	6	3
4	5 TO	7	12 TO 14	6	3
5	4 TO	7	9 TO 12	6	4
6	4 TO	7	12 TO 15	6	4

END OF TYPE I LISTING. TOTAL OF 6 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 6
EXACT RETROGRADE

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	4 TO 7	3	4

*** TEST 6 COMPLETED AT 75 SECONDS INTO EXECUTION ***

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 7

TEST REQUESTED 7
UNITS OF DATA PER CARD 13

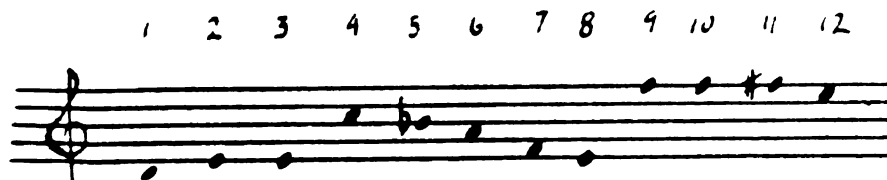
COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 13
52 54 54 62 60 59 55 54 67 67 68 66 -99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

PATTERNS WHICH LACK CHANGE-OF-DIRECTION



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 7

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO	3	9 TO	11	7 3
2	2 TO	4	8 TO	10	7 3
3	3 TO	5	7 TO	9	7 3
4	7 TO	9	10 TO	12	7 3
**** FOR	8 TO	10.	SEE	1 TO	3 ABOVE ****
5	1 TO	4	8 TO	11	7 4
6	2 TO	5	7 TO	10	7 4
7	3 TO	6	6 TO	9	7 4
8	1 TO	5	7 TO	11	7 5
9	2 TO	6	6 TO	10	7 5
10	1 TO	6	6 TO	11	7 6

END OF TYPE I LISTING. TOTAL OF 10 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 7
TGNAL RET. INVERSION

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	1 TO 6	2	6

**** TEST 7 COMPLETED AT 105 SECONDS INTO EXECUTION ****

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 8

TEST REQUESTED 8
UNITS OF DATA PER CARD 15

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 15
59 59 60 60 70 64 64 61 59 62 62 56 66 69 69

NOTES 16 THROUGH 18
70 70 -99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 8

PATTERN	NCOTES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO	3	15 TO 17	8	3
2	2 TO	4	14 TO 16	8	3
3	4 TO	6	11 TO 13	8	3
4	5 TO	7	10 TO 12	8	3
5	6 TO	8	9 TO 11	8	3
6	6 TO	8	13 TO 15	8	3
7	1 TO	4	14 TO 17	8	4
8	4 TO	7	10 TO 13	8	4
9	5 TO	8	9 TO 12	8	4
10	4 TO	8	9 TO 13	8	5

END OF TYPE I LISTING. TOTAL OF 10 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 8
EXACT RET. INVERSION

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	4 TO 8	2	5

**** TEST 8 COMPLETED AT 93 SECONDS INTO EXECUTION ****

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 9

TEST REQUESTED 9
UNITS OF DATA PER CARD 16

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 16
50 0 50 50 50 0 50 50 50 50 50 0 50 50 50 0

NOTES 17 THROUGH 32
50 50 50 50 50 0 50 50 50 0 50 50 50 50 50 0

NOTES 33 THROUGH 43
50 50 50 0 50 50 50 50 0-99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH CONTAIN AN UNDEFINED RHYTHM



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 9

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO	4	5 TO	8	9 3
2	1 TO	4	11 TO	14	9 3
3	1 TO	4	15 TO	18	9 3
4	1 TO	4	21 TO	24	9 3
5	1 TO	4	25 TO	28	9 3
6	1 TO	4	31 TO	34	9 3
7	1 TO	4	35 TO	38	9 3
8	3 TO	5	9 TO	11	9 3
9	3 TO	5	13 TO	15	9 3
10	3 TO	5	19 TO	21	9 3
11	3 TO	5	23 TO	25	9 3
12	3 TO	5	29 TO	31	9 3
13	3 TO	5	33 TO	35	9 3
14	3 TO	5	39 TO	41	9 3
15	4 TO	7	10 TO	13	9 3
16	4 TO	7	14 TO	17	9 3
17	4 TO	7	20 TO	23	9 3
18	4 TO	7	24 TO	27	9 3
19	4 TO	7	30 TO	33	9 3
20	4 TO	7	34 TO	37	9 3
**** FOR	5 TO	8,	SEE	1 TO	4 ABOVE ****
**** FOR	9 TO	11,	SEE	3 TO	5 ABOVE ****
**** FOR	10 TO	13,	SEE	4 TO	7 ABOVE ****
**** FOR	11 TO	14,	SEE	1 TO	4 ABOVE ****
**** FOR	13 TO	15,	SEE	3 TO	5 ABOVE ****
**** FOR	14 TO	17,	SEE	4 TO	7 ABOVE ****
**** FOR	15 TO	18,	SEE	1 TO	4 ABOVE ****
**** FOR	19 TO	21,	SEE	3 TO	5 ABOVE ****
**** FOR	20 TO	23,	SEE	4 TO	7 ABOVE ****
**** FOR	21 TO	24,	SEE	1 TO	4 ABOVE ****
**** FOR	23 TO	25,	SEE	3 TO	5 ABOVE ****
**** FOR	24 TO	27,	SEE	4 TO	7 ABOVE ****
**** FOR	25 TO	28,	SEE	1 TO	4 ABOVE ****
**** FOR	29 TO	31,	SEE	3 TO	5 ABOVE ****
**** FOR	30 TO	33,	SEE	4 TO	7 ABOVE ****
**** FOR	31 TO	34,	SEE	1 TO	4 ABOVE ****
**** FOR	33 TO	35,	SEE	3 TO	5 ABOVE ****
**** FOR	34 TO	37,	SEE	4 TO	7 ABOVE ****
**** FOR	35 TO	38,	SEE	1 TO	4 ABOVE ****
21	1 TO	5	11 TO	15	9 4
22	1 TO	5	21 TO	25	9 4
23	1 TO	5	31 TO	35	9 4
24	3 TO	7	9 TO	13	9 4
25	3 TO	7	13 TO	17	9 4
26	3 TO	7	19 TO	23	9 4

P	ATTEN	NOTES	RELATED TO	NOTES	TEST	LENGTH	
	27	3 TO	7	23 TO	27	9	4
	28	3 TO	7	29 TO	33	9	4
	29	3 TO	7	33 TO	37	9	4
	30	4 TO	8	10 TO	14	9	4
	31	4 TO	8	14 TO	18	9	4
	32	4 TO	8	20 TO	24	9	4
	33	4 TO	8	24 TO	28	9	4
	34	4 TO	8	30 TO	34	9	4
	35	4 TO	8	34 TO	38	9	4
	36	5 TO	9	15 TO	19	9	4
	37	5 TO	9	25 TO	29	9	4
	38	5 TO	9	35 TO	39	9	4
	39	8 TO	11	18 TO	21	9	4
	40	8 TO	11	28 TO	31	9	4
	41	8 TO	11	38 TO	41	9	4
*****	FCR	9 TO	13.	SEE	3 TO	7 ABOVE	*****
*****	FOR	10 TO	14.	SEE	4 TO	8 ABOVE	*****
*****	FCR	11 TO	15.	SEE	1 TO	5 ABOVE	*****
*****	FCR	13 TO	17.	SEE	3 TO	7 ABOVE	*****
*****	FOR	14 TO	18.	SEE	4 TO	8 ABOVE	*****
*****	FOR	15 TO	19.	SEE	5 TO	9 ABOVE	*****
*****	FCR	18 TO	21.	SEE	8 TO	11 ABOVE	*****
*****	FOR	19 TO	23.	SEE	3 TO	7 ABOVE	*****
*****	FOR	20 TO	24.	SEE	4 TO	8 ABOVE	*****
*****	FCR	21 TO	25.	SEE	1 TO	5 ABOVE	*****
*****	FOR	23 TO	27.	SEE	3 TO	7 ABOVE	*****
*****	FOR	24 TO	28.	SEE	4 TO	8 ABOVE	*****
*****	FOR	25 TO	29.	SEE	5 TO	9 ABOVE	*****
*****	FOR	28 TO	31.	SEE	8 TO	11 ABOVE	*****
*****	FOR	29 TO	33.	SEE	3 TO	7 ABOVE	*****
*****	FOR	30 TO	34.	SEE	4 TO	8 ABOVE	*****
*****	FCR	31 TO	35.	SEE	1 TO	5 ABOVE	*****
*****	FCR	33 TO	37.	SEE	3 TO	7 ABOVE	*****
*****	FCR	34 TO	38.	SEE	4 TO	8 ABOVE	*****
	42	1 TO	7	11 TO	17	9	5
	43	1 TO	7	21 TO	27	9	5
	44	1 TO	7	31 TO	37	9	5
	45	3 TO	8	9 TO	14	9	5
	46	3 TO	8	13 TO	18	9	5
	47	3 TO	8	19 TO	24	9	5
	48	3 TO	8	23 TO	28	9	5
	49	3 TO	8	29 TO	34	9	5
	50	3 TO	8	33 TO	38	9	5
	51	4 TO	9	14 TO	19	9	5
	52	4 TO	9	24 TO	29	9	5
	53	4 TO	9	34 TO	39	9	5
	54	5 TO	10	15 TO	20	9	5
	55	5 TO	10	25 TO	30	9	5
	56	5 TO	10	35 TO	40	9	5
	57	7 TO	11	17 TO	21	9	5
	58	7 TO	11	27 TO	31	9	5

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
59	7 TO	11	37 TO	41	9 5
60	8 TO	13	18 TO	23	9 5
61	8 TO	13	28 TO	33	9 5
*** FOR	9 TO	14.	SEE 3 TO	8 ABOVE	**** 5
62	10 TO	15	20 TO	25	9 5
63	10 TO	15	30 TO	35	9 5
*** FOR	11 TO	17.	SEE 1 TO	7 ABOVE	****
*** FOR	13 TO	18.	SEE 3 TO	8 ABOVE	****
*** FOR	14 TO	19.	SEE 4 TO	9 ABOVE	****
*** FOR	15 TO	20.	SEE 5 TO	10 ABOVE	****
*** FOR	17 TO	21.	SEE 7 TO	11 ABOVE	****
*** FOR	18 TO	23.	SEE 8 TO	13 ABOVE	****
*** FOR	19 TO	24.	SEE 3 TO	8 ABOVE	****
*** FOR	20 TO	25.	SEE 10 TO	15 ABOVE	****
*** FOR	21 TO	27.	SEE 1 TO	7 ABOVE	****
*** FOR	23 TO	28.	SEE 3 TO	8 ABOVE	****
*** FOR	24 TO	29.	SEE 4 TO	9 ABOVE	****
*** FOR	25 TO	30.	SEE 5 TO	10 ABOVE	****
*** FOR	27 TO	31.	SEE 7 TO	11 ABOVE	****
*** FOR	28 TO	33.	SEE 8 TO	13 ABOVE	****
*** FOR	29 TO	34.	SEE 3 TO	8 ABOVE	****
*** FOR	30 TO	35.	SEE 10 TO	15 ABOVE	****
*** FOR	31 TO	37.	SEE 1 TO	7 ABOVE	****
64	1 TO	8	11 TO	18	9 6
65	1 TO	8	21 TO	28	9 6
66	1 TO	8	31 TO	38	9 6
67	3 TO	9	13 TO	19	9 6
68	3 TO	9	23 TO	29	9 6
69	3 TO	9	33 TO	39	9 6
70	4 TO	10	14 TO	20	9 6
71	4 TO	10	24 TO	30	9 6
72	4 TO	10	34 TO	40	9 6
73	5 TO	11	15 TO	21	9 6
74	5 TO	11	25 TO	31	9 6
75	5 TO	11	35 TO	41	9 6
76	7 TO	13	17 TO	23	9 6
77	7 TO	13	27 TO	33	9 6
78	8 TO	14	18 TO	24	9 6
79	8 TO	14	28 TO	34	9 6
80	9 TO	15	19 TO	25	9 6
81	9 TO	15	29 TO	35	9 6
82	10 TO	17	20 TO	27	9 6
83	10 TO	17	30 TO	37	9 6
*** FOR	11 TO	18.	SEE 1 TO	8 ABOVE	****
*** FOR	13 TO	19.	SEE 3 TO	9 ABOVE	****
*** FOR	14 TO	20.	SEE 4 TO	10 ABOVE	****
*** FOR	15 TO	21.	SEE 5 TO	11 ABOVE	****
*** FOR	17 TO	23.	SEE 7 TO	13 ABOVE	****
*** FOR	18 TO	24.	SEE 8 TO	14 ABOVE	****
*** FOR	19 TO	25.	SEE 9 TO	15 ABOVE	****
*** FOR	20 TO	27.	SEE 10 TO	17 ABOVE	****

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
*** FOR	21 TO 28,	SEE	1 TO 8 ABOVE ****		
* ** FOR	23 TO 29,	SEE	3 TO 9 ABOVE ****		
* ** FGR	24 TO 30,	SEE	4 TO 10 ABOVE ****		
* ** FGR	25 TO 31,	SEE	5 TO 11 ABOVE ****		
* ** FGR	27 TO 33,	SEE	7 TO 13 ABOVE ****		
* ** FGR	28 TO 34,	SEE	8 TO 14 ABOVE ****		
* ** FOR	29 TO 35,	SEE	9 TO 15 ABOVE ****		
84	1 TO 9		11 TO 19	9	7
85	1 TO 9		21 TO 29	9	7
86	1 TO 9		31 TO 39	9	7
87	3 TO 10		13 TO 20	9	7
88	3 TO 10		23 TO 30	9	7
89	3 TO 10		33 TO 40	9	7
9C	4 TO 11		14 TO 21	9	7
91	4 TO 11		24 TO 31	9	7
92	4 TO 11		34 TO 41	9	7
93	5 TO 13		15 TO 23	9	7
94	5 TO 13		25 TO 33	9	7
95	7 TO 14		17 TO 24	9	7
96	7 TO 14		27 TO 34	9	7
97	8 TO 15		18 TO 25	9	7
98	8 TO 15		28 TO 35	9	7
99	9 TO 17		19 TO 27	9	7
100	9 TO 17		29 TO 37	9	7
101	10 TO 18		20 TO 28	9	7
102	10 TO 18		30 TO 38	9	7
103	1 TO 10		11 TO 20	9	8
104	1 TO 10		21 TO 30	9	8
105	1 TO 10		31 TO 40	9	8
106	3 TO 11		13 TO 21	9	8
107	3 TO 11		23 TO 31	9	8
108	3 TO 11		33 TO 41	9	8
109	4 TO 13		14 TO 23	9	8
110	4 TO 13		24 TO 33	9	8
111	5 TO 14		15 TO 24	9	8
112	5 TO 14		25 TO 34	9	8
113	7 TO 15		17 TO 25	9	8
114	7 TO 15		27 TO 35	9	8
115	8 TO 17		18 TO 27	9	8
116	8 TO 17		28 TO 37	9	8
117	9 TO 18		19 TO 28	9	8
118	9 TO 18		29 TO 38	9	8
119	10 TO 19		20 TO 29	9	8
120	10 TO 19		30 TO 39	9	8
121	1 TO 11		11 TO 21	9	9
122	1 TO 11		21 TO 31	9	9
123	1 TO 11		31 TO 41	9	9
124	3 TO 13		13 TO 23	9	9
125	3 TO 13		23 TO 33	9	9
126	4 TO 14		14 TO 24	9	9
127	4 TO 14		24 TO 34	9	9

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
128	5 TO	15	15 TO	25	9
129	5 TO	15	25 TO	35	9
130	7 TO	17	17 TO	27	9
131	7 TO	17	27 TO	37	9
132	8 TO	18	18 TO	28	9
133	8 TO	18	28 TO	38	9
134	9 TO	19	19 TO	29	9
135	9 TO	19	29 TO	39	9
136	10 TO	20	20 TO	30	9
137	10 TO	20	30 TO	40	9
138	1 TO	13	21 TO	33	9
139	3 TO	14	23 TO	34	9
140	4 TO	15	24 TO	35	9
141	5 TO	17	25 TO	37	9
142	7 TO	18	27 TO	38	9
143	8 TO	19	28 TO	39	9
144	9 TO	20	29 TO	40	9
145	10 TO	21	30 TO	41	9
146	1 TO	14	21 TO	34	9
147	3 TO	15	23 TO	35	9
148	4 TO	17	24 TO	37	9
149	5 TO	18	25 TO	38	9
150	7 TO	19	27 TO	39	9
151	8 TO	20	28 TO	40	9
152	9 TO	21	29 TO	41	9
153	1 TO	15	21 TO	35	9
154	3 TO	17	23 TO	37	9
155	4 TO	18	24 TO	38	9
156	5 TO	19	25 TO	39	9
157	7 TO	20	27 TO	40	9
158	8 TO	21	28 TO	41	9
159	1 TO	17	21 TO	37	9
160	3 TO	18	23 TO	38	9
161	4 TO	19	24 TO	39	9
162	5 TO	20	25 TO	40	9
163	7 TO	21	27 TO	41	9
164	1 TO	18	21 TO	38	9
165	3 TO	19	23 TO	39	9
166	4 TO	20	24 TO	40	9
167	5 TO	21	25 TO	41	9
168	1 TO	19	21 TO	39	9
169	3 TO	20	23 TO	40	9
170	4 TO	21	24 TO	41	9
171	1 TO	20	21 TO	40	9
172	3 TO	21	23 TO	41	9
173	1 TO	21	21 TO	41	9

END OF TYPE I LISTING. TOTAL OF 173 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 9
RHYTHM

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	1 TO 21	2	17
SUBPATTERN	1 TO 11	4	9
SUBPATTERN	3 TO 11	4	8
SUBPATTERN	1 TO 10	4	8
SUBPATTERN	4 TO 11	4	7
SUBPATTERN	3 TO 10	4	7
SUBPATTERN	1 TO 9	4	7
SUBPATTERN	5 TO 11	4	6
SUBPATTERN	4 TO 10	4	6
SUBPATTERN	3 TO 9	4	6
SUBPATTERN	1 TO 8	4	6
SUBPATTERN	7 TO 11	4	5
SUBPATTERN	5 TO 10	4	5
SUBPATTERN	4 TO 9	4	5
SUBPATTERN	3 TO 8	7	5
SUBPATTERN	1 TO 7	4	5
SUBPATTERN	8 TO 11	4	4
SUBPATTERN	5 TO 9	4	4
SUBPATTERN	4 TO 8	7	4
SUBPATTERN	3 TO 7	7	4
SUBPATTERN	1 TO 5	4	4
SUBPATTERN	4 TO 7	7	3
SUBPATTERN	3 TO 5	8	3

**** TEST 9 COMPLETED AT 313 SECONDS INTO EXECUTION ****

* ***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 10

TEST REQUESTED 10
UNITS OF DATA PER CARD 16

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 16
50 0 50 50 50 0 0 0 0 0 50 0 50 50 50 0

NOTES 17 THROUGH 32
50 0 50 0 50 50 0 0 50 0 50 0 50 0 50 0

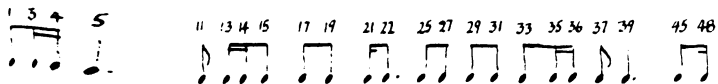
NOTES 33 THROUGH 48
50 0 50 50 50 0 50 0 0 0 0 50 0 0 50

NOTES 49 THROUGH 49
-99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH CONTAIN AN UNDEFINED RHYTHM

'SYM' DESIGNATES NONRETROGRADABLE (I.E., SYMMETRICAL) RHYTHM.



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 10

PATTERN	NOTES	RELATED TO	NOTES	TEST LENGTH
1	1 TO 4		13 TO 15	10 3
2	1 TO 4		35 TO 37	10 3
3	5 TO 13		36 TO 39	10 3
*** FOR	11 TO 14,	SEE	1 TO 4 ABOVE ****	
4	13 TO 15		33 TO 36	10 3
5	14 TO 17		17 TO 21	10 3
6	14 TO 17		31 TO 35	10 3
*** FGR	33 TO 36,	SEE	1 TO 4 ABOVE ****	
*** FOR	35 TO 37,	SEE	13 TO 15 ABOVE ****	
7	5 TO 14		35 TO 39	10 4
8	11 TO 15	(SYM)	33 TO 37	10 4
9	13 TO 17		31 TO 36	10 4
10	14 TO 19		29 TO 35	10 4
*** FOR	33 TO 37,	SEE	11 TO 15 ABOVE ****	
11	5 TO 15		33 TO 39	10 5
12	11 TO 17		31 TO 37	10 5
13	13 TO 19		29 TO 36	10 5
14	5 TO 17		31 TO 39	10 6
15	11 TO 19		29 TO 37	10 6
16	5 TO 19		29 TO 39	10 7

END OF TYPE I LISTING. TOTAL OF 16 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 10
RHYTHM RETROGRADE

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	5 TO 19	2	7

*** TEST 10 COMPLETED AT 124 SECONDS INTO EXECUTION ****

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 11

TEST REQUESTED 11
 UNITS OF DATA PER CARD 12

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 12
 50 0 62 61 62 0 52 u 64 62 64 0

NOTES 13 THROUGH 24
 54 66 0 65 66 0 55 u 67 66 67 0

NOTES 25 THROUGH 25
 -99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
 FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
 FOUR NOTES-IN-LENGTH

PATTERNS WHICH LACK CHANGE-OF-DIRECTION



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 11

PATTERN	NOTES	RELATED TO	NOTES	TEST LENGTH
1	1 TO 4		7 TO 10	11 3
2	1 TO 4		19 TO 22	11 3
3	3 TO 5		9 TO 11	11 3
4	3 TO 5		21 TO 23	11 3
5	4 TO 7		16 TO 19	11 3
6	5 TO 9		17 TO 21	11 3
*** FOR	7 TO 10.	SEE	1 TO 4 ABOVE	****
*** FOR	9 TO 11.	SEE	3 TO 5 ABOVE	****
7	10 TO 13		13 TO 16	11 3
8	11 TO 14		14 TO 17	11 3
*** FOR	13 TO 16.	SEE	10 TO 13 ABOVE	****
*** FOR	14 TO 17.	SEE	11 TO 14 ABOVE	****
*** FOR	16 TO 19.	SEE	4 TO 7 ABOVE	****
*** FOR	17 TO 21.	SEE	5 TO 9 ABOVE	****
9	1 TO 5		7 TO 11	11 4
10	1 TO 5		19 TO 23	11 4
11	4 TO 9		16 TO 21	11 4
12	5 TO 10		17 TO 22	11 4
** FOR	7 TO 11.	SEE	1 TO 5 ABOVE	****
13	4 TO 10		16 TO 22	11 5
14	5 TO 11		17 TO 23	11 5
15	4 TO 11		16 TO 23	11 6

END OF TYPE I LISTING. TOTAL OF 15 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 11
EXACT RHYTHM WITH TONAL CONTOUR (ORIGINAL)

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	4 TO 11	2	6

*** TEST 11 COMPLETED AT 107 SECONDS INTO EXECUTION ***

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 12

TEST REQUESTED 12
 UNITS OF DATA PER CARD 12

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 12
 50 0 62 61 62 0 52 0 64 62 64 0

NOTES 13 THROUGH 24
 54 66 0 65 66 0 55 0 67 66 67 0

NOTES 25 THROUGH 25
 -99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
 FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
 FOUR NOTES-IN-LENGTH



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 12

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO	4	19 TO 22	12	3
2	3 TO	5	21 TO 23	12	3
3	1 TO	5	19 TO 23	12	4

END OF TYPE I LISTING. TOTAL OF 3 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 12
EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	1 TO 5	2	4

*** TEST 12 COMPLETED AT 74 SECONDS INTO EXECUTION ***

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 13

TEST REQUESTED 13
UNITS OF DATA PER CARD 12

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 12
57 0 61 59 61 0 59 J 55 57 55 0

NOTES 13 THROUGH 24
58 54 0 56 54 0 55 J 52 54 52 0

NOTES 25 THROUGH 25
-99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

PATTERNS WHICH LACK CHANGE-OF-DIRECTION



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 13

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO	4	7 TO 10	13	3
2	1 TO	4	19 TO 22	13	3
3	3 TO	5	9 TO 11	13	3
4	3 TO	5	21 TO 23	13	3
5	4 TO	7	16 TO 19	13	3
6	1 TO	5	7 TO 11	13	4
7	1 TO	5	19 TO 23	13	4

END OF TYPE I LISTING. TOTAL OF 7 PATTERNS LOCATED.

80
81

72

71

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 13
EXACT RHYTHM WITH TONAL INVERSION

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	1 TO 5	3	4

*** TEST 13 COMPLETED AT 77 SECONDS INTO EXECUTION ***

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 14

TEST REQUESTED 14
 UNITS OF DATA PER CARD 12

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 12
 57 0 61 59 61 0 59 J 55 57 55 0

NOTES 13 THROUGH 24
 58 54 0 56 54 0 55 J 52 54 52 0

NOTES 25 THROUGH 25
 -99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
 FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
 FOUR NOTES-IN-LENGTH



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 14

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO	4	7 TO 10	14	3
2	3 TO	5	9 TO 11	14	3
3	3 TO	5	21 TO 23	14	3
4	1 TO	5	7 TO 11	14	4

END OF TYPE I LISTING. TOTAL OF 4 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 14
EXACT RHYTHM WITH EXACT INVERSION

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	1 TO 5	2	4

*** TEST 14 COMPLETED AT 74 SECONDS INTO EXECUTION ***

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 15

TEST REQUESTED 15
UNITS OF DATA PER CARD 16

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 16
60 59 57 0 59 0 57 0 57 59 57 0 59 0 61 0

NOTES 17 THROUGH 32
59 61 59 0 61 0 62 0 57 0 59 0 57 0 59 60

NOTES 33 THROUGH 33
-99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

PATTERNS WHICH LACK CHANGE-OF-DIRECTION

LISTING MAY INCLUDE SOME CROSS-REFERENCES TO STATEMENTS
NOT PREVIOUSLY SHOWN. IGNORE THESE CROSS-REFERENCE
STATEMENTS.



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 15

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH	
1	2 TO	5	10 TO	13	15	3
2	2 TO	5	18 TO	21	15	3
3	3 TO	7	21 TO	25	15	3
4	3 TO	7	25 TO	29	15	3
***** FOR	10 TO	13.	SEE	2 TO	5 ABOVE	****
***** FOR	18 TO	21.	SEE	2 TO	5 ABOVE	****
***** FOR	21 TO	25.	SEE	3 TO	7 ABOVE	****
***** FOR	25 TO	29.	SEE	3 TO	7 ABOVE	****
5	1 TO	7	9 TO	15	15	5
6	1 TO	7	17 TO	23	15	5

END OF TYPE I LISTING. TOTAL OF 6 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 15
EXACT RHYTHM WITH TONAL RETROGRADE

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	1 TO 7	3	5

*** TEST 15 COMPLETED AT 117 SECONDS INTO EXECUTION ****

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 16

TEST REQUESTED 16
UNITS OF DATA PER CARD 16

CCOMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 16
60 59 57 0 59 0 57 0 57 59 57 0 59 0 61 0

NOTES 17 THROUGH 32
59 61 59 0 61 0 62 0 57 0 59 0 57 0 59 60

NOTES 33 THROUGH 33
-99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

LISTING MAY INCLUDE SOME CROSS-REFERENCES TO STATEMENTS
NOT PREVIOUSLY SHOWN. IGNORE THESE CROSS-REFERENCE
STATEMENTS.



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 16

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH	
1	2 TO	5	10 TO	13	16	3
2	2 TO	5	18 TO	21	16	3
3	3 TO	7	25 TO	29	16	3
*** FOR	10 TO	13.	SEE	2 TO	5 ABOVE	****
*** FOR	18 TO	21.	SEE	2 TO	5 ABOVE	****
*** FOR	25 TO	29.	SEE	3 TO	7 ABOVE	****
4	1 TO	7	17 TO	23	16	5

END OF TYPE I LISTING. TOTAL OF 4 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 16
EXACT RHYTHM WITH EXACT RETROGRADE

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	1 TO 7	2	5

*** TEST 16 COMPLETED AT 115 SECONDS INTO EXECUTION ***

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 17

TEST REQUESTED 17
UNITS OF DATA PER CARD 16

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 16
55 0 57 57 62 0 61 0 57 0 56 61 61 0 63 0

NOTES 17 THROUGH 32
59 58 63 63 65 0 66 0 55 0 54 58 58 0 59 0

NOTES 33 THROUGH 33
-99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

PATTERNS WHICH LACK CHANGE-OF-DIRECTION

LISTING MAY INCLUDE SOME CROSS-REFERENCES TO STATEMENTS
NOT PREVIOUSLY SHOWN. IGNORE THESE CROSS-REFERENCE
STATEMENTS.



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 17

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	3 TO 5		11 TO 13	17	3
2	3 TO 5		27 TO 29	17	3
*** FOR	19 TO 21.	SEE	3 TO 5	ABOVE	****
*** FOR	25 TO 28.	SEE	9 TO 12	ABOVE	****
3	7 TO 12		13 TO 18	17	4
4	1 TO 7		9 TO 15	17	5
5	1 TO 7		25 TO 31	17	5

END OF TYPE I LISTING. TOTAL OF 5 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 17
EXACT RHYTHM WITH TONAL RET. INVERSION

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	1 TO 7	3	5

*** TEST 17 COMPLETED AT 139 SECONDS INTO EXECUTION ***

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 18

TEST REQUESTED 18
 UNITS OF DATA PER CARD 16

CCOMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 16
 55 0 57 57 62 0 61 0 57 0 56 61 61 0 63 0

NOTES 17 THROUGH 32
 59 58 63 63 65 0 66 0 59 0 54 58 58 0 59 0

NOTES 33 THROUGH 33
 -99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
 FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
 FOUR NOTES-IN-LENGTH

LISTING MAY INCLUDE SOME CROSS-REFERENCES TO STATEMENTS
 NOT PREVIOUSLY SHOWN. IGNORE THESE CROSS-REFERENCE
 STATEMENTS.



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 18

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH	
1	3 TO	5	11 TO	13	18	3
2	1 TO	7	9 TO	15	18	5

END OF TYPE I LISTING. TOTAL OF 2 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 18
EXACT RHYTHM WITH EXACT RET. INVERSION

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	1 TO 7	2	5

**** TEST 18 COMPLETED AT 120 SECONDS INTO EXECUTION ****

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 19

TEST REQUESTED 19
 UNITS OF DATA PER CARD 16

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 16
 57 0 0 0 0 0 55 0 54 55 57 0 55 0 54 52

NOTES 17 THROUGH 32
 62 0 0 0 0 0 60 0 54 61 62 0 61 0 59 57

NOTES 33 THROUGH 48
 59 57 56 0 57 0 59 57 55 0 54 0 0 0 0 0

NOTES 49 THROUGH 64
 55 53 52 0 54 0 55 53 52 0 50 0 0 0 0 0

NOTES 65 THROUGH 65
 -99

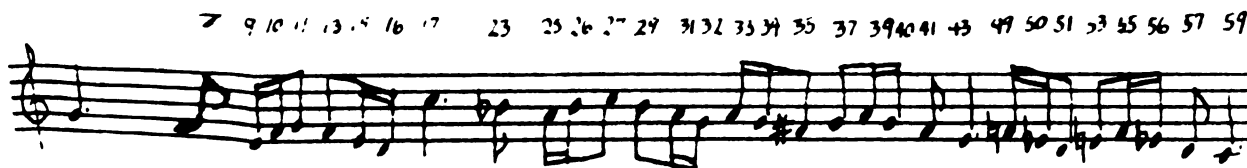
THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
 FROM THE LISTINGS WHICH FOLLOW --

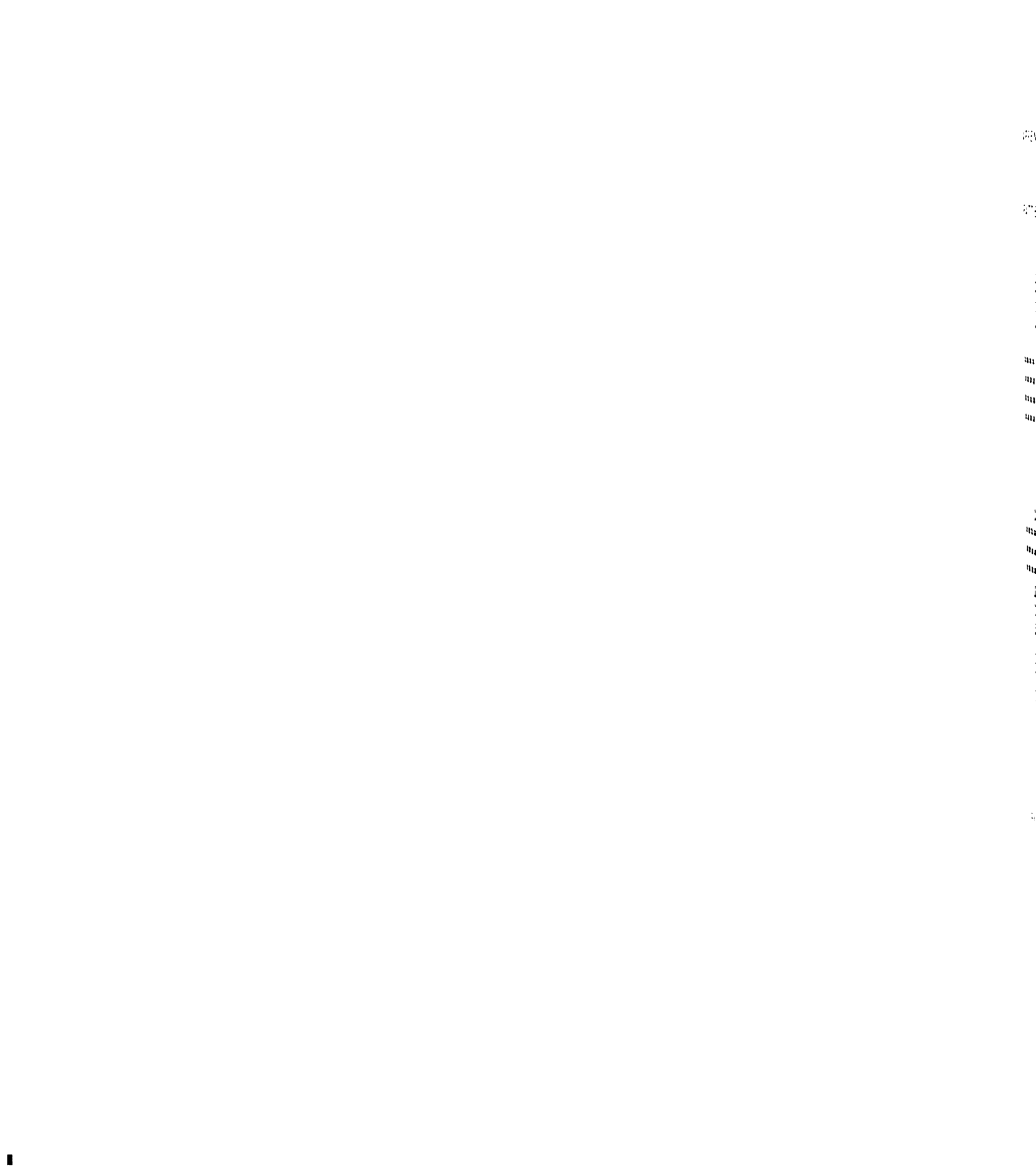
PATTERNS WHICH ARE REITERATIONS LONGER THAN
 FOUR NOTES-IN-LENGTH

PATTERNS WHICH LACK CHANGE-OF-DIRECTION

'SYM' DESIGNATES NONRETROGRADABLE (I.E., SYMMETRICAL) RHYTHM.

LISTING MAY INCLUDE SOME CROSS-REFERENCES TO STATEMENTS
 NOT PREVIOUSLY SHOWN. IGNORE THESE CROSS-REFERENCE
 STATEMENTS.





*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 19

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	7 TO	11 (SYM)	23 TO	27 19	4
2	9 TO	13	35 TO	40 19	4
3	9 TO	13	51 TO	56 19	4
4	10 TO	15 (SYM)	26 TO	31 19	4
5	15 TO	23	41 TO	50 19	4
**** FOR	23 TO	27, SEE	7 TO	11 ABOVE ****	
**** FOR	26 TO	31, SEE	10 TO	15 ABOVE ****	
**** FOR	35 TO	40, SEE	9 TO	13 ABOVE ****	
**** FOR	41 TO	50, SEE	15 TO	23 ABOVE ****	
6	7 TO	15	34 TO	41 19	6
7	7 TO	15	50 TO	57 19	6
8	9 TO	16 (SYM)	25 TO	32 19	6
9	13 TO	25	40 TO	51 19	6
10	13 TO	25	40 TO	51 19	6
**** FOR	25 TO	32, SEE	9 TO	16 ABOVE ****	
**** FOR	34 TO	41, SEE	7 TO	15 ABOVE ****	
**** FOR	40 TO	51, SEE	13 TO	25 ABOVE ****	
11	1 TO	16	33 TO	43 19	8
12	1 TO	16	49 TO	59 19	8
13	11 TO	26	39 TO	53 19	8
14	11 TO	26	39 TO	53 19	8
15	10 TO	27	37 TO	55 19	10
16	9 TO	29	35 TO	56 19	12
17	7 TO	31	34 TO	57 19	14
18	1 TO	32	33 TO	59 19	16

END OF TYPE I LISTING.

TOTAL OF 18 PATTERNS LOCATED.

1000
1000
1000

1000
1000
1000

1000
1000
1000

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 19
RHYTHM RETROGRADE W.TONAL CONTOUR (ORIGINAL)

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	1 TO 32	2	16

**** TEST 19 COMPLETED AT 372 SECONDS INTO EXECUTION ****

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 20

TEST REQUESTED 20
UNITS OF DATA PER CARD 16

CCMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 16
57 0 0 0 0 0 55 0 54 55 57 0 55 0 54 52

NOTES 17 THROUGH 32
62 0 0 0 0 0 60 0 59 61 62 0 61 0 59 57

NOTES 33 THROUGH 48
59 57 56 0 57 0 59 57 55 0 54 0 0 0 0 0

NOTES 49 THROUGH 64
55 53 52 0 54 0 55 53 52 0 50 0 0 0 0 0

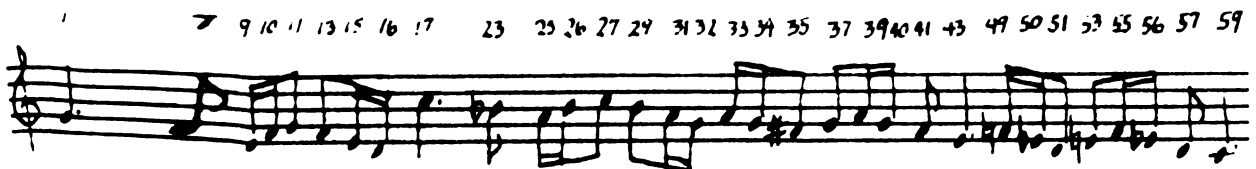
NOTES 65 THROUGH 65
-99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

'SYM' DESIGNATES NONRETROGRADABLE (I.E., SYMMETRICAL) RHYTHM.

LISTING MAY INCLUDE SOME CROSS-REFERENCES TO STATEMENTS
NOT PREVIOUSLY SHOWN. IGNORE THESE CROSS-REFERENCE
STATEMENTS.



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 20

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	9 TO 13		35 TO 40	20	4
***** FOR	35 TO 40,	SEE	9 TO 13 ABOVE	*****	
2	7 TO 15		34 TO 41	20	6
***** FOR	34 TO 41,	SEE	7 TO 15 ABOVE	*****	
3	1 TO 16		33 TO 43	20	8

END OF TYPE I LISTING. TOTAL OF 3 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 20
RHYTHM RETROGRADE W.EXACT CONTOUR (ORIGINAL)

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	1 TO 16	2	8

***** TEST 20 COMPLETED AT 172 SECONDS INTO EXECUTION *****

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 21

TEST REQUESTED 21
UNITS OF DATA PER CARD 16

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 16
62 0 0 62 67 0 65 62 64 61 62 0 64 0 64 55

NOTES 17 THROUGH 32
57 60 59 0 64 62 0 0 62 0 62 57 59 0 62 60

NOTES 33 THROUGH 48
63 0 0 62 60 0 60 55 57 60 58 0 61 60 0 0

NOTES 49 THROUGH 49
-99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

PATTERNS WHICH LACK CHANGE-OF-DIRECTION

- SYM DESIGNATES NONRETROGRADABLE (I.E., SYMMETRICAL) RHYTHM.
- LISTING MAY INCLUDE SOME CROSS-REFERENCES TO STATEMENTS NOT PREVIOUSLY SHOWN. IGNORE THESE CROSS-REFERENCE STATEMENTS.



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 21

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
1	4 TO	7	(SYM)	18 TO 21	21 3
2	4 TO	7	(SYM)	42 TO 45	21 3
***** FCR	15 TO	17.	SEE	7 TO 9 ABOVE	*****
***** FCR	39 TO	41.	SEE	7 TO 9 ABOVE	*****
3	4 TO	8		27 TO 31	21 4
4	5 TO	9		16 TO 19	21 4
5	5 TO	9		40 TO 43	21 4
6	4 TO	10		15 TO 21	21 6
7	4 TO	10		39 TO 45	21 6
8	1 TO	11		13 TO 22	21 8
9	1 TO	11		37 TO 46	21 8

END OF TYPE I LISTING. TOTAL OF 9 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 21
RHYTHM RETROGRADE W.TONAL INVERSION

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	1 TC 11	3	8

* * * * * TEST 21 COMPLETED AT 223 SECONDS INTO EXECUTION * * * * *

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 22

TEST REQUESTED 22
UNITS OF DATA PER CARD 16

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 16
62 0 0 62 67 0 65 62 64 61 62 0 64 0 64 55

NOTES 17 THROUGH 32
57 60 59 0 64 62 0 0 62 0 62 57 59 0 62 60

NOTES 33 THROUGH 48
63 0 0 62 60 0 60 55 57 60 58 0 61 60 0 0

NOTES 49 THROUGH 49
-99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

- SYM DESIGNATES NONRETROGRADABLE (I.E., SYMMETRICAL) RHYTHM.
- LISTING MAY INCLUDE SOME CROSS-REFERENCES TO STATEMENTS NOT PREVIOUSLY SHOWN. IGNORE THESE CROSS-REFERENCE STATEMENTS.



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 22

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	4 TO 8		27 TO 31	22	4
2	5 TO 9		40 TO 43	22	4
3	4 TO 10		39 TO 45	22	6
4	1 TO 11		37 TO 46	22	8

END OF TYPE I LISTING. TOTAL OF 4 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 22
RHYTHM RETROGRADE W. EXACT INVERSION

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	1 TO 11	2	8

**** TEST 22 COMPLETED AT 215 SECONDS INTO EXECUTION ****

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 23

TEST REQUESTED 23
UNITS OF DATA PER CARD 16

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 16
57 59 67 0 66 61 62 0 62 0 0 60 60 62 0 0

NOTES 17 THROUGH 32
62 0 57 66 67 0 62 61 57 0 59 59 58 63 64 0

NOTES 33 THROUGH 48
56 0 0 54 55 57 0 0 57 0 56 61 62 0 54 52

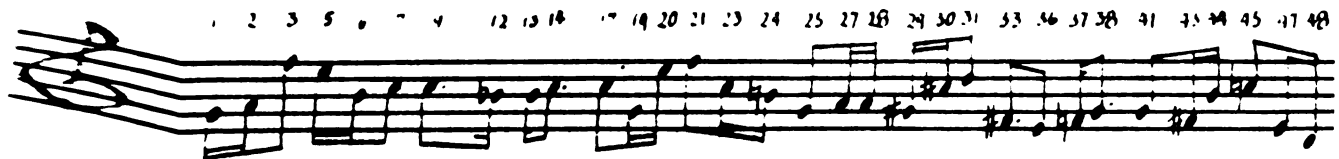
NOTES 49 THROUGH 49
-99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

PATTERNS WHICH LACK CHANGE-OF-DIRECTION

• SYM DESIGNATES NONRETROGRADABLE (I.E., SYMMETRICAL) RHYTHM.



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 23

PATTERN	NCOTES	RELATED TO	NCOTES	TEST	LENGTH
1	2 TO 5	(SYM)	20 TO 23	23	3
2	2 TO 5	(SYM)	44 TO 47	23	3
3	5 TO 7		17 TO 20	23	3
4	5 TO 7		41 TO 44	23	3
5	6 TO 9		14 TO 19	23	3
6	6 TO 9		38 TO 43	23	3
7	7 TO 12		13 TO 17	23	3
8	7 TO 12		37 TO 41	23	3
***** FOR	20 TO 23.	SEE	2 TO 5 ABOVE	*****	
9	1 TO 5		20 TO 24	23	4
10	1 TO 5		44 TO 48	23	4
11	2 TO 6		19 TO 23	23	4
12	2 TO 6		43 TO 47	23	4
13	3 TO 7	(SYM)	17 TO 21	23	4
14	3 TO 7	(SYM)	41 TO 45	23	4
15	5 TO 9		14 TO 20	23	4
16	5 TO 9		38 TO 44	23	4
17	6 TO 12		13 TO 19	23	4
18	6 TO 12		37 TO 43	23	4
***** FOR	19 TO 23.	SEE	1 TO 5 ABOVE	*****	
***** FOR	20 TO 24.	SEE	2 TO 6 ABOVE	*****	
19	1 TO 6	(SYM)	19 TO 24	23	5
20	1 TO 6	(SYM)	43 TO 48	23	5
21	2 TO 7		17 TO 23	23	5
22	2 TO 7		41 TO 47	23	5
23	3 TO 9		14 TO 21	23	5
24	3 TO 9		38 TO 45	23	5
25	5 TO 12		13 TO 20	23	5
26	5 TO 12		37 TO 44	23	5
***** FOR	19 TO 24.	SEE	1 TO 6 ABOVE	*****	
27	1 TO 7		17 TO 24	23	6
28	1 TO 7		41 TO 48	23	6
29	2 TO 9		14 TO 23	23	6
30	2 TO 9		38 TO 47	23	6
31	3 TO 12		13 TO 21	23	6
32	3 TO 12		37 TO 45	23	6
33	1 TO 9		14 TO 24	23	7
34	1 TO 9		38 TO 48	23	7
35	2 TO 12		13 TO 23	23	7
36	2 TO 12		37 TO 47	23	7
37	1 TO 12		13 TO 24	23	8
38	1 TO 12		37 TO 48	23	8

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
---------	-------	------------	-------	------	--------

END OF TYPE I LISTING. TOTAL OF 38 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 23
RHYTHM RETROGRADE W.TONAL RETROGRADE

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	1 TO 12	3	8

***** TEST 23 COMPLETED AT 146 SECONDS INTO EXECUTION *****

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 24

TEST REQUESTED 24
UNITS OF DATA PER CARD 16

CCOMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 16
57 59 67 0 66 61 62 0 62 0 0 60 60 62 0 0

NOTES 17 THROUGH 32
62 0 57 66 67 62 61 0 57 0 59 59 58 63 64 0

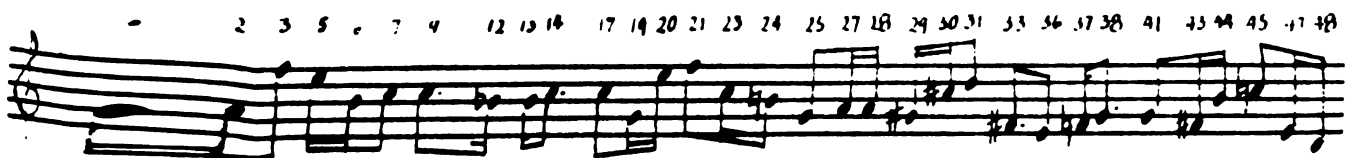
NOTES 33 THROUGH 48
56 0 0 54 55 57 0 0 57 0 56 61 62 0 54 52

NOTES 49 THROUGH 49
-99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

'SYM' - DESIGNATES NONRETROGRADABLE (I.E., SYMMETRICAL) RHYTHM.



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 24

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO 3		45 TO 48	24	3
2	2 TO 5	(SYM)	44 TO 47	24	3
3	3 TO 6		29 TO 31	24	3
4	3 TO 6		43 TO 45	24	3
5	5 TO 7		41 TO 44	24	3
6	6 TO 9		38 TO 43	24	3
7	7 TO 12		13 TO 17	24	3
8	7 TO 12		37 TO 41	24	3
9	1 TO 5		44 TO 48	24	4
10	2 TO 6		43 TO 47	24	4
11	3 TO 7	(SYM)	41 TO 45	24	4
12	5 TO 9		38 TO 44	24	4
13	6 TO 12		37 TO 43	24	4
14	1 TO 6	(SYM)	43 TO 48	24	5
15	2 TO 7		41 TO 47	24	5
16	3 TO 9		38 TO 45	24	5
17	5 TO 12		37 TO 44	24	5
18	1 TO 7		41 TO 48	24	6
19	2 TO 9		38 TO 47	24	6
20	3 TO 12		37 TO 45	24	6
21	1 TO 9		38 TO 48	24	7
22	2 TO 12		37 TO 47	24	7
23	1 TO 12		37 TO 48	24	8

END OF TYPE I LISTING. TOTAL OF 23 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 24
RHYTHM RETROGRADE W. EXACT RETROGRADE

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	1 TO 12	2	8

***** TEST 24 COMPLETED AT 140 SECONDS INTO EXECUTION *****

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 25

TEST REQUESTED 25
UNITS OF DATA PER CARD 12

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES	1 THROUGH	12										
54	0	0	59	57	57	55	J	64	62	62	0	
NOTES	13 THROUGH	24										
59	0	59	54	64	0	62	62	61	64	0	0	
NOTES	25 THROUGH	36										
62	62	60	69	67	67	65	J	0	70	0	0	
NOTES	37 THROUGH	48										
59	0	59	57	66	0	64	64	62	67	0	0	
NOTES	49 THROUGH	49										
-99												

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

PATTERNS WHICH LACK CHANGE-OF-DIRECTION

'SYM' DESIGNATES NONRETROGRADABLE (I.E., SYMMETRICAL) RHYTHM.



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 25

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH	
1	1 TO	5	20 TO	22	25	3
2	1 TO	5	44 TO	46	25	3
3	4 TO	6 (SYM)	19 TO	21	25	3
4	4 TO	6 (SYM)	25 TO	27	25	3
5	4 TO	6 (SYM)	43 TO	45	25	3
6	5 TO	7	17 TO	20	25	3
7	5 TO	7	41 TO	44	25	3
8	6 TO	9 (SYM)	16 TO	19	25	3
9	6 TO	9 (SYM)	40 TO	43	25	3
10	7 TO	10	15 TO	17	25	3
11	7 TO	10	39 TO	41	25	3
12	9 TO	11	13 TO	16	25	3
13	9 TO	11	37 TO	40	25	3
14	19 TO	21 (SYM)	28 TO	30	25	3
15	22 TO	26	29 TO	31	25	3
*** FOR	25 TO	27, SEE	19 TO	21 ABOVE ****		
*** FOR	28 TO	30, SEE	4 TO	6 ABOVE ****		
16	1 TO	6	19 TO	22	25	4
17	1 TO	6	43 TO	46	25	4
18	4 TO	7	17 TO	21	25	4
19	4 TO	7	41 TO	45	25	4
20	5 TO	9	16 TO	20	25	4
21	5 TO	9	40 TO	44	25	4
22	6 TO	10	15 TO	19	25	4
23	6 TO	10	39 TO	43	25	4
24	7 TO	11 (SYM)	13 TO	17	25	4
25	7 TO	11 (SYM)	37 TO	41	25	4
26	22 TO	27	28 TO	31	25	4
27	1 TO	7	17 TO	22	25	5
28	1 TO	7	41 TO	46	25	5
29	4 TO	9	16 TO	21	25	5
30	4 TO	9	40 TO	45	25	5
31	5 TO	10 (SYM)	15 TO	20	25	5
32	5 TO	10 (SYM)	39 TO	44	25	5
33	6 TO	11	13 TO	19	25	5
34	6 TO	11	37 TO	43	25	5
35	1 TO	9	16 TO	22	25	6
36	1 TO	9	40 TO	46	25	6
37	4 TO	10	15 TO	21	25	6
38	4 TO	10	39 TO	45	25	6
39	5 TO	11	13 TO	20	25	6
40	5 TO	11	37 TO	44	25	6
41	1 TO	10	15 TO	22	25	7
42	1 TO	10	39 TO	46	25	7
43	4 TO	11	13 TO	21	25	7

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
44	4 TO 11		37 TO 45	25	7
45	1 TO 11		13 TO 22	25	8
46	1 TO 11		37 TO 46	25	8

END OF TYPE I LISTING. TOTAL OF 46 PATTERNS LOCATED.

*** TYPE II LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 25
RHYTHM RETROGRADE M.TONAL RET. INVERSION

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	1 TO 11	3	8

*** TEST 25 COMPLETED AT 148 SECONDS INTO EXECUTION ***

***** MUSIC MELODIC PATTERN ANALYSIS *****

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 26

TEST REQUESTED 26
UNITS OF DATA PER CARD 12

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES	1	THROUGH	12									
54	0	0	59	57	57	55	J	64	62	62	0	
NOTES	13	THROUGH	24									
59	0	59	54	64	0	62	62	61	64	0	0	
NOTES	25	THROUGH	36									
62	62	60	69	67	67	65	J	0	70	0	0	
NOTES	37	THROUGH	48									
59	0	59	57	66	0	64	64	62	67	0	0	
NOTES	49	THROUGH	49									
199												

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

'SYM' DESIGNATES NONRETROGRADABLE (I.E., SYMMETRICAL) RHYTHM.



*** TYPE I LISTING ***

APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 26

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO 5		44 TO 46	26	3
2	4 TO 6	(SYM)	25 TO 27	26	3
3	4 TO 6	(SYM)	43 TO 45	26	3
4	5 TO 7		17 TO 20	26	3
5	5 TO 7		41 TO 44	26	3
6	6 TO 9	(SYM)	40 TO 43	26	3
7	7 TO 10		39 TO 41	26	3
8	9 TO 11		37 TO 40	26	3
9	22 TO 26		29 TO 31	26	3
10	25 TO 27	(SYM)	28 TO 30	26	3
*** FOR	28 TO 30,	SEE	4 TO 6 ABOVE ****		
11	1 TO 6		43 TO 46	26	4
12	4 TO 7		41 TO 45	26	4
13	5 TO 9		40 TO 44	26	4
14	6 TO 10		39 TO 43	26	4
15	7 TO 11	(SYM)	37 TO 41	26	4
16	22 TO 27		28 TO 31	26	4
17	1 TO 7		41 TO 46	26	5
18	4 TO 9		40 TO 45	26	5
19	5 TO 10	(SYM)	39 TO 44	26	5
20	6 TO 11		37 TO 43	26	5
21	1 TO 9		40 TO 46	26	6
22	4 TO 10		39 TO 45	26	6
23	5 TO 11		37 TO 44	26	6
24	1 TO 10		39 TO 46	26	7
25	4 TO 11		37 TO 45	26	7
26	1 TO 11		37 TO 46	26	8

END OF TYPE I LISTING. TOTAL OF 26 PATTERNS LOCATED.

***** TYPE II LISTING *******APPENDIX A ANALYSIS OF MUSIC EXCERPT ILLUSTRATING TEST 26
RHYTHM RETROGRADE W. EXACT RET. INVERSION**

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	1 TO 11	2	8

*** * * * TEST 26 COMPLETED AT 142 SECONDS INTO EXECUTION * * * ***

APPENDIX B

Computer Output for Analyses of Works

by Varèse, Dunstable, and Hindemith

As was stated earlier in the thesis, each pattern-statement shown in this Appendix designates two specific melodic excerpts which display a previously defined musical relationship. Each statement describes a specific musical relationship; the statements were not intended to provide the reader with any type of collective summary of the music excerpt under analysis.

The reader must refer to the appropriate musical score included with this Appendix when using the different pattern lists; the lists cannot be used effectively without reference to the associated score. The reader may wish to review pp. 70 to 79 before examining this Appendix.

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An **a**lyses of motet "Veni Sancte Spiritus" by John Dunstable

Musical score with computer-assigned reference numbers used for Test 5 and 13.	458
Test 5	463
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An **a**lyses of "Fuga nona in B-flat" from Ludis Tonalis by Paul Hindemith

Test 0, complete.	587
Musical score with computer-assigned reference numbers for bottom-sounding voice only.	591

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ANNALS

41 42 43 44 45 46 47 70 71 72 73 51

52 53 54 55 56 57

58 59 60 61 62 63 64 65 66 67 68 69 70

71-86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

101 102 103 104 105 106 107 108 109 110 111 112 113

(sharply articulated) ***

114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132

133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150

151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168

169 170 171 172 173 174 175 176 177 178 179 180 181

mp *p* *mp* *p* *loco* *f* *p subito*

The Merry Widow

182 183 184 185 186 187 188 189
 $\text{♩} = 72$
 $f > p$ $f > p$ p
 190 191 192 193 194 195 196 197 198 199

200 201 202 203 204 205 206 207 208 209 210 211 212 213

214 215 216 217 218 219 220 221 222 223

224 225 226 227 228 229 230 231 232 233 234 235 236 237

238 239 240 241 242 243 244 245 246 247 248 249 250 251

Handwritten musical notation on a single staff. The notation includes various note values, rests, and dynamic markings. A bracket with the number '3' is placed over measures 247-249. The dynamic marking *pp* appears above measure 246, and *meno. molto* appears below measure 248. The staff ends with a double bar line.

252 253 254 255 256 257 258 259 260 261 262 263 264

Handwritten musical notation on a single staff. The notation includes various note values, rests, and dynamic markings. A bracket with the number '3' is placed over measures 255-257. The staff ends with a double bar line.

***** MUSIC MELJDIC PATTERN ANALYSIS *****

EDGARD VARESE DENSITY 21.5 FOR SOLJ FLUTE

TEST REQUESTED 1
UNITS OF DATA PER CARD 15

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES	1	THROUGH	15												
55	54	56	51	56	51	57	55	54	56	57	51	57	56	57	
NOTES	16	THROUGH	30												
56	54	51	57	51	57	59	60	57	60	57	60	62	63	62	
NOTES	31	THROUGH	45												
63	62	63	62	63	62	63	62	64	70	64	58	64	70	53	
NOTES	46	THROUGH	60												
59	65	71	59	72	78	66	65	67	65	67	65	66	68	55	
NOTES	61	THROUGH	75												
56	81	61	60	61	61	59	61	58	61	75	74	75	74	75	
NOTES	76	THROUGH	90												
74	75	74	75	74	75	74	75	74	75	74	76	61	60	61	
NOTES	91	THROUGH	105												
59	60	61	59	60	74	75	74	74	74	54	51	54	51	51	
NOTES	106	THROUGH	120												
51	54	64	51	64	51	52	58	54	58	52	65	81	80	68	
NOTES	121	THROUGH	135												
67	81	80	68	81	80	68	67	67	57	68	69	56	57	58	
NOTES	136	THROUGH	150												
59	54	60	70	73	83	73	80	83	80	73	83	73	80	83	
NOTES	151	THROUGH	165												
73	80	83	80	73	83	73	80	83	80	83	80	83	80	83	
NOTES	166	THROUGH	180												
80	73	74	65	74	65	65	64	65	63	65	64	63	65	63	
NOTES	181	THROUGH	195												
64	64	65	63	65	61	56	55	57	56	55	57	55	56	57	

NOTES 196 THROUGH 210

56 55 57 52 58 59 66 72 75 90 85 88 85 88 88

NOTES 211 THROUGH 225

85 88 85 85 88 85 88 85 88 88 58 58 58 59 57

NOTES 226 THROUGH 240

74 68 67 74 68 67 74 68 67 74 54 52 51 54 51

NOTES 241 THROUGH 255

54 56 57 54 57 71 60 54 60 50 54 64 54 50 64

NOTES 256 THROUGH 265

50 54 60 64 68 75 77 74 85 -99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

PATTERNS WHICH LACK CHANGE-OF-DIRECTION

EDGARD VARESE

DENSITY 21.5 FOR SOLD FLUTE

ASCENDING AND DESCENDING INTERVALS*
(INCLUDING ENHARMONIC EQUIVALENTS)

	TOTAL OCCURRENCES	PERCENTAGE OF OCCURRENCE
MINOR 2	75	28.52
MAJOR 2	32	12.17
MINOR 3	42	15.97
MAJOR 3	8	3.04
PERF. 4	7	2.66
TRITONE	27	10.27
PERF. 5	12	4.56
MINOR 6	0	0.0
MAJOR 6	3	1.14
MINOR 7	13	4.94
MAJOR 7	2	0.76
OCTAVE	5	1.90
MINOR 9	8	3.04
MAJOR 9	6	2.28
MINOR 10	2	0.76
MAJOR 10	1	0.38
PERF. 11	2	0.76
CCMP. TT	0	0.0
PERF. 12	0	0.0
MINOR 13	3	1.14
MAJOR 13	0	0.0
MINOR 14	0	0.0
MAJOR 14	0	0.0
TWO OCT.	0	0.0
UNISON	13	4.94
INTERVALS EXCEEDING TWO OCTAVES	2	0.76

263 INTERVALS COUNTED

*INCLUDING UNISONS

EDGARD VARESE

DENSITY 21.5 FOR SOLO FLUTE

ASCENDING INTERVALS
(INCLUDING ENHARMONIC EQUIVALENTS)

	TOTAL OCCURRENCES	PERCENTAGE OF OCCURRENCE
MINOR 2	37	27.82
MAJOR 2	19	14.29
MINOR 3	23	17.29
MAJOR 3	5	3.76
PERF. 4	1	0.75
TRITONE	18	13.53
PERF. 5	9	6.77
MINOR 6	0	0.0
MAJOR 6	1	0.75
MINOR 7	6	4.51
MAJOR 7	1	0.75
OCTAVE	0	0.0
MINOR 9	4	3.01
MAJOR 9	5	3.76
MINOR 10	1	0.75
MAJOR 10	1	0.75
PERF. 11	1	0.75
CCMP. TT	0	0.0
PERF. 12	0	0.0
MINOR 13	0	0.0
MAJOR 13	0	0.0
MINOR 14	0	0.0
MAJOR 14	0	0.0
TWO OCT. INTERVALS	0 1	0.0 0.75
EXCEEDING TWO OCTAVES		

133 ASCENDING INTERVALS COUNTED

EDGARD VARESE

DENSITY 21.5 FOR SOLO FLUTE

DESCENDING INTERVALS
(INCLUDING ENHARMONIC EQUIVALENTS)

	TOTAL OCCURRENCES	PERCENTAGE OF OCCURRENCE
MINOR 2	38	32.48
MAJOR 2	13	11.11
MINOR 3	19	16.24
MAJOR 3	3	2.56
PERF. 4	6	5.13
TRITONE	9	7.69
PERF. 5	3	2.56
MINOR 6	0	0.0
MAJOR 6	2	1.71
MINOR 7	7	5.98
MAJOR 7	1	0.85
OCTAVE	5	4.27
MINOR 9	4	3.42
MAJOR 9	1	0.85
MINOR 10	1	0.85
MAJOR 10	0	0.0
PERF. 11	1	0.85
COMP. TT	0	0.0
PERF. 12	0	0.0
MINOR 13	3	2.56
MAJOR 13	0	0.0
MINOR 14	0	0.0
MAJOR 14	0	0.0
TWO OCT. INTERVALS	0 1	0.0 0.85
EXCEEDING TWO OCTAVES		

117 DESCENDING INTERVALS COUNTED

*** TYPE I LISTING ***

EDGARD VARESE

DENSITY 21.5 FOR SOLO FLUTE

SEARCH FOR PATTERNS OF 3 NOTES IN LENGTH --
 TONAL CONTOUR (ORIGINAL)
 WAS BEGUN AT 28 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TC	NOTES	TEST	LENGTH
1	1 TO	3	3 TO	5	1 3
2	1 TO	3	5 TO	7	1 3
3	1 TO	3	8 TO	10	1 3
4	1 TO	3	11 TO	13	1 3
5	1 TO	3	13 TO	15	1 3
6	1 TO	3	17 TO	19	1 3
7	1 TO	3	19 TO	21	1 3
8	1 TO	3	23 TO	25	1 3
9	1 TO	3	25 TO	27	1 3
10	1 TO	3	29 TO	31	1 3
11	1 TO	3	31 TO	33	1 3
12	1 TO	3	33 TO	35	1 3
13	1 TO	3	35 TO	37	1 3
14	1 TO	3	37 TO	39	1 3
15	1 TO	3	41 TO	43	1 3
16	1 TO	3	44 TO	46	1 3
17	1 TO	3	48 TO	50	1 3
18	1 TO	3	52 TO	54	1 3
19	1 TO	3	54 TO	56	1 3
20	1 TO	3	56 TO	58	1 3
21	1 TO	3	59 TO	61	1 3
22	1 TO	3	63 TO	65	1 3
23	1 TO	3	66 TO	68	1 3
24	1 TO	3	68 TO	70	1 3
25	1 TO	3	71 TO	73	1 3
26	1 TO	3	73 TO	75	1 3
27	1 TO	3	75 TO	77	1 3
28	1 TO	3	77 TO	79	1 3
29	1 TO	3	79 TO	81	1 3
30	1 TO	3	81 TO	83	1 3
31	1 TO	3	83 TO	85	1 3
32	1 TO	3	85 TO	87	1 3
33	1 TO	3	88 TO	90	1 3
34	1 TO	3	90 TO	92	1 3
35	1 TO	3	93 TO	95	1 3
36	1 TO	3	101 TO	103	1 3
37	1 TO	3	108 TO	110	1 3
38	1 TO	3	110 TO	112	1 3
39	1 TO	3	113 TO	115	1 3
40	1 TO	3	115 TO	117	1 3
41	1 TO	3	120 TO	122	1 3
42	1 TO	3	123 TO	125	1 3

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
43	1 TO	3	129 TO 131	1	3
44	1 TO	3	132 TO 134	1	3
45	1 TO	3	136 TO 138	1	3
46	1 TO	3	141 TO 143	1	3
47	1 TO	3	145 TO 147	1	3
48	1 TO	3	147 TO 149	1	3
49	1 TO	3	150 TO 152	1	3
50	1 TO	3	154 TO 156	1	3
51	1 TO	3	156 TO 158	1	3
52	1 TO	3	159 TO 161	1	3
53	1 TO	3	161 TO 163	1	3
54	1 TO	3	163 TO 165	1	3
55	1 TO	3	166 TO 168	1	3
56	1 TO	3	168 TO 170	1	3
57	1 TO	3	172 TO 174	1	3
58	1 TO	3	174 TO 176	1	3
59	1 TO	3	177 TO 179	1	3
60	1 TO	3	179 TO 181	1	3
61	1 TO	3	183 TO 185	1	3
62	1 TO	3	187 TO 189	1	3
63	1 TO	3	190 TO 192	1	3
64	1 TO	3	192 TO 194	1	3
65	1 TO	3	196 TO 198	1	3
66	1 TO	3	198 TO 200	1	3
67	1 TO	3	205 TO 207	1	3
68	1 TO	3	207 TO 209	1	3
69	1 TO	3	210 TO 212	1	3
70	1 TO	3	215 TO 217	1	3
71	1 TO	3	217 TO 219	1	3
72	1 TO	3	224 TO 226	1	3
73	1 TO	3	227 TO 229	1	3
74	1 TO	3	230 TO 232	1	3
75	1 TO	3	233 TO 235	1	3
76	1 TO	3	237 TO 239	1	3
77	1 TO	3	239 TO 241	1	3
78	1 TO	3	243 TO 245	1	3
79	1 TO	3	247 TO 249	1	3
80	1 TO	3	249 TO 251	1	3
81	1 TO	3	253 TO 255	1	3
82	1 TO	3	255 TO 257	1	3
83	2 TO	4	4 TO 6	1	3
84	2 TO	4	6 TO 8	1	3
85	2 TO	4	10 TO 12	1	3
86	2 TO	4	12 TO 14	1	3
87	2 TO	4	14 TO 16	1	3
88	2 TO	4	18 TO 20	1	3
89	2 TO	4	22 TO 24	1	3
90	2 TO	4	24 TO 26	1	3
91	2 TO	4	28 TO 30	1	3
92	2 TO	4	30 TO 32	1	3
93	2 TO	4	32 TO 34	1	3

PATTERN	NCTES	RELATED TC	NOTES	TEST	LENGTH
94	2 TO	4	34 TO 36	1	3
95	2 TO	4	36 TO 38	1	3
96	2 TO	4	39 TO 41	1	3
97	2 TO	4	43 TO 45	1	3
98	2 TO	4	47 TO 49	1	3
99	2 TO	4	50 TO 52	1	3
100	2 TO	4	53 TO 55	1	3
101	2 TO	4	55 TO 57	1	3
102	2 TO	4	58 TO 60	1	3
103	2 TO	4	61 TO 63	1	3
104	2 TO	4	67 TO 69	1	3
105	2 TO	4	70 TO 72	1	3
106	2 TO	4	72 TO 74	1	3
107	2 TO	4	74 TO 76	1	3
108	2 TO	4	76 TO 78	1	3
109	2 TO	4	78 TO 80	1	3
110	2 TO	4	80 TO 82	1	3
111	2 TO	4	82 TO 84	1	3
112	2 TO	4	84 TO 86	1	3
113	2 TO	4	86 TO 88	1	3
114	2 TO	4	89 TO 91	1	3
115	2 TO	4	92 TO 94	1	3
116	2 TO	4	96 TO 98	1	3
117	2 TO	4	102 TO 104	1	3
118	2 TO	4	107 TO 109	1	3
119	2 TO	4	109 TO 111	1	3
120	2 TO	4	112 TO 114	1	3
121	2 TO	4	114 TO 116	1	3
122	2 TO	4	117 TO 119	1	3
123	2 TO	4	121 TO 123	1	3
124	2 TO	4	124 TO 126	1	3
125	2 TO	4	131 TO 133	1	3
126	2 TO	4	135 TO 137	1	3
127	2 TO	4	140 TO 142	1	3
128	2 TO	4	143 TO 145	1	3
129	2 TO	4	146 TO 148	1	3
130	2 TO	4	149 TO 151	1	3
131	2 TO	4	152 TO 154	1	3
132	2 TO	4	155 TO 157	1	3
133	2 TO	4	158 TO 160	1	3
134	2 TO	4	160 TO 162	1	3
135	2 TO	4	162 TO 164	1	3
136	2 TO	4	164 TO 166	1	3
137	2 TO	4	167 TO 169	1	3
138	2 TO	4	169 TO 171	1	3
139	2 TO	4	173 TO 175	1	3
140	2 TO	4	175 TO 177	1	3
141	2 TO	4	178 TO 180	1	3
142	2 TO	4	182 TO 184	1	3
143	2 TO	4	184 TO 186	1	3
144	2 TO	4	188 TO 190	1	3



PATTERN	NCTES	RELATED TC	NOTES	TEST	LENGTH
145	2 TO	4	191 TO	193	1 3
146	2 TO	4	194 TO	196	1 3
147	2 TO	4	197 TO	199	1 3
148	2 TO	4	204 TO	206	1 3
149	2 TO	4	206 TO	208	1 3
150	2 TO	4	211 TO	213	1 3
151	2 TO	4	214 TO	216	1 3
152	2 TO	4	216 TO	218	1 3
153	2 TO	4	223 TO	225	1 3
154	2 TO	4	225 TO	227	1 3
155	2 TO	4	228 TO	230	1 3
156	2 TO	4	231 TO	233	1 3
157	2 TO	4	234 TO	236	1 3
158	2 TO	4	238 TO	240	1 3
159	2 TO	4	242 TO	244	1 3
160	2 TO	4	245 TO	247	1 3
161	2 TO	4	248 TO	250	1 3
162	2 TO	4	251 TO	253	1 3
163	2 TO	4	254 TO	256	1 3
**** FOR	3 TO	5.	SEE 1 TO	3 ABOVE	****
**** FOR	4 TO	6.	SEE 2 TO	4 ABOVE	****
**** FOR	5 TO	7.	SEE 1 TO	3 ABOVE	****
**** FOR	6 TO	8.	SEE 2 TO	4 ABOVE	****
**** FOR	8 TO	10.	SEE 1 TO	3 ABOVE	****
**** FOR	10 TO	12.	SEE 2 TO	4 ABOVE	****
**** FOR	11 TO	13.	SEE 1 TO	3 ABOVE	****
**** FOR	12 TO	14.	SEE 2 TO	4 ABOVE	****
**** FOR	13 TO	15.	SEE 1 TO	3 ABOVE	****
**** FOR	14 TO	16.	SEE 2 TO	4 ABOVE	****
**** FOR	17 TO	19.	SEE 1 TO	3 ABOVE	****
**** FOR	18 TO	20.	SEE 2 TO	4 ABOVE	****
**** FOR	19 TO	21.	SEE 1 TO	3 ABOVE	****
**** FOR	22 TO	24.	SEE 2 TO	4 ABOVE	****
**** FOR	23 TO	25.	SEE 1 TO	3 ABOVE	****
**** FOR	24 TO	26.	SEE 2 TO	4 ABOVE	****
**** FOR	25 TO	27.	SEE 1 TO	3 ABOVE	****
**** FOR	28 TO	30.	SEE 2 TO	4 ABOVE	****
**** FOR	29 TO	31.	SEE 1 TO	3 ABOVE	****
**** FOR	30 TO	32.	SEE 2 TO	4 ABOVE	****
**** FOR	31 TO	33.	SEE 1 TO	3 ABOVE	****
**** FOR	32 TO	34.	SEE 2 TO	4 ABOVE	****
**** FOR	33 TO	35.	SEE 1 TO	3 ABOVE	****
**** FOR	34 TO	36.	SEE 2 TO	4 ABOVE	****
**** FOR	35 TO	37.	SEE 1 TO	3 ABOVE	****
**** FOR	36 TO	38.	SEE 2 TO	4 ABOVE	****
**** FOR	37 TO	39.	SEE 1 TO	3 ABOVE	****
**** FOR	39 TO	41.	SEE 2 TO	4 ABOVE	****
**** FOR	41 TO	43.	SEE 1 TO	3 ABOVE	****
**** FOR	43 TO	45.	SEE 2 TO	4 ABOVE	****
**** FOR	44 TO	46.	SEE 1 TO	3 ABOVE	****
**** FOR	47 TO	49.	SEE 2 TO	4 ABOVE	****

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	48 TO	50.	SEE	1 TO	3 ABOVE ****
**** FOR	50 TO	52.	SEE	2 TO	4 ABOVE ****
**** FOR	52 TO	54.	SEE	1 TO	3 ABOVE ****
**** FOR	53 TO	55.	SEE	2 TO	4 ABOVE ****
**** FOR	54 TO	56.	SEE	1 TO	3 ABOVE ****
**** FOR	55 TO	57.	SEE	2 TO	4 ABOVE ****
**** FOR	56 TO	58.	SEE	1 TO	3 ABOVE ****
**** FCR	58 TO	60.	SEE	2 TO	4 ABOVE ****
**** FOR	59 TO	61.	SEE	1 TO	3 ABOVE ****
**** FCR	61 TO	63.	SEE	2 TO	4 ABOVE ****
**** FOR	63 TO	65.	SEE	1 TO	3 ABOVE ****
164	64 TO	66	180 TO	182	1 3
165	64 TO	66	208 TO	210	1 3
166	64 TO	66	218 TO	220	1 3
167	65 TO	67	99 TO	101	1 3
168	65 TO	67	128 TO	130	1 3
169	65 TO	67	171 TO	173	1 3
170	65 TO	67	209 TO	211	1 3
171	65 TO	67	219 TO	221	1 3
**** FOR	66 TO	68.	SEE	1 TO	3 ABOVE ****
**** FCR	67 TO	69.	SEE	2 TO	4 ABOVE ****
**** FOR	68 TO	70.	SEE	1 TO	3 ABOVE ****
**** FOR	70 TO	72.	SEE	2 TO	4 ABOVE ****
**** FOR	71 TO	73.	SEE	1 TO	3 ABOVE ****
**** FCR	72 TO	74.	SEE	2 TO	4 ABOVE ****
**** FOR	73 TO	75.	SEE	1 TO	3 ABOVE ****
**** FOR	74 TO	76.	SEE	2 TO	4 ABOVE ****
**** FOR	75 TO	77.	SEE	1 TO	3 ABOVE ****
**** FOR	76 TO	78.	SEE	2 TO	4 ABOVE ****
**** FOR	77 TO	79.	SEE	1 TO	3 ABOVE ****
**** FOR	78 TO	80.	SEE	2 TO	4 ABOVE ****
**** FOR	79 TO	81.	SEE	1 TO	3 ABOVE ****
**** FCR	80 TO	82.	SEE	2 TO	4 ABOVE ****
**** FOR	81 TO	83.	SEE	1 TO	3 ABOVE ****
**** FOR	82 TO	84.	SEE	2 TO	4 ABOVE ****
**** FOR	83 TO	85.	SEE	1 TO	3 ABOVE ****
**** FOR	84 TO	86.	SEE	2 TO	4 ABOVE ****
**** FOR	85 TO	87.	SEE	1 TO	3 ABOVE ****
**** FOR	86 TO	88.	SEE	2 TO	4 ABOVE ****
**** FOR	88 TO	90.	SEE	1 TO	3 ABOVE ****
**** FCR	89 TO	91.	SEE	2 TO	4 ABOVE ****
**** FOR	90 TO	92.	SEE	1 TO	3 ABOVE ****
**** FCR	92 TO	94.	SEE	2 TO	4 ABOVE ****
**** FCR	93 TO	95.	SEE	1 TO	3 ABOVE ****
**** FCR	96 TO	98.	SEE	2 TO	4 ABOVE ****
172	97 TO	99	103 TO	105	1 3
173	97 TO	99	127 TO	129	1 3
174	97 TO	99	170 TO	172	1 3
175	97 TO	99	212 TO	214	1 3
176	97 TO	99	220 TO	222	1 3
**** FOR	99 TO	101.	SEE	65 TO	67 ABOVE ****

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 101 TO 103.	SEE	1 TO 3	ABOVE	****	
**** FOR 102 TO 104.	SEE	2 TO 4	ABOVE	****	
**** FOR 103 TO 105.	SEE	97 TO 99	ABOVE	****	
177 105 TO 107		181 TO 183		1	3
178 105 TO 107		213 TO 215		1	3
179 105 TO 107		222 TO 224		1	3
**** FOR 107 TO 109.	SEE	2 TO 4	ABOVE	****	
**** FCR 108 TO 110.	SEE	1 TO 3	ABOVE	****	
**** FCR 109 TO 111.	SEE	2 TO 4	ABOVE	****	
**** FCR 110 TO 112.	SEE	1 TO 3	ABOVE	****	
**** FOR 112 TO 114.	SEE	2 TO 4	ABOVE	****	
**** FOR 113 TO 115.	SEE	1 TO 3	ABOVE	****	
**** FOR 114 TO 116.	SEE	2 TO 4	ABOVE	****	
**** FOR 115 TO 117.	SEE	1 TO 3	ABOVE	****	
**** FCR 117 TO 119.	SEE	2 TO 4	ABOVE	****	
**** FOR 120 TO 122.	SEE	1 TO 3	ABOVE	****	
**** FOR 121 TO 123.	SEE	2 TO 4	ABOVE	****	
**** FOR 123 TO 125.	SEE	1 TO 3	ABOVE	****	
**** FOR 124 TO 126.	SEE	2 TO 4	ABOVE	****	
**** FCR 127 TO 129.	SEE	97 TO 99	ABOVE	****	
**** FCR 128 TO 130.	SEE	65 TO 67	ABOVE	****	
**** FOR 129 TO 131.	SEE	1 TO 3	ABOVE	****	
**** FOR 131 TO 133.	SEE	2 TO 4	ABOVE	****	
**** FOR 132 TO 134.	SEE	1 TO 3	ABOVE	****	
**** FOR 135 TO 137.	SEE	2 TO 4	ABOVE	****	
**** FOR 136 TO 138.	SEE	1 TO 3	ABOVE	****	
**** FOR 140 TO 142.	SEE	2 TO 4	ABOVE	****	
**** FOR 141 TO 143.	SEE	1 TO 3	ABOVE	****	
**** FOR 143 TO 145.	SEE	2 TO 4	ABOVE	****	
**** FOR 145 TO 147.	SEE	1 TO 3	ABOVE	****	
**** FOR 146 TO 148.	SEE	2 TO 4	ABOVE	****	
**** FOR 147 TO 149.	SEE	1 TO 3	ABOVE	****	
**** FOR 149 TO 151.	SEE	2 TO 4	ABOVE	****	
**** FOR 150 TO 152.	SEE	1 TO 3	ABOVE	****	
**** FOR 152 TO 154.	SEE	2 TO 4	ABOVE	****	
**** FOR 154 TO 156.	SEE	1 TO 3	ABOVE	****	
**** FOR 155 TO 157.	SEE	2 TO 4	ABOVE	****	
**** FOR 156 TO 158.	SEE	1 TO 3	ABOVE	****	
**** FOR 158 TO 160.	SEE	2 TO 4	ABOVE	****	
**** FOR 159 TO 161.	SEE	1 TO 3	ABOVE	****	
**** FOR 160 TO 162.	SEE	2 TO 4	ABOVE	****	
**** FOR 161 TO 163.	SEE	1 TO 3	ABOVE	****	
**** FOR 162 TO 164.	SEE	2 TO 4	ABOVE	****	
**** FOR 163 TO 165.	SEE	1 TO 3	ABOVE	****	
**** FOR 164 TO 166.	SEE	2 TO 4	ABOVE	****	
**** FOR 166 TO 168.	SEE	1 TO 3	ABOVE	****	
**** FOR 167 TO 169.	SEE	2 TO 4	ABOVE	****	
**** FOR 168 TO 170.	SEE	1 TO 3	ABOVE	****	
**** FOR 169 TO 171.	SEE	2 TO 4	ABOVE	****	
**** FCR 170 TO 172.	SEE	97 TO 99	ABOVE	****	
**** FCR 171 TO 173.	SEE	65 TO 67	ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST LENGTH
**** FOR 172 TO 174.	SEE	1 TO	3 ABOVE	****
**** FOR 173 TO 175.	SEE	2 TO	4 ABOVE	****
**** FOR 174 TO 176.	SEE	1 TO	3 ABOVE	****
**** FOR 175 TO 177.	SEE	2 TO	4 ABOVE	****
**** FOR 177 TO 179.	SEE	1 TO	3 ABOVE	****
**** FOR 178 TO 180.	SEE	2 TO	4 ABOVE	****
**** FOR 179 TO 181.	SEE	1 TO	3 ABOVE	****
**** FOR 180 TO 182.	SEE	64 TO	66 ABOVE	****
**** FOR 181 TO 183.	SEE	105 TO	107 ABOVE	****
**** FOR 182 TO 184.	SEE	2 TO	4 ABOVE	****
**** FOR 183 TO 185.	SEE	1 TO	3 ABOVE	****
**** FOR 184 TO 186.	SEE	2 TO	4 ABOVE	****
**** FOR 187 TO 189.	SEE	1 TO	3 ABOVE	****
**** FOR 188 TO 190.	SEE	2 TO	4 ABOVE	****
**** FOR 190 TO 192.	SEE	1 TO	3 ABOVE	****
**** FOR 191 TO 193.	SEE	2 TO	4 ABOVE	****
**** FOR 192 TO 194.	SEE	1 TO	3 ABOVE	****
**** FOR 194 TO 196.	SEE	2 TO	4 ABOVE	****
**** FOR 196 TO 198.	SEE	1 TO	3 ABOVE	****
**** FOR 197 TO 199.	SEE	2 TO	4 ABOVE	****
**** FOR 198 TO 200.	SEE	1 TO	3 ABOVE	****
**** FOR 204 TO 206.	SEE	2 TO	4 ABOVE	****
**** FOR 205 TO 207.	SEE	1 TO	3 ABOVE	****
**** FOR 206 TO 208.	SEE	2 TO	4 ABOVE	****
**** FOR 207 TO 209.	SEE	1 TO	3 ABOVE	****
**** FOR 208 TO 210.	SEE	64 TO	66 ABOVE	****
**** FOR 209 TO 211.	SEE	65 TO	67 ABOVE	****
**** FOR 210 TO 212.	SEE	1 TO	3 ABOVE	****
**** FOR 211 TO 213.	SEE	2 TO	4 ABOVE	****
**** FOR 212 TO 214.	SEE	97 TO	99 ABOVE	****
**** FOR 213 TO 215.	SEE	105 TO	107 ABOVE	****
**** FOR 214 TO 216.	SEE	2 TO	4 ABOVE	****
**** FOR 215 TO 217.	SEE	1 TO	3 ABOVE	****
**** FOR 216 TO 218.	SEE	2 TO	4 ABOVE	****
**** FOR 217 TO 219.	SEE	1 TO	3 ABOVE	****
**** FOR 218 TO 220.	SEE	64 TO	66 ABOVE	****
**** FOR 219 TO 221.	SEE	65 TO	67 ABOVE	****
**** FOR 220 TO 222.	SEE	97 TO	99 ABOVE	****
**** FOR 222 TO 224.	SEE	105 TO	107 ABOVE	****
**** FOR 223 TO 225.	SEE	2 TO	4 ABOVE	****
**** FOR 224 TO 226.	SEE	1 TO	3 ABOVE	****
**** FOR 225 TO 227.	SEE	2 TO	4 ABOVE	****
**** FOR 227 TO 229.	SEE	1 TO	3 ABOVE	****
**** FOR 228 TO 230.	SEE	2 TO	4 ABOVE	****
**** FOR 230 TO 232.	SEE	1 TO	3 ABOVE	****
**** FOR 231 TO 233.	SEE	2 TO	4 ABOVE	****
**** FOR 233 TO 235.	SEE	1 TO	3 ABOVE	****
**** FOR 234 TO 236.	SEE	2 TO	4 ABOVE	****
**** FOR 237 TO 239.	SEE	1 TO	3 ABOVE	****
**** FOR 238 TO 240.	SEE	2 TO	4 ABOVE	****
**** FOR 239 TO 241.	SEE	1 TO	3 ABOVE	****

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 242 TO 244,	SEE	2 TO	4 ABOVE	****	
**** FOR 243 TO 245,	SEE	1 TO	3 ABOVE	****	
**** FOR 245 TO 247,	SEE	2 TO	4 ABOVE	****	
**** FOR 247 TO 249,	SEE	1 TO	3 ABOVE	****	
**** FOR 248 TO 250,	SEE	2 TO	4 ABOVE	****	
**** FOR 249 TO 251,	SEE	1 TO	3 ABOVE	****	
**** FOR 251 TO 253,	SEE	2 TO	4 ABOVE	****	
**** FOR 253 TO 255,	SEE	1 TO	3 ABOVE	****	
**** FOR 254 TO 256,	SEE	2 TO	4 ABOVE	****	
**** FOR 255 TO 257,	SEE	1 TO	3 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 4 NOTES IN LENGTH --
 TONAL CONTOUR (ORIGINAL)
 WAS BEGUN AT 146 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
180	1 TO	4	5 TO 8	1	4
181	1 TO	4	11 TO 14	1	4
182	1 TO	4	13 TO 16	1	4
183	1 TO	4	17 TO 20	1	4
184	1 TO	4	23 TO 26	1	4
185	1 TO	4	29 TO 32	1	4
186	1 TO	4	31 TO 34	1	4
187	1 TO	4	33 TO 36	1	4
188	1 TO	4	35 TO 38	1	4
189	1 TO	4	52 TO 55	1	4
190	1 TO	4	54 TO 57	1	4
191	1 TO	4	66 TO 69	1	4
192	1 TO	4	71 TO 74	1	4
193	1 TO	4	73 TO 76	1	4
194	1 TO	4	75 TO 78	1	4
195	1 TO	4	77 TO 80	1	4
196	1 TO	4	79 TO 82	1	4
197	1 TO	4	81 TO 84	1	4
198	1 TO	4	83 TO 86	1	4
199	1 TO	4	85 TO 88	1	4
200	1 TO	4	88 TO 91	1	4
201	1 TO	4	101 TO 104	1	4
202	1 TO	4	108 TO 111	1	4
203	1 TO	4	113 TO 116	1	4
204	1 TO	4	120 TO 123	1	4
205	1 TO	4	123 TO 126	1	4
206	1 TO	4	145 TO 148	1	4
207	1 TO	4	154 TO 157	1	4
208	1 TO	4	159 TO 162	1	4
209	1 TO	4	161 TO 164	1	4
210	1 TO	4	163 TO 166	1	4
211	1 TO	4	166 TO 169	1	4
212	1 TO	4	168 TO 171	1	4
213	1 TO	4	172 TO 175	1	4
214	1 TO	4	174 TO 177	1	4
215	1 TO	4	177 TO 180	1	4
216	1 TO	4	183 TO 186	1	4
217	1 TO	4	187 TO 190	1	4
218	1 TO	4	190 TO 193	1	4
219	1 TO	4	196 TO 199	1	4
220	1 TO	4	205 TO 208	1	4
221	1 TO	4	210 TO 213	1	4
222	1 TO	4	215 TO 218	1	4
223	1 TO	4	224 TO 227	1	4

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
224	1 TO	4	227 TO 230	1	4
225	1 TO	4	230 TO 233	1	4
226	1 TO	4	233 TO 236	1	4
227	1 TO	4	237 TO 240	1	4
228	1 TO	4	247 TO 250	1	4
229	1 TO	4	253 TO 256	1	4
230	2 TO	5	10 TO 13	1	4
231	2 TO	5	12 TO 15	1	4
232	2 TO	5	18 TO 21	1	4
233	2 TO	5	22 TO 25	1	4
234	2 TO	5	24 TO 27	1	4
235	2 TO	5	28 TO 31	1	4
236	2 TO	5	30 TO 33	1	4
237	2 TO	5	32 TO 35	1	4
238	2 TO	5	34 TO 37	1	4
239	2 TO	5	36 TO 39	1	4
240	2 TO	5	43 TO 46	1	4
241	2 TO	5	47 TO 50	1	4
242	2 TO	5	53 TO 56	1	4
243	2 TO	5	55 TO 58	1	4
244	2 TO	5	58 TO 61	1	4
245	2 TO	5	67 TO 70	1	4
246	2 TO	5	70 TO 73	1	4
247	2 TO	5	72 TO 75	1	4
248	2 TO	5	74 TO 77	1	4
249	2 TO	5	76 TO 79	1	4
250	2 TO	5	78 TO 81	1	4
251	2 TO	5	80 TO 83	1	4
252	2 TO	5	82 TO 85	1	4
253	2 TO	5	84 TO 87	1	4
254	2 TO	5	89 TO 92	1	4
255	2 TO	5	92 TO 95	1	4
256	2 TO	5	107 TO 110	1	4
257	2 TO	5	109 TO 112	1	4
258	2 TO	5	112 TO 115	1	4
259	2 TO	5	114 TO 117	1	4
260	2 TO	5	131 TO 134	1	4
261	2 TO	5	135 TO 138	1	4
262	2 TO	5	140 TO 143	1	4
263	2 TO	5	146 TO 149	1	4
264	2 TO	5	149 TO 152	1	4
265	2 TO	5	155 TO 158	1	4
266	2 TO	5	158 TO 161	1	4
267	2 TO	5	160 TO 163	1	4
268	2 TO	5	162 TO 165	1	4
269	2 TO	5	167 TO 170	1	4
270	2 TO	5	173 TO 176	1	4
271	2 TO	5	178 TO 181	1	4
272	2 TO	5	182 TO 185	1	4
273	2 TO	5	191 TO 194	1	4
274	2 TO	5	197 TO 200	1	4

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
275	2 TO	5	204 TO	207	1 4
276	2 TO	5	206 TO	209	1 4
277	2 TO	5	214 TO	217	1 4
278	2 TO	5	216 TO	219	1 4
279	2 TO	5	223 TO	226	1 4
280	2 TO	5	238 TO	241	1 4
281	2 TO	5	242 TO	245	1 4
282	2 TO	5	248 TO	251	1 4
283	2 TO	5	254 TO	257	1 4
**** FOR	3 TO	6,	SEE 1 TO	4 ABOVE ****	
**** FOR	4 TO	7,	SEE 2 TO	5 ABOVE ****	
**** FOR	5 TO	8,	SEE 1 TO	4 ABOVE ****	
284	6 TO	9	14 TO	17	1 4
285	6 TO	9	39 TO	42	1 4
286	6 TO	9	50 TO	53	1 4
287	6 TO	9	61 TO	64	1 4
288	6 TO	9	86 TO	89	1 4
289	6 TO	9	117 TO	120	1 4
290	6 TO	9	121 TO	124	1 4
291	6 TO	9	124 TO	127	1 4
292	6 TO	9	143 TO	146	1 4
293	6 TO	9	152 TO	155	1 4
294	6 TO	9	164 TO	167	1 4
295	6 TO	9	175 TO	178	1 4
296	6 TO	9	184 TO	187	1 4
297	6 TO	9	188 TO	191	1 4
298	6 TO	9	194 TO	197	1 4
299	6 TO	9	225 TO	228	1 4
300	6 TO	9	228 TO	231	1 4
301	6 TO	9	231 TO	234	1 4
302	6 TO	9	234 TO	237	1 4
303	6 TO	9	245 TO	248	1 4
304	6 TO	9	251 TO	254	1 4
305	7 TO	10	16 TO	19	1 4
306	7 TO	10	40 TO	43	1 4
307	7 TO	10	51 TO	54	1 4
308	7 TO	10	62 TO	65	1 4
309	7 TO	10	87 TO	90	1 4
310	7 TO	10	100 TO	103	1 4
311	7 TO	10	119 TO	122	1 4
312	7 TO	10	122 TO	125	1 4
313	7 TO	10	144 TO	147	1 4
314	7 TO	10	153 TO	156	1 4
315	7 TO	10	165 TO	168	1 4
316	7 TO	10	176 TO	179	1 4
317	7 TO	10	186 TO	189	1 4
318	7 TO	10	189 TO	192	1 4
319	7 TO	10	195 TO	198	1 4
320	7 TO	10	226 TO	229	1 4
321	7 TO	10	229 TO	232	1 4
322	7 TO	10	232 TO	235	1 4

PATTERN	NCTES		RELATED TO	NOTES		TEST	LENGTH
323	7	TO	10	236	TO 239	1	4
324	7	TO	10	246	TO 249	1	4
325	7	TO	10	252	TO 255	1	4
326	8	TO	11	19	TO 22	1	4
327	8	TO	11	25	TO 28	1	4
328	8	TO	11	37	TO 40	1	4
329	8	TO	11	41	TO 44	1	4
330	8	TO	11	44	TO 47	1	4
331	8	TO	11	48	TO 51	1	4
332	8	TO	11	56	TO 59	1	4
333	8	TO	11	59	TO 62	1	4
334	8	TO	11	68	TO 71	1	4
335	8	TO	11	90	TO 93	1	4
336	8	TO	11	93	TO 96	1	4
337	8	TO	11	110	TO 113	1	4
338	8	TO	11	115	TO 118	1	4
339	8	TO	11	129	TO 132	1	4
340	8	TO	11	132	TO 135	1	4
341	8	TO	11	136	TO 139	1	4
342	8	TO	11	141	TO 144	1	4
343	8	TO	11	147	TO 150	1	4
344	8	TO	11	150	TO 153	1	4
345	8	TO	11	156	TO 159	1	4
346	8	TO	11	192	TO 195	1	4
347	8	TO	11	198	TO 201	1	4
348	8	TO	11	239	TO 242	1	4
349	8	TO	11	243	TO 246	1	4
350	8	TO	11	249	TO 252	1	4
351	8	TO	11	255	TO 258	1	4
352	9	TO	12	21	TO 24	1	4
353	9	TO	12	27	TO 30	1	4
354	9	TO	12	38	TO 41	1	4
355	9	TO	12	42	TO 45	1	4
356	9	TO	12	46	TO 49	1	4
357	9	TO	12	49	TO 52	1	4
358	9	TO	12	57	TO 60	1	4
359	9	TO	12	60	TO 63	1	4
360	9	TO	12	69	TO 72	1	4
361	9	TO	12	91	TO 94	1	4
362	9	TO	12	95	TO 98	1	4
363	9	TO	12	106	TO 109	1	4
364	9	TO	12	111	TO 114	1	4
365	9	TO	12	116	TO 119	1	4
366	9	TO	12	130	TO 133	1	4
367	9	TO	12	134	TO 137	1	4
368	9	TO	12	139	TO 142	1	4
369	9	TO	12	142	TO 145	1	4
370	9	TO	12	148	TO 151	1	4
371	9	TO	12	151	TO 154	1	4
372	9	TO	12	157	TO 160	1	4
373	9	TO	12	193	TO 196	1	4

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
374	9 TO	12	203 TO	206	1 4
375	9 TO	12	241 TO	244	1 4
376	9 TO	12	244 TO	247	1 4
377	9 TO	12	250 TO	253	1 4
**** FOR	10 TO	13.	SEE	2 TO	5 ABOVE ****
**** FOR	11 TO	14.	SEE	1 TO	4 ABOVE ****
**** FOR	12 TO	15.	SEE	2 TO	5 ABOVE ****
**** FCR	13 TO	16.	SEE	1 TO	4 ABOVE ****
**** FOR	14 TO	17.	SEE	6 TO	9 ABOVE ****
**** FOR	16 TO	19.	SEE	7 TO	10 ABOVE ****
**** FCR	17 TO	20.	SEE	1 TO	4 ABOVE ****
**** FCR	18 TO	21.	SEE	2 TO	5 ABOVE ****
**** FOR	19 TO	22.	SEE	8 TO	11 ABOVE ****
**** FCR	21 TO	24.	SEE	9 TO	12 ABOVE ****
**** FOR	22 TO	25.	SEE	2 TO	5 ABOVE ****
**** FOR	23 TO	26.	SEE	1 TO	4 ABOVE ****
**** FOR	24 TO	27.	SEE	2 TO	5 ABOVE ****
**** FCR	25 TO	28.	SEE	8 TO	11 ABOVE ****
**** FCR	27 TO	30.	SEE	9 TO	12 ABOVE ****
**** FOR	28 TO	31.	SEE	2 TO	5 ABOVE ****
**** FOR	29 TO	32.	SEE	1 TO	4 ABOVE ****
**** FOR	30 TO	33.	SEE	2 TO	5 ABOVE ****
**** FOR	31 TO	34.	SEE	1 TO	4 ABOVE ****
**** FOR	32 TO	35.	SEE	2 TO	5 ABOVE ****
**** FOR	33 TO	36.	SEE	1 TO	4 ABOVE ****
**** FOR	34 TO	37.	SEE	2 TO	5 ABOVE ****
**** FOR	35 TO	38.	SEE	1 TO	4 ABOVE ****
**** FOR	36 TO	39.	SEE	2 TO	5 ABOVE ****
**** FOR	37 TO	40.	SEE	8 TO	11 ABOVE ****
**** FOR	38 TO	41.	SEE	9 TO	12 ABOVE ****
**** FOR	39 TO	42.	SEE	6 TO	9 ABOVE ****
**** FCR	40 TO	43.	SEE	7 TO	10 ABOVE ****
**** FOR	41 TO	44.	SEE	8 TO	11 ABOVE ****
**** FOR	42 TO	45.	SEE	9 TO	12 ABOVE ****
**** FCR	43 TO	46.	SEE	2 TO	5 ABOVE ****
**** FOR	44 TO	47.	SEE	8 TO	11 ABOVE ****
**** FOR	46 TO	49.	SEE	9 TO	12 ABOVE ****
**** FOR	47 TO	50.	SEE	2 TO	5 ABOVE ****
**** FOR	48 TO	51.	SEE	8 TO	11 ABOVE ****
**** FOR	49 TO	52.	SEE	9 TO	12 ABOVE ****
**** FOR	50 TO	53.	SEE	6 TO	9 ABOVE ****
**** FCR	51 TO	54.	SEE	7 TO	10 ABOVE ****
**** FOR	52 TO	55.	SEE	1 TO	4 ABOVE ****
**** FOR	53 TO	56.	SEE	2 TO	5 ABOVE ****
**** FOR	54 TO	57.	SEE	1 TO	4 ABOVE ****
**** FOR	55 TO	58.	SEE	2 TO	5 ABOVE ****
**** FOR	56 TO	59.	SEE	8 TO	11 ABOVE ****
**** FOR	57 TO	60.	SEE	9 TO	12 ABOVE ****
**** FCR	58 TO	61.	SEE	2 TO	5 ABOVE ****
**** FOR	59 TO	62.	SEE	8 TO	11 ABOVE ****
**** FOR	60 TO	63.	SEE	9 TO	12 ABOVE ****

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	61 TO 64.	SEE	6 TO 9 ABOVE	****	
**** FCR	62 TO 65.	SEE	7 TO 10 ABOVE	****	
378	63 TO 66		179 TO 182	1	4
379	63 TO 66		207 TO 210	1	4
380	63 TO 66		217 TO 220	1	4
381	64 TO 67		208 TO 211	1	4
382	64 TO 67		218 TO 221	1	4
383	65 TO 68		128 TO 131	1	4
384	65 TO 68		171 TO 174	1	4
385	65 TO 68		209 TO 212	1	4
**** FCR	66 TO 69.	SEE	1 TO 4 ABOVE	****	
**** FOR	67 TO 70.	SEE	2 TO 5 ABOVE	****	
**** FCR	68 TO 71.	SEE	8 TO 11 ABOVE	****	
**** FOR	69 TO 72.	SEE	9 TO 12 ABOVE	****	
**** FOR	70 TO 73.	SEE	2 TO 5 ABOVE	****	
**** FOR	71 TO 74.	SEE	1 TO 4 ABOVE	****	
**** FOR	72 TO 75.	SEE	2 TO 5 ABOVE	****	
**** FOR	73 TO 76.	SEE	1 TO 4 ABOVE	****	
**** FCR	74 TO 77.	SEE	2 TO 5 ABOVE	****	
**** FOR	75 TO 78.	SEE	1 TO 4 ABOVE	****	
**** FOR	76 TO 79.	SEE	2 TO 5 ABOVE	****	
**** FOR	77 TO 80.	SEE	1 TO 4 ABOVE	****	
**** FOR	78 TO 81.	SEE	2 TO 5 ABOVE	****	
**** FOR	79 TO 82.	SEE	1 TO 4 ABOVE	****	
**** FOR	80 TO 83.	SEE	2 TO 5 ABOVE	****	
**** FOR	81 TO 84.	SEE	1 TO 4 ABOVE	****	
**** FOR	82 TO 85.	SEE	2 TO 5 ABOVE	****	
**** FOR	83 TO 86.	SEE	1 TO 4 ABOVE	****	
**** FOR	84 TO 87.	SEE	2 TO 5 ABOVE	****	
**** FOR	85 TO 88.	SEE	1 TO 4 ABOVE	****	
**** FCR	86 TO 89.	SEE	6 TO 9 ABOVE	****	
**** FOR	87 TO 90.	SEE	7 TO 10 ABOVE	****	
**** FOR	88 TO 91.	SEE	1 TO 4 ABOVE	****	
**** FOR	89 TO 92.	SEE	2 TO 5 ABOVE	****	
**** FOR	90 TO 93.	SEE	8 TO 11 ABOVE	****	
**** FCR	91 TO 94.	SEE	9 TO 12 ABOVE	****	
**** FOR	92 TO 95.	SEE	2 TO 5 ABOVE	****	
**** FOR	93 TO 96.	SEE	8 TO 11 ABOVE	****	
**** FOR	95 TO 98.	SEE	9 TO 12 ABOVE	****	
386	96 TO 99		102 TO 105	1	4
387	96 TO 99		169 TO 172	1	4
388	96 TO 99		211 TO 214	1	4
389	97 TO 100		103 TO 106	1	4
390	97 TO 100		220 TO 223	1	4
**** FCR	100 TO 103.	SEE	7 TO 10 ABOVE	****	
**** FOR	101 TO 104.	SEE	1 TO 4 ABOVE	****	
**** FOR	102 TO 105.	SEE	96 TO 99 ABOVE	****	
**** FOR	103 TO 106.	SEE	97 TO 100 ABOVE	****	
391	104 TO 107		221 TO 224	1	4
**** FOR	106 TO 109.	SEE	9 TO 12 ABOVE	****	
**** FOR	107 TO 110.	SEE	2 TO 5 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	108 TO 111.	SEE	1 TO 4 ABOVE	****	
**** FOR	109 TO 112.	SEE	2 TO 5 ABOVE	****	
**** FOR	110 TO 113.	SEE	8 TO 11 ABOVE	****	
**** FOR	111 TO 114.	SEE	9 TO 12 ABOVE	****	
**** FOR	112 TO 115.	SEE	2 TO 5 ABOVE	****	
**** FCR	113 TO 116.	SEE	1 TO 4 ABOVE	****	
**** FCR	114 TO 117.	SEE	2 TO 5 ABOVE	****	
**** FCR	115 TO 118.	SEE	8 TO 11 ABOVE	****	
**** FOR	116 TO 119.	SEE	9 TO 12 ABOVE	****	
**** FOR	117 TO 120.	SEE	6 TO 9 ABOVE	****	
**** FOR	119 TO 122.	SEE	7 TO 10 ABOVE	****	
**** FOR	120 TO 123.	SEE	1 TO 4 ABOVE	****	
**** FOR	121 TO 124.	SEE	6 TO 9 ABOVE	****	
**** FOR	122 TO 125.	SEE	7 TO 10 ABOVE	****	
**** FCR	123 TO 126.	SEE	1 TO 4 ABOVE	****	
**** FOR	124 TO 127.	SEE	6 TO 9 ABOVE	****	
392	127 TO 130		170 TO 173	1	4
**** FOR	128 TO 131.	SEE	65 TO 68 ABOVE	****	
**** FOR	129 TO 132.	SEE	8 TO 11 ABOVE	****	
**** FOR	130 TO 133.	SEE	9 TO 12 ABOVE	****	
**** FOR	131 TO 134.	SEE	2 TO 5 ABOVE	****	
**** FOR	132 TO 135.	SEE	8 TO 11 ABOVE	****	
**** FOR	134 TO 137.	SEE	9 TO 12 ABOVE	****	
**** FOR	135 TO 138.	SEE	2 TO 5 ABOVE	****	
**** FOR	136 TO 139.	SEE	8 TO 11 ABOVE	****	
**** FOR	139 TO 142.	SEE	9 TO 12 ABOVE	****	
**** FOR	140 TO 143.	SEE	2 TO 5 ABOVE	****	
**** FOR	141 TO 144.	SEE	8 TO 11 ABOVE	****	
**** FOR	142 TO 145.	SEE	9 TO 12 ABOVE	****	
**** FOR	143 TO 146.	SEE	6 TO 9 ABOVE	****	
**** FCR	144 TO 147.	SEE	7 TO 10 ABOVE	****	
**** FOR	145 TO 148.	SEE	1 TO 4 ABOVE	****	
**** FOR	146 TO 149.	SEE	2 TO 5 ABOVE	****	
**** FOR	147 TO 150.	SEE	8 TO 11 ABOVE	****	
**** FCR	148 TO 151.	SEE	9 TO 12 ABOVE	****	
**** FCR	149 TO 152.	SEE	2 TO 5 ABOVE	****	
**** FOR	150 TO 153.	SEE	8 TO 11 ABOVE	****	
**** FOR	151 TO 154.	SEE	9 TO 12 ABOVE	****	
**** FOR	152 TO 155.	SEE	6 TO 9 ABOVE	****	
**** FOR	153 TO 156.	SEE	7 TO 10 ABOVE	****	
**** FOR	154 TO 157.	SEE	1 TO 4 ABOVE	****	
**** FOR	155 TO 158.	SEE	2 TO 5 ABOVE	****	
**** FOR	156 TO 159.	SEE	8 TO 11 ABOVE	****	
**** FOR	157 TO 160.	SEE	9 TO 12 ABOVE	****	
**** FOR	158 TO 161.	SEE	2 TO 5 ABOVE	****	
**** FOR	159 TO 162.	SEE	1 TO 4 ABOVE	****	
**** FOR	160 TO 163.	SEE	2 TO 5 ABOVE	****	
**** FOR	161 TO 164.	SEE	1 TO 4 ABOVE	****	
**** FOR	162 TO 165.	SEE	2 TO 5 ABOVE	****	
**** FOR	163 TO 166.	SEE	1 TO 4 ABOVE	****	
**** FOR	164 TO 167.	SEE	6 TO 9 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
*** FOR	165 TO 168.	SEE	7 TO 10 ABOVE	****	
*** FOR	166 TO 169.	SEE	1 TO 4 ABOVE	****	
*** FOR	167 TO 170.	SEE	2 TO 5 ABOVE	****	
*** FOR	168 TO 171.	SEE	1 TO 4 ABOVE	****	
*** FOR	169 TO 172.	SEE	96 TO 99 ABOVE	****	
*** FOR	170 TO 173.	SEE	127 TO 130 ABOVE	****	
*** FOR	171 TO 174.	SEE	65 TO 68 ABOVE	****	
*** FOR	172 TO 175.	SEE	1 TO 4 ABOVE	****	
*** FOR	173 TO 176.	SEE	2 TO 5 ABOVE	****	
*** FOR	174 TO 177.	SEE	1 TO 4 ABOVE	****	
*** FOR	175 TO 178.	SEE	6 TO 9 ABOVE	****	
*** FOR	176 TO 179.	SEE	7 TO 10 ABOVE	****	
*** FOR	177 TO 180.	SEE	1 TO 4 ABOVE	****	
*** FOR	178 TO 181.	SEE	2 TO 5 ABOVE	****	
*** FOR	179 TO 182.	SEE	63 TO 66 ABOVE	****	
393	181 TO 184		213 TO 216	1	4
394	181 TO 184		222 TO 225	1	4
*** FOR	182 TO 185.	SEE	2 TO 5 ABOVE	****	
*** FOR	183 TO 186.	SEE	1 TO 4 ABOVE	****	
*** FOR	184 TO 187.	SEE	6 TO 9 ABOVE	****	
*** FOR	186 TO 189.	SEE	7 TO 10 ABOVE	****	
*** FOR	187 TO 190.	SEE	1 TO 4 ABOVE	****	
*** FOR	188 TO 191.	SEE	6 TO 9 ABOVE	****	
*** FOR	189 TO 192.	SEE	7 TO 10 ABOVE	****	
*** FOR	190 TO 193.	SEE	1 TO 4 ABOVE	****	
*** FOR	191 TO 194.	SEE	2 TO 5 ABOVE	****	
*** FOR	192 TO 195.	SEE	8 TO 11 ABOVE	****	
*** FOR	193 TO 196.	SEE	9 TO 12 ABOVE	****	
*** FOR	194 TO 197.	SEE	6 TO 9 ABOVE	****	
*** FOR	195 TO 198.	SEE	7 TO 10 ABOVE	****	
*** FOR	196 TO 199.	SEE	1 TO 4 ABOVE	****	
*** FOR	197 TO 200.	SEE	2 TO 5 ABOVE	****	
*** FOR	198 TO 201.	SEE	8 TO 11 ABOVE	****	
*** FOR	203 TO 206.	SEE	9 TO 12 ABOVE	****	
*** FOR	204 TO 207.	SEE	2 TO 5 ABOVE	****	
*** FOR	205 TO 208.	SEE	1 TO 4 ABOVE	****	
*** FOR	206 TO 209.	SEE	2 TO 5 ABOVE	****	
*** FOR	207 TO 210.	SEE	63 TO 66 ABOVE	****	
*** FOR	208 TO 211.	SEE	64 TO 67 ABOVE	****	
*** FOR	209 TO 212.	SEE	65 TO 68 ABOVE	****	
*** FOR	210 TO 213.	SEE	1 TO 4 ABOVE	****	
*** FOR	211 TO 214.	SEE	96 TO 99 ABOVE	****	
*** FOR	213 TO 216.	SEE	181 TO 184 ABOVE	****	
*** FOR	214 TO 217.	SEE	2 TO 5 ABOVE	****	
*** FOR	215 TO 218.	SEE	1 TO 4 ABOVE	****	
*** FOR	216 TO 219.	SEE	2 TO 5 ABOVE	****	
*** FOR	217 TO 220.	SEE	63 TO 66 ABOVE	****	
*** FOR	218 TO 221.	SEE	64 TO 67 ABOVE	****	
*** FOR	220 TO 223.	SEE	97 TO 100 ABOVE	****	
*** FOR	221 TO 224.	SEE	104 TO 107 ABOVE	****	
*** FOR	222 TO 225.	SEE	181 TO 184 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
****	FOR 223 TO 226,	SEE	2 TO	5 ABOVE	****
****	FOR 224 TO 227,	SEE	1 TO	4 ABOVE	****
****	FOR 225 TO 228,	SEE	6 TO	9 ABOVE	****
****	FOR 226 TO 229,	SEE	7 TO	10 ABOVE	****
****	FOR 227 TO 230,	SEE	1 TO	4 ABOVE	****
****	FOR 228 TO 231,	SEE	6 TO	9 ABOVE	****
****	FOR 229 TO 232,	SEE	7 TO	10 ABOVE	****
****	FOR 230 TO 233,	SEE	1 TO	4 ABOVE	****
****	FOR 231 TO 234,	SEE	6 TO	9 ABOVE	****
****	FOR 232 TO 235,	SEE	7 TO	10 ABOVE	****
****	FOR 233 TO 236,	SEE	1 TO	4 ABOVE	****
****	FOR 234 TO 237,	SEE	6 TO	9 ABOVE	****
****	FOR 236 TO 239,	SEE	7 TO	10 ABOVE	****
****	FOR 237 TO 240,	SEE	1 TO	4 ABOVE	****
****	FOR 238 TO 241,	SEE	2 TO	5 ABOVE	****
****	FOR 239 TO 242,	SEE	8 TO	11 ABOVE	****
****	FOR 241 TO 244,	SEE	9 TO	12 ABOVE	****
****	FOR 242 TO 245,	SEE	2 TO	5 ABOVE	****
****	FOR 243 TO 246,	SEE	8 TO	11 ABOVE	****
****	FOR 244 TO 247,	SEE	9 TO	12 ABOVE	****
****	FOR 245 TO 248,	SEE	6 TO	9 ABOVE	****
****	FOR 246 TO 249,	SEE	7 TO	10 ABOVE	****
****	FOR 247 TO 250,	SEE	1 TO	4 ABOVE	****
****	FOR 248 TO 251,	SEE	2 TO	5 ABOVE	****
****	FOR 249 TO 252,	SEE	8 TO	11 ABOVE	****
****	FOR 250 TO 253,	SEE	9 TO	12 ABOVE	****
****	FOR 251 TO 254,	SEE	6 TO	9 ABOVE	****
****	FOR 252 TO 255,	SEE	7 TO	10 ABOVE	****
****	FOR 253 TO 256,	SEE	1 TO	4 ABOVE	****
****	FOR 254 TO 257,	SEE	2 TO	5 ABOVE	****
****	FOR 255 TO 258,	SEE	8 TO	11 ABOVE	****

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 5 NOTES IN LENGTH --
 TONAL CONTOUR (ORIGINAL)
 WAS BEGUN AT 286 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
395	1 TO	5	11 TO	15	1 5
396	1 TO	5	17 TO	21	1 5
397	1 TO	5	23 TO	27	1 5
398	1 TO	5	29 TO	33	1 5
399	1 TO	5	31 TO	35	1 5
400	1 TO	5	33 TO	37	1 5
401	1 TO	5	35 TO	39	1 5
402	1 TO	5	52 TO	56	1 5
403	1 TO	5	54 TO	58	1 5
404	1 TO	5	66 TO	70	1 5
405	1 TO	5	71 TO	75	1 5
406	1 TO	5	73 TO	77	1 5
407	1 TO	5	75 TO	79	1 5
408	1 TO	5	77 TO	81	1 5
409	1 TO	5	79 TO	83	1 5
410	1 TO	5	81 TO	85	1 5
411	1 TO	5	83 TO	87	1 5
412	1 TO	5	88 TO	92	1 5
413	1 TO	5	108 TO	112	1 5
414	1 TO	5	113 TO	117	1 5
415	1 TO	5	145 TO	149	1 5
416	1 TO	5	154 TO	158	1 5
417	1 TO	5	159 TO	163	1 5
418	1 TO	5	161 TO	165	1 5
419	1 TO	5	166 TO	170	1 5
420	1 TO	5	172 TO	176	1 5
421	1 TO	5	177 TO	181	1 5
422	1 TO	5	190 TO	194	1 5
423	1 TO	5	196 TO	200	1 5
424	1 TO	5	205 TO	209	1 5
425	1 TO	5	215 TO	219	1 5
426	1 TO	5	237 TO	241	1 5
427	1 TO	5	247 TO	251	1 5
428	1 TO	5	253 TO	257	1 5
429	2 TO	6	10 TO	14	1 5
430	2 TO	6	12 TO	16	1 5
431	2 TO	6	22 TO	26	1 5
432	2 TO	6	28 TO	32	1 5
433	2 TO	6	30 TO	34	1 5
434	2 TO	6	32 TO	36	1 5
435	2 TO	6	34 TO	38	1 5
436	2 TO	6	53 TO	57	1 5
437	2 TO	6	70 TO	74	1 5
438	2 TO	6	72 TO	76	1 5

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
439	2 TO	6	74 TO 78	1	5
440	2 TO	6	76 TO 80	1	5
441	2 TO	6	78 TO 82	1	5
442	2 TO	6	80 TO 84	1	5
443	2 TO	6	82 TO 86	1	5
444	2 TO	6	84 TO 88	1	5
445	2 TO	6	107 TO 111	1	5
446	2 TO	6	112 TO 116	1	5
447	2 TO	6	158 TO 162	1	5
448	2 TO	6	160 TO 164	1	5
449	2 TO	6	162 TO 166	1	5
450	2 TO	6	167 TO 171	1	5
451	2 TO	6	173 TO 177	1	5
452	2 TO	6	182 TO 186	1	5
453	2 TO	6	204 TO 208	1	5
454	2 TO	6	214 TO 218	1	5
455	2 TO	6	223 TO 227	1	5
*** FOR	3 TO	7,	SEE 1 TO 5 ABOVE ****		
*** FOR	4 TO	8,	SEE 2 TO 6 ABOVE ****		
456	5 TO	9	13 TO 17	1	5
457	5 TO	9	85 TO 89	1	5
458	5 TO	9	120 TO 124	1	5
459	5 TO	9	123 TO 127	1	5
460	5 TO	9	163 TO 167	1	5
461	5 TO	9	174 TO 178	1	5
462	5 TO	9	183 TO 187	1	5
463	5 TO	9	187 TO 191	1	5
464	5 TO	9	224 TO 228	1	5
465	5 TO	9	227 TO 231	1	5
466	5 TO	9	230 TO 234	1	5
467	5 TO	9	233 TO 237	1	5
468	6 TO	10	39 TO 43	1	5
469	6 TO	10	50 TO 54	1	5
470	6 TO	10	61 TO 65	1	5
471	6 TO	10	86 TO 90	1	5
472	6 TO	10	121 TO 125	1	5
473	6 TO	10	143 TO 147	1	5
474	6 TO	10	152 TO 156	1	5
475	6 TO	10	164 TO 168	1	5
476	6 TO	10	175 TO 179	1	5
477	6 TO	10	188 TO 192	1	5
478	6 TO	10	194 TO 198	1	5
479	6 TO	10	225 TO 229	1	5
480	6 TO	10	228 TO 232	1	5
481	6 TO	10	231 TO 235	1	5
482	6 TO	10	245 TO 249	1	5
483	6 TO	10	251 TO 255	1	5
*** FOR	6 TO	10,	SEE 6 TO 10 ABOVE ****		
484	7 TO	11	40 TO 44	1	5
485	8 TO	12	37 TO 41	1	5
486	8 TO	12	41 TO 45	1	5

PATTERN	NCOTES	RELATFD TO	NOTES	TEST	LENGTH
487	8 TO 12		48 TO 52	1	5
488	8 TO 12		56 TO 60	1	5
489	8 TO 12		59 TO 63	1	5
490	8 TO 12		68 TO 72	1	5
491	8 TO 12		90 TO 94	1	5
492	8 TO 12		110 TO 114	1	5
493	8 TO 12		115 TO 119	1	5
494	8 TO 12		129 TO 133	1	5
495	8 TO 12		141 TO 145	1	5
496	8 TO 12		147 TO 151	1	5
497	8 TO 12		150 TO 154	1	5
498	8 TO 12		156 TO 160	1	5
499	8 TO 12		192 TO 196	1	5
500	8 TO 12		243 TO 247	1	5
501	8 TO 12		249 TO 253	1	5
*** FOR	8 TO 12.	SEE	8 TO 12 ABOVE	****	
502	9 TO 13		21 TO 25	1	5
503	9 TO 13		27 TO 31	1	5
504	9 TO 13		42 TO 46	1	5
505	9 TO 13		46 TO 50	1	5
506	9 TO 13		57 TO 61	1	5
507	9 TO 13		69 TO 73	1	5
508	9 TO 13		91 TO 95	1	5
509	9 TO 13		106 TO 110	1	5
510	9 TO 13		111 TO 115	1	5
511	9 TO 13		130 TO 134	1	5
512	9 TO 13		134 TO 138	1	5
513	9 TO 13		139 TO 143	1	5
514	9 TO 13		148 TO 152	1	5
515	9 TO 13		157 TO 161	1	5
516	9 TO 13		203 TO 207	1	5
517	9 TO 13		241 TO 245	1	5
*** FOR	10 TO 14.	SEE	2 TO 6 ABOVE	****	
*** FOR	11 TO 15.	SEE	1 TO 5 ABOVE	****	
*** FOR	12 TO 16.	SEE	2 TO 6 ABOVE	****	
*** FOR	13 TO 17.	SEE	5 TO 9 ABOVE	****	
518	14 TO 18		117 TO 121	1	5
519	14 TO 18		124 TO 128	1	5
520	14 TO 18		184 TO 188	1	5
521	14 TO 18		234 TO 238	1	5
522	15 TO 19		118 TO 122	1	5
523	15 TO 19		185 TO 189	1	5
524	15 TO 19		235 TO 239	1	5
*** FOR	15 TO 19.	SEE	15 TO 19 ABOVE	****	
525	16 TO 20		51 TO 55	1	5
526	16 TO 20		87 TO 91	1	5
527	16 TO 20		100 TO 104	1	5
528	16 TO 20		119 TO 123	1	5
529	16 TO 20		122 TO 126	1	5
530	16 TO 20		144 TO 148	1	5
531	16 TO 20		153 TO 157	1	5

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
532	16 TO 20		165 TO 169	1	5
533	16 TO 20		176 TO 180	1	5
534	16 TO 20		186 TO 190	1	5
535	16 TO 20		189 TO 193	1	5
536	16 TO 20		195 TO 199	1	5
537	16 TO 20		226 TO 230	1	5
538	16 TO 20		229 TO 233	1	5
539	16 TO 20		232 TO 236	1	5
540	16 TO 20		236 TO 240	1	5
541	16 TO 20		246 TO 250	1	5
542	16 TO 20		252 TO 256	1	5
*** FOR	17 TO 21.	SEE	1 TO 5 ABOVE ****		
543	18 TO 22		24 TO 28	1	5
544	18 TO 22		36 TO 40	1	5
545	18 TO 22		43 TO 47	1	5
546	18 TO 22		47 TO 51	1	5
547	18 TO 22		55 TO 59	1	5
548	18 TO 22		58 TO 62	1	5
549	18 TO 22		67 TO 71	1	5
550	18 TO 22		89 TO 93	1	5
551	18 TO 22		92 TO 96	1	5
552	18 TO 22		109 TO 113	1	5
553	18 TO 22		114 TO 118	1	5
554	18 TO 22		131 TO 135	1	5
555	18 TO 22		135 TO 139	1	5
556	18 TO 22		140 TO 144	1	5
557	18 TO 22		146 TO 150	1	5
558	18 TO 22		149 TO 153	1	5
559	18 TO 22		155 TO 159	1	5
560	18 TO 22		191 TO 195	1	5
561	18 TO 22		197 TO 201	1	5
562	18 TO 22		238 TO 242	1	5
563	18 TO 22		242 TO 246	1	5
564	18 TO 22		248 TO 252	1	5
565	18 TO 22		254 TO 258	1	5
566	19 TO 23		25 TO 29	1	5
567	19 TO 23		44 TO 48	1	5
568	19 TO 23		93 TO 97	1	5
569	19 TO 23		132 TO 136	1	5
570	19 TO 23		136 TO 140	1	5
571	19 TO 23		198 TO 202	1	5
572	19 TO 23		239 TO 243	1	5
573	19 TO 23		255 TO 259	1	5
574	20 TO 24		26 TO 30	1	5
575	20 TO 24		45 TO 49	1	5
576	20 TO 24		94 TO 98	1	5
577	20 TO 24		133 TO 137	1	5
578	20 TO 24		138 TO 142	1	5
579	20 TO 24		202 TO 206	1	5
580	20 TO 24		240 TO 244	1	5
*** FOR	20 TO 24.	SEE	20 TO 24 ABOVE ****		

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PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
*** FOR	21 TO 25.	SEE	9 TO 13 ABOVE	****	
*** FOR	22 TO 26.	SEE	2 TO 6 ABOVE	****	
*** FCR	24 TO 28.	SEE	18 TO 22 ABOVE	****	
*** FOR	25 TO 29.	SEE	19 TO 23 ABOVE	****	
*** FOR	26 TO 30.	SEE	20 TO 24 ABOVE	****	
*** FOR	27 TO 31.	SEE	9 TO 13 ABOVE	****	
*** FOR	35 TO 39.	SEE	1 TO 5 ABOVE	****	
*** FOR	36 TO 40.	SEE	18 TO 22 ABOVE	****	
*** FOR	37 TO 41.	SEE	8 TO 12 ABOVE	****	
581	38 TO 42		49 TO 53	1	5
582	38 TO 42		60 TO 64	1	5
583	38 TO 42		116 TO 120	1	5
584	38 TO 42		142 TO 146	1	5
585	38 TO 42		151 TO 155	1	5
586	38 TO 42		193 TO 197	1	5
587	38 TO 42		244 TO 248	1	5
588	38 TO 42		250 TO 254	1	5
*** FOR	39 TO 43.	SEE	6 TO 10 ABOVE	****	
*** FOR	40 TO 44.	SEE	7 TO 11 ABOVE	****	
*** FOR	41 TO 45.	SEE	8 TO 12 ABOVE	****	
*** FCR	42 TO 46.	SEE	9 TO 13 ABOVE	****	
*** FOR	43 TO 47.	SEE	18 TO 22 ABOVE	****	
*** FOR	44 TO 48.	SEE	19 TO 23 ABOVE	****	
*** FOR	45 TO 49.	SEE	20 TO 24 ABOVE	****	
*** FOR	46 TO 50.	SEE	9 TO 13 ABOVE	****	
*** FOR	47 TO 51.	SEE	18 TO 22 ABOVE	****	
*** FCR	48 TO 52.	SEE	8 TO 12 ABOVE	****	
*** FOR	49 TO 53.	SEE	38 TO 42 ABOVE	****	
*** FOR	50 TO 54.	SEE	6 TO 10 ABOVE	****	
*** FOR	51 TO 55.	SEE	16 TO 20 ABOVE	****	
*** FOR	52 TO 56.	SEE	1 TO 5 ABOVE	****	
*** FOR	54 TO 58.	SEE	1 TO 5 ABOVE	****	
*** FCR	55 TO 59.	SEE	18 TO 22 ABOVE	****	
*** FOR	56 TO 60.	SEE	8 TO 12 ABOVE	****	
*** FOR	57 TO 61.	SEE	9 TO 13 ABOVE	****	
*** FOR	58 TO 62.	SEE	18 TO 22 ABOVE	****	
*** FOR	59 TO 63.	SEE	8 TO 12 ABOVE	****	
*** FCR	60 TO 64.	SEE	38 TO 42 ABOVE	****	
*** FOR	61 TO 65.	SEE	6 TO 10 ABOVE	****	
589	63 TO 67		207 TO 211	1	5
590	63 TO 67		217 TO 221	1	5
*** FOR	63 TO 67.	SEE	63 TO 67 ABOVE	****	
591	64 TO 68		208 TO 212	1	5
592	65 TO 69		171 TO 175	1	5
593	65 TO 69		209 TO 213	1	5
*** FOR	66 TO 70.	SEE	1 TO 5 ABOVE	****	
*** FOR	67 TO 71.	SEE	18 TO 22 ABOVE	****	
*** FOR	68 TO 72.	SEE	8 TO 12 ABOVE	****	
*** FOR	69 TO 73.	SEE	9 TO 13 ABOVE	****	
*** FCR	70 TO 74.	SEE	2 TO 6 ABOVE	****	
*** FCR	83 TO 87.	SEE	1 TO 5 ABOVE	****	

P A T T E R N	NOTES	RELATED TO	NOTES	TEST	LENGTH
# FOR 84 TO 88,	SEE	2 TO	6 ABOVE	*	
# FOR 85 TO 89,	SEE	5 TO	9 ABOVE	*	
# FOR 86 TO 90,	SEE	6 TO	10 ABOVE	*	
# FCR 87 TO 91,	SEE	16 TO	20 ABOVE	*	
# FOR 88 TO 92,	SEE	1 TO	5 ABOVE	*	
# FOR 89 TO 93,	SEE	18 TO	22 ABOVE	*	
# FOR 90 TO 94,	SEE	8 TO	12 ABOVE	*	
# FCR 91 TO 95,	SEE	9 TO	13 ABOVE	*	
# FOR 92 TO 96,	SEE	18 TO	22 ABOVE	*	
# FCR 93 TO 97,	SEE	19 TO	23 ABOVE	*	
# FOR 94 TO 98,	SEE	20 TO	24 ABOVE	*	
594	56 TO 100	102 TO 106	1	5	
# FOR 96 TO 100,	SEE	96 TO 100	ABOVE	*	
# FOR 100 TO 104,	SEE	16 TO 20	ABOVE	*	
595	101 TO 105	168 TO 172	1	5	
596	101 TO 105	210 TO 214	1	5	
# FCR 102 TO 106,	SEE	96 TO 100	ABOVE	*	
597	103 TO 107	220 TO 224	1	5	
# FOR 106 TO 110,	SEE	9 TO 13	ABOVE	*	
# FOR 107 TO 111,	SEE	2 TO 6	ABOVE	*	
# FOR 108 TO 112,	SEE	1 TO 5	ABOVE	*	
# FOR 109 TO 113,	SEE	18 TO 22	ABOVE	*	
# FOR 110 TO 114,	SEE	8 TO 12	ABOVE	*	
# FOR 111 TO 115,	SEE	9 TO 13	ABOVE	*	
# FOR 112 TO 116,	SEE	2 TO 6	ABOVE	*	
# FOR 113 TO 117,	SEE	1 TO 5	ABOVE	*	
# FCR 114 TO 118,	SEE	18 TO 22	ABOVE	*	
# FOR 115 TO 119,	SEE	8 TO 12	ABOVE	*	
# FOR 116 TO 120,	SEE	38 TO 42	ABOVE	*	
# FOR 117 TO 121,	SEE	14 TO 18	ABOVE	*	
# FCR 118 TO 122,	SEE	15 TO 19	ABOVE	*	
# FCR 119 TO 123,	SEE	16 TO 20	ABOVE	*	
# FOR 120 TO 124,	SEE	5 TO 9	ABOVE	*	
# FCR 121 TO 125,	SEE	6 TO 10	ABOVE	*	
# FOR 122 TO 126,	SEE	16 TO 20	ABOVE	*	
# FOR 123 TO 127,	SEE	5 TO 9	ABOVE	*	
# FOR 124 TO 128,	SEE	14 TO 18	ABOVE	*	
598	127 TO 131	170 TO 174	1	5	
# FOR 127 TO 131,	SEE	127 TO 131	ABOVE	*	
# FOR 129 TO 133,	SEE	8 TO 12	ABOVE	*	
# FOR 130 TO 134,	SEE	9 TO 13	ABOVE	*	
# FOR 131 TO 135,	SEE	18 TO 22	ABOVE	*	
# FOR 132 TO 136,	SEE	19 TO 23	ABOVE	*	
# FCR 133 TO 137,	SEE	20 TO 24	ABOVE	*	
# FOR 134 TO 138,	SEE	9 TO 13	ABOVE	*	
# FOR 135 TO 139,	SEE	18 TO 22	ABOVE	*	
# FCR 136 TO 140,	SEE	19 TO 23	ABOVE	*	
# FCR 138 TO 142,	SEE	20 TO 24	ABOVE	*	
# FOR 139 TO 143,	SEE	9 TO 13	ABOVE	*	
# FOR 140 TO 144,	SEE	18 TO 22	ABOVE	*	
# FOR 141 TO 145,	SEE	8 TO 12	ABOVE	*	

PATTERN	NCOTES	RELATED TO	NOTES	TEST	LENGTH
*** FOR 142 TO 146.	SEE	38 TO	42 ABOVE	****	
*** FOR 143 TO 147.	SEE	6 TO	10 ABOVE	****	
*** FOR 144 TO 148.	SEE	16 TO	20 ABOVE	****	
*** FOR 145 TO 149.	SEE	1 TO	5 ABOVE	****	
*** FOR 146 TO 150.	SEE	18 TO	22 ABOVE	****	
*** FOR 147 TO 151.	SEE	8 TO	12 ABOVE	****	
*** FOR 148 TO 152.	SEE	9 TO	13 ABOVE	****	
*** FOR 149 TO 153.	SEE	18 TO	22 ABOVE	****	
*** FOR 150 TO 154.	SEE	8 TO	12 ABOVE	****	
*** FOR 151 TO 155.	SEE	38 TO	42 ABOVE	****	
*** FOR 152 TO 156.	SEE	6 TO	10 ABOVE	****	
*** FOR 153 TO 157.	SEE	16 TO	20 ABOVE	****	
*** FOR 154 TO 158.	SEE	1 TO	5 ABOVE	****	
*** FOR 155 TO 159.	SEE	18 TO	22 ABOVE	****	
*** FOR 156 TO 160.	SEE	8 TO	12 ABOVE	****	
*** FOR 157 TO 161.	SEE	9 TO	13 ABOVE	****	
*** FOR 163 TO 167.	SEE	5 TO	9 ABOVE	****	
*** FOR 164 TO 168.	SEE	6 TO	10 ABOVE	****	
*** FOR 165 TO 169.	SEE	16 TO	20 ABOVE	****	
*** FOR 166 TO 170.	SEE	1 TO	5 ABOVE	****	
*** FOR 167 TO 171.	SEE	2 TO	6 ABOVE	****	
*** FOR 168 TO 172.	SEE	101 TO	105 ABOVE	****	
*** FOR 170 TO 174.	SEE	127 TO	131 ABOVE	****	
*** FOR 171 TO 175.	SEE	65 TO	69 ABOVE	****	
*** FOR 172 TO 176.	SEE	1 TO	5 ABOVE	****	
*** FOR 173 TO 177.	SEE	2 TO	6 ABOVE	****	
*** FOR 174 TO 178.	SEE	5 TO	9 ABOVE	****	
*** FOR 175 TO 179.	SEE	6 TO	10 ABOVE	****	
*** FOR 176 TO 180.	SEE	16 TO	20 ABOVE	****	
*** FOR 177 TO 181.	SEE	1 TO	5 ABOVE	****	
599 178 TO 182		206 TO	210	1	5
600 178 TO 182		216 TO	220	1	5
601 181 TO 185		213 TO	217	1	5
602 181 TO 185		222 TO	226	1	5
*** FOR 181 TO 185.	SEE	181 TO	185 ABOVE	****	
*** FOR 182 TO 186.	SEE	2 TO	6 ABOVE	****	
*** FOR 183 TO 187.	SEE	5 TO	9 ABOVE	****	
*** FOR 184 TO 188.	SEE	14 TO	18 ABOVE	****	
*** FOR 185 TO 189.	SEE	15 TO	19 ABOVE	****	
*** FOR 186 TO 190.	SEE	16 TO	20 ABOVE	****	
*** FOR 187 TO 191.	SEE	5 TO	9 ABOVE	****	
*** FOR 188 TO 192.	SEE	6 TO	10 ABOVE	****	
*** FOR 189 TO 193.	SEE	16 TO	20 ABOVE	****	
*** FOR 190 TO 194.	SEE	1 TO	5 ABOVE	****	
*** FOR 191 TO 195.	SEE	18 TO	22 ABOVE	****	
*** FOR 192 TO 196.	SEE	8 TO	12 ABOVE	****	
*** FOR 193 TO 197.	SEE	38 TO	42 ABOVE	****	
*** FOR 194 TO 198.	SEE	6 TO	10 ABOVE	****	
*** FOR 195 TO 199.	SEE	16 TO	20 ABOVE	****	
*** FOR 196 TO 200.	SEE	1 TO	5 ABOVE	****	
*** FOR 197 TO 201.	SEE	18 TO	22 ABOVE	****	

PATTERN	NCYES	RELATED TO	NOTES	TEST	LENGTH
*** FOR 198 TO 202,	SEE	19 TO 23	ABOVE	****	
*** FOR 202 TO 206,	SEE	20 TO 24	ABOVE	****	
*** FOR 203 TO 207,	SEE	9 TO 13	ABOVE	****	
*** FOR 204 TO 208,	SEE	2 TO 6	ABOVE	****	
*** FOR 205 TO 209,	SEE	1 TO 5	ABOVE	****	
*** FOR 206 TO 210,	SEE	178 TO 182	ABOVE	****	
*** FOR 207 TO 211,	SEE	63 TO 67	ABOVE	****	
*** FOR 208 TO 212,	SEE	64 TO 68	ABOVE	****	
*** FOR 209 TO 213,	SEE	65 TO 69	ABOVE	****	
*** FOR 210 TO 214,	SEE	101 TO 105	ABOVE	****	
*** FOR 213 TO 217,	SEE	181 TO 185	ABOVE	****	
*** FOR 216 TO 220,	SEE	178 TO 182	ABOVE	****	
*** FOR 217 TO 221,	SEE	63 TO 67	ABOVE	****	
*** FOR 220 TO 224,	SEE	103 TO 107	ABOVE	****	
*** FOR 222 TO 226,	SEE	181 TO 185	ABOVE	****	
*** FOR 223 TO 227,	SEE	2 TO 6	ABOVE	****	
*** FOR 224 TO 228,	SEE	5 TO 9	ABOVE	****	
*** FOR 225 TO 229,	SEE	6 TO 10	ABOVE	****	
*** FOR 226 TO 230,	SEE	16 TO 20	ABOVE	****	
*** FOR 227 TO 231,	SEE	5 TO 9	ABOVE	****	
*** FOR 228 TO 232,	SEE	6 TO 10	ABOVE	****	
*** FOR 229 TO 233,	SEE	16 TO 20	ABOVE	****	
*** FOR 230 TO 234,	SEE	5 TO 9	ABOVE	****	
*** FOR 231 TO 235,	SEE	6 TO 10	ABOVE	****	
*** FOR 232 TO 236,	SEE	16 TO 20	ABOVE	****	
*** FOR 233 TO 237,	SEE	5 TO 9	ABOVE	****	
*** FOR 234 TO 238,	SEE	14 TO 18	ABOVE	****	
*** FOR 235 TO 239,	SEE	15 TO 19	ABOVE	****	
*** FOR 236 TO 240,	SEE	16 TO 20	ABOVE	****	
*** FOR 237 TO 241,	SEE	1 TO 5	ABOVE	****	
*** FOR 238 TO 242,	SEE	18 TO 22	ABOVE	****	
*** FOR 239 TO 243,	SEE	19 TO 23	ABOVE	****	
*** FOR 240 TO 244,	SEE	20 TO 24	ABOVE	****	
*** FOR 241 TO 245,	SEE	9 TO 13	ABOVE	****	
*** FOR 242 TO 246,	SEE	18 TO 22	ABOVE	****	
*** FOR 243 TO 247,	SEE	8 TO 12	ABOVE	****	
*** FOR 244 TO 248,	SEE	38 TO 42	ABOVE	****	
*** FOR 245 TO 249,	SEE	6 TO 10	ABOVE	****	
*** FOR 246 TO 250,	SEE	16 TO 20	ABOVE	****	
*** FOR 247 TO 251,	SEE	1 TO 5	ABOVE	****	
*** FOR 248 TO 252,	SEE	18 TO 22	ABOVE	****	
*** FOR 249 TO 253,	SEE	8 TO 12	ABOVE	****	
*** FOR 250 TO 254,	SEE	38 TO 42	ABOVE	****	
*** FOR 251 TO 255,	SEE	6 TO 10	ABOVE	****	
*** FOR 252 TO 256,	SEE	16 TO 20	ABOVE	****	
*** FOR 253 TO 257,	SEE	1 TO 5	ABOVE	****	
*** FOR 254 TO 258,	SEE	18 TO 22	ABOVE	****	
*** FOR 255 TO 259,	SEE	19 TO 23	ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 6 NOTES IN LENGTH --
 TONAL CCNTOUR (ORIGINAL)
 WAS BEGUN AT 451 SECONDS INTO EXECUTION.

PAT TERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
603	1 TO	6	11 TO	16	1 6
604	1 TO	6	29 TO	34	1 6
605	1 TO	6	31 TO	36	1 6
606	1 TO	6	33 TO	38	1 6
607	1 TO	6	52 TO	57	1 6
608	1 TO	6	71 TO	76	1 6
609	1 TO	6	73 TO	78	1 6
610	1 TO	6	75 TO	80	1 6
611	1 TO	6	77 TO	82	1 6
612	1 TO	6	79 TO	84	1 6
613	1 TO	6	81 TO	86	1 6
614	1 TO	6	83 TO	88	1 6
615	1 TO	6	159 TO	164	1 6
616	1 TO	6	161 TO	166	1 6
617	1 TO	6	166 TO	171	1 6
618	1 TO	6	172 TO	177	1 6
619	2 TO	7	10 TO	15	1 6
620	2 TO	7	22 TO	27	1 6
621	2 TO	7	28 TO	33	1 6
622	2 TO	7	30 TO	35	1 6
623	2 TO	7	32 TO	37	1 6
624	2 TO	7	34 TO	39	1 6
625	2 TO	7	53 TO	58	1 6
626	2 TO	7	70 TO	75	1 6
627	2 TO	7	72 TO	77	1 6
628	2 TO	7	74 TO	79	1 6
629	2 TO	7	76 TO	81	1 6
630	2 TO	7	78 TO	83	1 6
631	2 TO	7	80 TO	85	1 6
632	2 TO	7	82 TO	87	1 6
633	2 TO	7	107 TO	112	1 6
634	2 TO	7	112 TO	117	1 6
635	2 TO	7	158 TO	163	1 6
636	2 TO	7	160 TO	165	1 6
637	2 TO	7	204 TO	209	1 6
638	2 TO	7	214 TO	219	1 6
*** FOR	3 TO	8.	SEE 1 TO	6 ABOVE ****	
639	4 TO	9	12 TO	17	1 6
640	4 TO	9	84 TO	89	1 6
641	4 TO	9	162 TO	167	1 6
642	4 TO	9	173 TO	178	1 6
643	4 TO	9	182 TO	187	1 6
644	4 TO	9	223 TO	228	1 6
645	5 TO	10	85 TO	90	1 6

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
646	5 TO 10		120 TO 125	1	6
647	5 TO 10		163 TO 168	1	6
648	5 TO 10		174 TO 179	1	6
649	5 TO 10		187 TO 192	1	6
650	5 TO 10		224 TO 229	1	6
651	5 TO 10		227 TO 232	1	6
652	5 TO 10		230 TO 235	1	6
*** FOR	5 TO 10,	SEE	5 TO 10 ABOVE	****	
653	6 TO 11		39 TO 44	1	6
654	7 TO 12		40 TO 45	1	6
655	8 TO 13		41 TO 46	1	6
656	8 TO 13		56 TO 61	1	6
657	8 TO 13		68 TO 73	1	6
658	8 TO 13		90 TO 95	1	6
659	8 TO 13		110 TO 115	1	6
660	8 TO 13		129 TO 134	1	6
661	8 TO 13		147 TO 152	1	6
662	8 TO 13		156 TO 161	1	6
663	9 TO 14		21 TO 26	1	6
664	9 TO 14		27 TO 32	1	6
665	9 TO 14		69 TO 74	1	6
666	9 TO 14		106 TO 111	1	6
667	9 TO 14		111 TO 116	1	6
668	9 TO 14		157 TO 162	1	6
669	9 TO 14		203 TO 208	1	6
*** FOR	10 TO 15,	SEE	2 TO 7 ABOVE	****	
*** FCR	11 TO 16,	SEE	1 TO 6 ABOVE	****	
*** FOR	12 TO 17,	SEE	4 TO 9 ABOVE	****	
670	13 TO 18		123 TO 128	1	6
671	13 TO 18		183 TO 188	1	6
672	13 TO 18		233 TO 238	1	6
673	14 TO 19		117 TO 122	1	6
674	14 TO 19		184 TO 189	1	6
675	14 TO 19		234 TO 239	1	6
*** FOR	14 TO 19,	SEE	14 TO 19 ABOVE	****	
676	15 TO 20		118 TO 123	1	6
677	15 TO 20		185 TO 190	1	6
678	15 TO 20		235 TO 240	1	6
679	16 TO 21		51 TO 56	1	6
680	16 TO 21		87 TO 92	1	6
681	16 TO 21		144 TO 149	1	6
682	16 TO 21		153 TO 158	1	6
683	16 TO 21		165 TO 170	1	6
684	16 TO 21		176 TO 181	1	6
685	16 TO 21		189 TO 194	1	6
686	16 TO 21		195 TO 200	1	6
687	16 TO 21		236 TO 241	1	6
688	16 TO 21		246 TO 251	1	6
689	16 TO 21		252 TO 257	1	6
*** FOR	16 TO 21,	SEE	16 TO 21 ABOVE	****	
690	17 TO 22		23 TO 28	1	6

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
691	17 TO 22		35 TO 40	1	6
692	17 TO 22		54 TO 59	1	6
693	17 TO 22		66 TO 71	1	6
694	17 TO 22		88 TO 93	1	6
695	17 TO 22		108 TO 113	1	6
696	17 TO 22		113 TO 118	1	6
697	17 TO 22		145 TO 150	1	6
698	17 TO 22		154 TO 159	1	6
699	17 TO 22		190 TO 195	1	6
700	17 TO 22		196 TO 201	1	6
701	17 TO 22		237 TO 242	1	6
702	17 TO 22		247 TO 252	1	6
703	17 TO 22		253 TO 258	1	6
704	18 TO 23		24 TO 29	1	6
705	18 TO 23		43 TO 48	1	6
706	18 TO 23		92 TO 97	1	6
707	18 TO 23		131 TO 136	1	6
708	18 TO 23		135 TO 140	1	6
709	18 TO 23		197 TO 202	1	6
710	18 TO 23		238 TO 243	1	6
711	18 TO 23		254 TO 259	1	6
**** FOR	18 TO 23.	SEE	18 TO 23 ABOVE	****	
712	19 TO 24		25 TO 30	1	6
713	19 TO 24		44 TO 49	1	6
714	19 TO 24		93 TO 98	1	6
715	19 TO 24		132 TO 137	1	6
716	19 TO 24		239 TO 244	1	6
**** FCR	19 TO 24.	SEE	19 TO 24 ABOVE	****	
717	20 TO 25		26 TO 31	1	6
718	20 TO 25		45 TO 50	1	6
719	20 TO 25		133 TO 138	1	6
720	20 TO 25		138 TO 143	1	6
721	20 TO 25		202 TO 207	1	6
722	20 TO 25		240 TO 245	1	6
**** FOR	21 TO 26.	SEE	9 TO 14 ABOVE	****	
**** FOR	22 TO 27.	SEE	2 TO 7 ABOVE	****	
**** FOR	23 TO 28.	SEE	17 TO 22 ABOVE	****	
**** FOR	24 TO 29.	SEE	18 TO 23 ABOVE	****	
**** FOR	25 TO 30.	SEE	19 TO 24 ABOVE	****	
**** FOR	26 TO 31.	SEE	20 TO 25 ABOVE	****	
**** FCR	27 TO 32.	SEE	9 TO 14 ABOVE	****	
**** FOR	34 TO 39.	SEE	2 TO 7 ABOVE	****	
**** FOR	35 TO 40.	SEE	17 TO 22 ABOVE	****	
723	36 TO 41		47 TO 52	1	6
724	36 TO 41		55 TO 60	1	6
725	36 TO 41		58 TO 63	1	6
726	36 TO 41		67 TO 72	1	6
727	36 TO 41		89 TO 94	1	6
728	36 TO 41		109 TO 114	1	6
729	36 TO 41		114 TO 119	1	6
730	36 TO 41		140 TO 145	1	6

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
731	36 TO	41	146 TO	151	1 6
732	36 TO	41	149 TO	154	1 6
733	36 TO	41	155 TO	160	1 6
734	36 TO	41	191 TO	196	1 6
735	36 TO	41	242 TO	247	1 6
736	36 TO	41	248 TO	253	1 6
737	37 TO	42	48 TO	53	1 6
738	37 TO	42	59 TO	64	1 6
739	37 TO	42	115 TO	120	1 6
740	37 TO	42	141 TO	146	1 6
741	37 TO	42	150 TO	155	1 6
742	37 TO	42	192 TO	197	1 6
743	37 TO	42	243 TO	248	1 6
744	37 TO	42	249 TO	254	1 6
745	38 TO	43	49 TO	54	1 6
746	38 TO	43	60 TO	65	1 6
747	38 TO	43	142 TO	147	1 6
748	38 TO	43	151 TO	156	1 6
749	38 TO	43	193 TO	198	1 6
750	38 TO	43	244 TO	249	1 6
751	38 TO	43	250 TO	255	1 6
*** FOR	38 TO	43.	SEE 38 TO	43 ABOVE	****
*** FCR	39 TO	44.	SEE 6 TO	11 ABOVE	****
*** FOR	40 TO	45.	SEE 7 TO	12 ABOVE	****
*** FCR	41 TO	46.	SEE 8 TO	13 ABOVE	****
752	42 TO	47	57 TO	62	1 6
753	42 TO	47	91 TO	96	1 6
754	42 TO	47	130 TO	135	1 6
755	42 TO	47	134 TO	139	1 6
756	42 TO	47	139 TO	144	1 6
757	42 TO	47	148 TO	153	1 6
758	42 TO	47	241 TO	246	1 6
*** FOR	43 TO	48.	SEE 18 TO	23 ABOVE	****
*** FOR	44 TO	49.	SEE 19 TO	24 ABOVE	****
*** FCR	45 TO	50.	SEE 20 TO	25 ABOVE	****
*** FCR	46 TO	51.	SEE 42 TO	47 ABOVE	****
*** FOR	47 TO	52.	SEE 36 TO	41 ABOVE	****
*** FOR	48 TO	53.	SEE 37 TO	42 ABOVE	****
*** FCR	49 TO	54.	SEE 38 TO	43 ABOVE	****
759	50 TO	55	86 TO	91	1 6
760	50 TO	55	121 TO	126	1 6
761	50 TO	55	143 TO	148	1 6
762	50 TO	55	152 TO	157	1 6
763	50 TO	55	164 TO	169	1 6
764	50 TO	55	175 TO	180	1 6
765	50 TO	55	188 TO	193	1 6
766	50 TO	55	194 TO	199	1 6
767	50 TO	55	225 TO	230	1 6
768	50 TO	55	228 TO	233	1 6
769	50 TO	55	231 TO	236	1 6
770	50 TO	55	245 TO	250	1 6

P	PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
	771	50 TO 55		251 TO 256	1	6
*	*** FCR	51 TO 56.	SEE	16 TO 21 ABOVE	****	
*	*** FOR	52 TO 57.	SEE	1 TO 6 ABOVE	****	
*	*** FCR	53 TO 58.	SEE	2 TO 7 ABOVE	****	
*	*** FOR	54 TO 59.	SEE	17 TO 22 ABOVE	****	
*	*** FCR	55 TO 60.	SEE	36 TO 41 ABOVE	****	
*	*** FOR	56 TO 61.	SEE	8 TO 13 ABOVE	****	
*	*** FCR	57 TO 62.	SEE	42 TO 47 ABOVE	****	
*	*** FOR	58 TO 63.	SEE	36 TO 41 ABOVE	****	
*	*** FCR	59 TO 64.	SEE	37 TO 42 ABOVE	****	
*	*** FOR	60 TO 65.	SEE	38 TO 43 ABOVE	****	
	7 72	63 TO 68		207 TO 212	1	6
	7 73	64 TO 69		208 TO 213	1	6
	7 74	65 TO 70		171 TO 176	1	6
*	*** FCR	66 TO 71.	SEE	17 TO 22 ABOVE	****	
*	*** FCR	67 TO 72.	SEE	36 TO 41 ABOVE	****	
*	*** FCR	68 TO 73.	SEE	8 TO 13 ABOVE	****	
*	*** FCR	69 TO 74.	SEE	9 TO 14 ABOVE	****	
*	*** FOR	70 TO 75.	SEE	2 TO 7 ABOVE	****	
*	*** FOR	82 TO 87.	SEE	2 TO 7 ABOVE	****	
*	*** FOR	83 TO 88.	SEE	1 TO 6 ABOVE	****	
*	*** FOR	84 TO 89.	SEE	4 TO 9 ABOVE	****	
*	*** FOR	85 TO 90.	SEE	5 TO 10 ABOVE	****	
*	*** FOR	86 TO 91.	SEE	50 TO 55 ABOVE	****	
*	*** FOR	87 TO 92.	SEE	16 TO 21 ABOVE	****	
*	*** FOR	88 TO 93.	SEE	17 TO 22 ABOVE	****	
*	*** FOR	89 TO 94.	SEE	36 TO 41 ABOVE	****	
*	*** FOR	90 TO 95.	SEE	8 TO 13 ABOVE	****	
*	*** FCR	91 TO 96.	SEE	42 TO 47 ABOVE	****	
*	*** FCR	92 TO 97.	SEE	18 TO 23 ABOVE	****	
*	*** FOR	93 TO 98.	SEE	19 TO 24 ABOVE	****	
*	*** FOR	106 TO 111.	SEE	9 TO 14 ABOVE	****	
*	*** FOR	107 TO 112.	SEE	2 TO 7 ABOVE	****	
*	*** FOR	108 TO 113.	SEE	17 TO 22 ABOVE	****	
*	*** FCR	109 TO 114.	SEE	36 TO 41 ABOVE	****	
*	*** FOR	110 TO 115.	SEE	8 TO 13 ABOVE	****	
*	*** FOR	111 TO 116.	SEE	9 TO 14 ABOVE	****	
*	*** FOR	112 TO 117.	SEE	2 TO 7 ABOVE	****	
*	*** FOR	113 TO 118.	SEE	17 TO 22 ABOVE	****	
*	*** FOR	114 TO 119.	SEE	36 TO 41 ABOVE	****	
*	*** FOR	115 TO 120.	SEE	37 TO 42 ABOVE	****	
*	*** FOR	117 TO 122.	SEE	14 TO 19 ABOVE	****	
*	*** FOR	118 TO 123.	SEE	15 TO 20 ABOVE	****	
	775	119 TO 124		186 TO 191	1	6
	776	119 TO 124		226 TO 231	1	6
	777	119 TO 124		229 TO 234	1	6
	778	119 TO 124		232 TO 237	1	6
*	*** FCR	120 TO 125.	SEE	5 TO 10 ABOVE	****	
*	*** FCR	121 TO 126.	SEE	50 TO 55 ABOVE	****	
*	*** FCR	122 TO 127.	SEE	119 TO 124 ABOVE	****	
*	*** FCR	123 TO 128.	SEE	13 TO 18 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
*** FCR	129 TO 134.	SEE	8 TO 13 ABOVE	****	
*** FOR	130 TO 135.	SEE	42 TO 47 ABOVE	****	
*** FOR	131 TO 136.	SEE	18 TO 23 ABOVE	****	
*** FOR	132 TO 137.	SEE	19 TO 24 ABOVE	****	
*** FOR	133 TO 138.	SEE	20 TO 25 ABOVE	****	
*** FCR	134 TO 139.	SEE	42 TO 47 ABOVE	****	
*** FOR	135 TO 140.	SEE	18 TO 23 ABOVE	****	
7 79	136 TO 141		198 TO 203	1	6
7 80	136 TO 141		255 TO 260	1	6
7 81	137 TO 142		201 TO 206	1	6
*** FOR	137 TO 142.	SEE	137 TO 142 ABOVE	****	
*** FOR	138 TO 143.	SEE	20 TO 25 ABOVE	****	
*** FOR	139 TO 144.	SEE	42 TO 47 ABOVE	****	
*** FOR	140 TO 145.	SEE	36 TO 41 ABOVE	****	
*** FOR	141 TO 146.	SEE	37 TO 42 ABOVE	****	
*** FOR	142 TO 147.	SEE	38 TO 43 ABOVE	****	
*** FCR	143 TO 148.	SEE	50 TO 55 ABOVE	****	
*** FOR	144 TO 149.	SEE	16 TO 21 ABOVE	****	
*** FOR	145 TO 150.	SEE	17 TO 22 ABOVE	****	
*** FOR	146 TO 151.	SEE	36 TO 41 ABOVE	****	
*** FOR	147 TO 152.	SEE	8 TO 13 ABOVE	****	
*** FOR	148 TO 153.	SEE	42 TO 47 ABOVE	****	
*** FOR	149 TO 154.	SEE	36 TO 41 ABOVE	****	
*** FOR	150 TO 155.	SEE	37 TO 42 ABOVE	****	
*** FOR	151 TO 156.	SEE	38 TO 43 ABOVE	****	
*** FOR	152 TO 157.	SEE	50 TO 55 ABOVE	****	
*** FCR	153 TO 158.	SEE	16 TO 21 ABOVE	****	
*** FOR	154 TO 159.	SEE	17 TO 22 ABOVE	****	
*** FCR	155 TO 160.	SEE	36 TO 41 ABOVE	****	
*** FOR	156 TO 161.	SEE	8 TO 13 ABOVE	****	
*** FOR	157 TO 162.	SEE	9 TO 14 ABOVE	****	
*** FOR	162 TO 167.	SEE	4 TO 9 ABOVE	****	
*** FOR	163 TO 168.	SEE	5 TO 10 ABOVE	****	
*** FOR	164 TO 169.	SEE	50 TO 55 ABOVE	****	
*** FOR	165 TO 170.	SEE	16 TO 21 ABOVE	****	
*** FOR	166 TO 171.	SEE	1 TO 6 ABOVE	****	
*** FOR	171 TO 176.	SEE	65 TO 70 ABOVE	****	
*** FOR	172 TO 177.	SEE	1 TO 6 ABOVE	****	
*** FOR	173 TO 178.	SEE	4 TO 9 ABOVE	****	
*** FOR	174 TO 179.	SEE	5 TO 10 ABOVE	****	
*** FOR	175 TO 180.	SEE	50 TO 55 ABOVE	****	
*** FOR	176 TO 181.	SEE	16 TO 21 ABOVE	****	
7 82	177 TO 182		205 TO 210	1	6
7 83	177 TO 182		215 TO 220	1	6
7 84	181 TO 186		213 TO 218	1	6
7 85	181 TO 186		222 TO 227	1	6
*** FOR	182 TO 187.	SEE	4 TO 9 ABOVE	****	
*** FOR	183 TO 188.	SEE	13 TO 18 ABOVE	****	
*** FOR	184 TO 189.	SEE	14 TO 19 ABOVE	****	
*** FOR	185 TO 190.	SEE	15 TO 20 ABOVE	****	
*** FOR	186 TO 191.	SEE	119 TO 124 ABOVE	****	

PATTERN NOTES RELATED TO NOTES TEST LENGTH

*** FOR 187 TO 192.	SEE 5 TO 10 ABOVE	****
*** FOR 188 TO 193.	SEE 50 TO 55 ABOVE	****
*** FOR 189 TO 194.	SEE 16 TO 21 ABOVE	****
*** FCR 190 TO 195.	SEE 17 TO 22 ABOVE	****
*** FOR 191 TO 196.	SEE 36 TO 41 ABOVE	****
*** FOR 192 TO 197.	SEE 37 TO 42 ABOVE	****
*** FCR 193 TO 198.	SEE 38 TO 43 ABOVE	****
*** FOR 194 TO 199.	SEE 50 TO 55 ABOVE	****
*** FOR 195 TO 200.	SEE 16 TO 21 ABOVE	****
*** FOR 196 TO 201.	SEE 17 TO 22 ABOVE	****
*** FCR 197 TO 202.	SEE 18 TO 23 ABOVE	****
*** FOR 198 TO 203.	SEE 136 TO 141 ABOVE	****
*** FOR 201 TO 206.	SEE 137 TO 142 ABOVE	****
*** FOR 202 TO 207.	SEE 20 TO 25 ABOVE	****
*** FOR 203 TO 208.	SEE 9 TO 14 ABOVE	****
*** FCR 204 TO 209.	SEE 2 TO 7 ABOVE	****
*** FCR 205 TO 210.	SEE 177 TO 182 ABOVE	****
7 6 206 TO 211.	216 TO 221	1 6
*** FOR 207 TO 212.	SEE 63 TO 68 ABOVE	****
*** FOR 208 TO 213.	SEE 64 TO 69 ABOVE	****
*** FOR 213 TO 218.	SEE 181 TO 186 ABOVE	****
*** FOR 215 TO 220.	SEE 177 TO 182 ABOVE	****
*** FCR 216 TO 221.	SEE 206 TO 211 ABOVE	****
*** FOR 222 TO 227.	SEE 181 TO 186 ABOVE	****
*** FOR 223 TO 228.	SEE 4 TO 9 ABOVE	****
*** FOR 224 TO 229.	SEE 5 TO 10 ABOVE	****
*** FOR 225 TO 230.	SEE 50 TO 55 ABOVE	****
*** FOR 226 TO 231.	SEE 119 TO 124 ABOVE	****
*** FOR 227 TO 232.	SEE 5 TO 10 ABOVE	****
*** FOR 228 TO 233.	SEE 50 TO 55 ABOVE	****
*** FOR 229 TO 234.	SEE 119 TO 124 ABOVE	****
*** FOR 230 TO 235.	SEE 5 TO 10 ABOVE	****
*** FOR 231 TO 236.	SEE 50 TO 55 ABOVE	****
*** FOR 232 TO 237.	SEE 119 TO 124 ABOVE	****
*** FOR 233 TO 238.	SEE 13 TO 18 ABOVE	****
*** FOR 234 TO 239.	SEE 14 TO 19 ABOVE	****
*** FOR 235 TO 240.	SEE 15 TO 20 ABOVE	****
*** FOR 236 TO 241.	SEE 16 TO 21 ABOVE	****
*** FCR 237 TO 242.	SEE 17 TO 22 ABOVE	****
*** FCR 238 TO 243.	SEE 18 TO 23 ABOVE	****
*** FOR 239 TO 244.	SEE 19 TO 24 ABOVE	****
*** FOR 240 TO 245.	SEE 20 TO 25 ABOVE	****
*** FCR 241 TO 246.	SEE 42 TO 47 ABOVE	****
*** FCR 242 TO 247.	SEE 36 TO 41 ABOVE	****
*** FOR 243 TO 248.	SEE 37 TO 42 ABOVE	****
*** FOR 244 TO 249.	SEE 38 TO 43 ABOVE	****
*** FCR 245 TO 250.	SEE 50 TO 55 ABOVE	****
*** FOR 246 TO 251.	SEE 16 TO 21 ABOVE	****
*** FOR 247 TO 252.	SEE 17 TO 22 ABOVE	****
*** FOR 248 TO 253.	SEE 36 TO 41 ABOVE	****
*** FCR 249 TO 254.	SEE 37 TO 42 ABOVE	****

P A T T E R N	NOTES	RELATED TO	NOTES	TEST	LENGTH
* ** FOR	250 TO 255.	SEE	38 TO 43 ABOVE	****	
* ** FOR	251 TO 256.	SEE	50 TO 55 ABOVE	****	
* ** FOR	252 TO 257.	SEE	16 TO 21 ABOVE	****	
* ** FOR	253 TO 258.	SEE	17 TO 22 ABOVE	****	
* ** FOR	254 TO 259.	SFE	18 TO 23 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 7 NOTES IN LENGTH --
 TONAL CONTOUR (ORIGINAL)
 WAS BEGUN AT 632 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
787	1 TO	7	29 TO	35	1 7
788	1 TO	7	31 TO	37	1 7
789	1 TO	7	33 TO	39	1 7
790	1 TO	7	52 TO	58	1 7
791	1 TO	7	71 TO	77	1 7
792	1 TO	7	73 TO	79	1 7
793	1 TO	7	75 TO	81	1 7
794	1 TO	7	77 TO	83	1 7
795	1 TO	7	79 TO	85	1 7
796	1 TO	7	81 TO	87	1 7
797	1 TO	7	159 TO	165	1 7
798	2 TO	8	10 TO	16	1 7
799	2 TO	8	28 TO	34	1 7
800	2 TO	8	30 TO	36	1 7
801	2 TO	8	32 TO	38	1 7
802	2 TO	8	70 TO	76	1 7
803	2 TO	8	72 TO	78	1 7
804	2 TO	8	74 TO	80	1 7
805	2 TO	8	76 TO	82	1 7
806	2 TO	8	78 TO	84	1 7
807	2 TO	8	80 TO	86	1 7
808	2 TO	8	82 TO	88	1 7
809	2 TO	8	158 TO	164	1 7
810	2 TO	8	160 TO	166	1 7
811	4 TO	10	84 TO	90	1 7
812	4 TO	10	162 TO	168	1 7
813	4 TO	10	173 TO	179	1 7
814	4 TO	10	223 TO	229	1 7
815	6 TO	12	39 TO	45	1 7
816	7 TO	13	40 TO	46	1 7
817	8 TO	14	68 TO	74	1 7
818	8 TO	14	110 TO	116	1 7
819	8 TO	14	156 TO	162	1 7
820	9 TO	15	21 TO	27	1 7
821	9 TO	15	27 TO	33	1 7
822	9 TO	15	69 TO	75	1 7
823	9 TO	15	106 TO	112	1 7
824	9 TO	15	111 TO	117	1 7
825	9 TO	15	157 TO	163	1 7
826	9 TO	15	203 TO	209	1 7
827	13 TO	19	183 TO	189	1 7
828	13 TO	19	233 TO	239	1 7
829	14 TO	20	117 TO	123	1 7
830	14 TO	20	184 TO	190	1 7

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
831	14 TO	20	234 TO	240	1 7
832	15 TO	21	235 TO	241	1 7
833	16 TO	22	87 TO	93	1 7
834	16 TO	22	144 TO	150	1 7
835	16 TO	22	153 TO	159	1 7
836	16 TO	22	189 TO	195	1 7
837	16 TO	22	195 TO	201	1 7
838	16 TO	22	236 TO	242	1 7
839	16 TO	22	246 TO	252	1 7
840	16 TO	22	252 TO	258	1 7
841	17 TO	23	23 TO	29	1 7
842	17 TO	23	196 TO	202	1 7
843	17 TO	23	237 TO	243	1 7
844	17 TO	23	253 TO	259	1 7
845	18 TO	24	24 TO	30	1 7
846	18 TO	24	43 TO	49	1 7
847	18 TO	24	92 TO	98	1 7
848	18 TO	24	131 TO	137	1 7
849	18 TO	24	238 TO	244	1 7
850	19 TO	25	25 TO	31	1 7
851	19 TO	25	44 TO	50	1 7
852	19 TO	25	132 TO	138	1 7
853	19 TO	25	239 TO	245	1 7
854	20 TO	26	26 TO	32	1 7
855	20 TO	26	202 TO	208	1 7
856	36 TO	42	47 TO	53	1 7
857	36 TO	42	58 TO	64	1 7
858	36 TO	42	114 TO	120	1 7
859	36 TO	42	140 TO	146	1 7
860	36 TO	42	149 TO	155	1 7
861	36 TO	42	191 TO	197	1 7
862	36 TO	42	242 TO	248	1 7
863	36 TO	42	248 TO	254	1 7
864	37 TO	43	48 TO	54	1 7
865	37 TO	43	59 TO	65	1 7
866	37 TO	43	141 TO	147	1 7
867	37 TO	43	150 TO	156	1 7
868	37 TO	43	192 TO	198	1 7
869	37 TO	43	243 TO	249	1 7
870	37 TO	43	249 TO	255	1 7
871	42 TO	48	91 TO	97	1 7
872	42 TO	48	130 TO	136	1 7
873	42 TO	48	134 TO	140	1 7
874	50 TO	56	86 TO	92	1 7
875	50 TO	56	143 TO	149	1 7
876	50 TO	56	152 TO	158	1 7
877	50 TO	56	164 TO	170	1 7
878	50 TO	56	175 TO	181	1 7
879	50 TO	56	188 TO	194	1 7
880	50 TO	56	194 TO	200	1 7
881	50 TO	56	245 TO	251	1 7

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
882	50 TO 56		251 TO 257	1	7
883	63 TO 69		207 TO 213	1	7
884	119 TO 125		186 TO 192	1	7
885	119 TO 125		226 TO 232	1	7
886	119 TO 125		229 TO 235	1	7
887	137 TO 143		201 TO 207	1	7
888	181 TO 187		222 TO 228	1	7

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 8 NOTES IN LENGTH --
 TONAL CGNTOUR (ORIGINAL)
 WAS BEGUN AT 656 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
F89	1 TO 8		29 TO 36	1	8
F90	1 TO 8		31 TO 38	1	8
F91	1 TO 8		71 TO 78	1	8
F92	1 TO 8		73 TO 80	1	8
F93	1 TO 8		75 TO 82	1	8
F94	1 TO 8		77 TO 84	1	8
F95	1 TO 8		79 TO 86	1	8
F96	1 TO 8		81 TO 88	1	8
F97	1 TO 8		159 TO 166	1	8
F98	2 TO 9		10 TO 17	1	8
F99	2 TO 9		82 TO 89	1	8
000	2 TO 9		160 TO 167	1	8
001	6 TO 13		39 TO 46	1	8
002	8 TO 15		68 TO 75	1	8
003	8 TO 15		110 TO 117	1	8
004	8 TO 15		156 TO 163	1	8
005	9 TO 16		27 TO 34	1	8
006	9 TO 16		69 TO 76	1	8
007	9 TO 16		157 TO 164	1	8
008	13 TO 20		183 TO 190	1	8
009	13 TO 20		233 TO 240	1	8
010	14 TO 21		234 TO 241	1	8
011	15 TO 22		235 TO 242	1	8
012	16 TO 23		195 TO 202	1	8
013	16 TO 23		236 TO 243	1	8
014	16 TO 23		252 TO 259	1	8
015	17 TO 24		237 TO 244	1	8
016	18 TO 25		43 TO 50	1	8
017	18 TO 25		131 TO 138	1	8
018	18 TO 25		238 TO 245	1	8
019	20 TO 27		202 TO 209	1	8
020	36 TO 43		47 TO 54	1	8
021	36 TO 43		58 TO 65	1	8
022	36 TO 43		140 TO 147	1	8
023	36 TO 43		149 TO 156	1	8
024	36 TO 43		191 TO 198	1	8
025	36 TO 43		242 TO 249	1	8
026	36 TO 43		248 TO 255	1	8
027	42 TO 49		91 TO 98	1	8
028	42 TO 49		130 TO 137	1	8
029	50 TO 57		164 TO 171	1	8
030	119 TO 126		186 TO 193	1	8
031	119 TO 126		226 TO 233	1	8
032	119 TO 126		229 TO 236	1	8

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 9 NOTES IN LENGTH --
 TONAL CONTOUR (ORIGINAL)
 WAS BEGUN AT 675 SECONDS INTO EXECUTION.

P A T T E R N	NOTES	RELATED TO	NOTES	TEST	LENGTH
933	1 TO 9		81 TO 89	1	9
934	1 TO 9		159 TO 167	1	9
935	2 TO 10		82 TO 90	1	9
936	2 TO 10		160 TO 168	1	9
937	8 TO 16		68 TO 76	1	9
938	8 TO 16		156 TO 164	1	9
939	13 TO 21		233 TO 241	1	9
940	14 TO 22		234 TO 242	1	9
941	15 TO 23		235 TO 243	1	9
942	16 TO 24		236 TO 244	1	9
943	17 TO 25		237 TO 245	1	9
944	42 TO 50		130 TO 138	1	9
945	119 TO 127		226 TO 234	1	9
946	119 TO 127		229 TO 237	1	9

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 10 NOTES IN LENGTH --
 TONAL CCNTOUR (ORIGINAL)
 WAS BEGUN AT 691 SECONDS INTO EXECUTION.

PATTERN	NCOTES	RELATED TO	NOTES	TEST	LENGTH
947	1 TO 10		81 TO 90	1	10
948	1 TO 10		159 TO 168	1	10
949	13 TO 22		233 TO 242	1	10
950	14 TO 23		234 TO 243	1	10
951	15 TO 24		235 TO 244	1	10
952	16 TO 25		236 TO 245	1	10
953	42 TO 51		130 TO 139	1	10
954	119 TO 128		229 TO 238	1	10

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 11 NOTES IN LENGTH --
 TONAL CONTOUR (ORIGINAL)
 WAS BEGUN AT 707 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
555	13 TO 23		233 TO 243	1	11
556	14 TO 24		234 TO 244	1	11
557	15 TO 25		235 TO 245	1	11

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 12 NOTES IN LENGTH --
TONAL CONTOUR (ORIGINAL)
WAS BEGUN AT 722 SECONDS INTO EXECUTION.

P A T T E R N	NOTES	RELATED TO	NOTES	TEST	LENGTH
958	13 TO 24		233 TO 244	1	12
959	14 TO 25		234 TO 245	1	12

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 13 NOTES IN LENGTH --
TONAL CONTOUR (ORIGINAL)
WAS BEGUN AT 737 SECONDS INTO EXECUTION.

P A T T E R N	NOTES	RELATED TO	NOTES	TEST	LENGTH
S60	13 TO 25		233 TO 245	1	13

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 14 NOTES IN LENGTH --
TONAL CONTOUR (ORIGINAL)
WAS BEGUN AT 754 SECONDS INTO EXECUTION.

P A T T E R N	N C T E S	R E L A T E D T O	N O T E S	T E S T	L E N G T H
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E A D O F T Y P E I L I S T I N G . T O T A L O F 9 6 0 P A T T E R N S L O C A T E D .

*** TYPE II LISTING ***

EDGARD VARESE DENSITY 21.5 FOR SOLO FLUTE
TORNAL CONTOUR (ORIGINAL)

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	13 TO 25	2	13
SUBPATTERN	18 TO 25	4	8
SUBPATTERN	16 TO 23	4	8
SUBPATTERN	19 TO 25	5	7
SUBPATTERN	18 TO 24	6	7
SUBPATTERN	17 TO 23	5	7
SUBPATTERN	16 TO 22	9	7
SUBPATTERN	14 TO 20	4	7
SUBPATTERN	20 TO 25	7	6
SUBPATTERN	19 TO 24	6	6
SUBPATTERN	18 TO 23	9	6
SUBPATTERN	17 TO 22	15	6
SUBPATTERN	16 TO 21	12	6
SUBPATTERN	15 TO 20	4	6
SUBPATTERN	14 TO 19	4	6
SUBPATTERN	13 TO 18	4	6
SUBPATTERN	20 TO 24	8	5
SUBPATTERN	19 TO 23	9	5
SUBPATTERN	18 TO 22	24	5
SUBPATTERN	16 TO 20	19	5
SUBPATTERN	15 TO 19	4	5
SUBPATTERN	14 TO 18	5	5

* * * * * TEST 1 COMPLETED AT 930 SECONDS INTO EXECUTION * * * * *

TEST REQUESTED 2
UNITS OF DATA PER CARD 15

NOTES	55	54	56	51	56	51	57	55	54	56	57	51	57	56	57	
	1 THROUGH					15										
NOTES	56	54	51	57	51	57	59	60	57	60	57	60	62	63	62	
	16 THROUGH					30										
NOTES	63	62	63	62	63	62	63	62	64	70	64	58	64	70	53	
	31 THROUGH					45										
NOTES	55	65	71	59	72	78	66	65	67	65	67	65	66	68	55	
	46 THROUGH					60										
NOTES	56	81	61	60	61	61	59	61	58	61	75	74	75	74	75	
	61 THROUGH					75										
NOTES	74	75	74	75	74	75	74	75	74	75	74	76	61	60	61	
	76 THROUGH					90										
NOTES	59	60	61	59	60	74	75	74	74	74	54	51	54	51	51	
	91 THROUGH					105										
NOTES	51	54	64	51	64	51	52	58	54	58	52	65	31	80	68	
	106 THROUGH					120										
NOTES	67	81	80	68	81	80	68	67	67	57	68	69	56	57	58	
	121 THROUGH					135										
NOTES	55	54	60	70	73	83	73	80	83	80	73	83	73	80	83	
	136 THROUGH					150										
NOTES	73	80	83	80	73	83	73	80	83	80	83	80	83	80	83	
	151 THROUGH					165										
NOTES	80	73	74	65	74	65	65	64	65	63	65	64	63	65	63	
	166 THROUGH					180										
NOTES	64	64	65	63	65	61	56	55	57	56	55	57	55	56	57	
	181 THROUGH					195										

NOTES 196 THROUGH 210

56 55 57 52 58 59 66 72 75 90 85 88 85 88 88

NOTES 211 THROUGH 225

85 88 85 85 88 85 88 85 88 88 58 58 58 59 57

NOTES 226 THROUGH 240

74 68 67 74 68 67 74 68 67 74 54 52 51 54 51

NOTES 241 THROUGH 255

54 56 57 54 57 71 60 54 60 50 54 64 54 50 64

NOTES 256 THROUGH 265

50 54 60 64 68 75 77 79 85 -99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

The interval tables appearing with Tests 2 through 8 of Density 21.5 would be identical to the tables shown with Test 1. In order to reduce the size of this appendix, these interval tables have been omitted.

*** TYPE I LISTING ***

EDGAR VARESE

DENSITY 21.5 FOR SOLO FLUTE

SEARCH FOR PATTERNS OF 3 NOTES IN LENGTH --
 EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 29 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO	3	8 TO	10	2 3
2	1 TO	3	37 TO	39	2 3
3	1 TO	3	52 TO	54	2 3
4	1 TO	3	85 TO	87	2 3
5	1 TO	3	177 TO	179	2 3
6	1 TO	3	187 TO	189	2 3
7	1 TO	3	190 TO	192	2 3
8	1 TO	3	196 TO	198	2 3
9	2 TO	4	197 TO	199	2 3
10	5 TO	7	136 TO	138	2 3
11	5 TO	7	198 TO	200	2 3
12	7 TO	9	236 TO	238	2 3
*** FCR	8 TO	10.	SEE 1 TO	3 ABOVE	****
13	9 TO	11	21 TO	23	2 3
14	9 TO	11	27 TO	29	2 3
15	9 TO	11	241 TO	243	2 3
16	11 TO	13	19 TO	21	2 3
17	11 TO	13	41 TO	43	2 3
18	11 TO	13	247 TO	249	2 3
19	13 TO	15	29 TO	31	2 3
20	13 TO	15	31 TO	33	2 3
21	13 TO	15	33 TO	35	2 3
22	13 TO	15	35 TO	37	2 3
23	13 TO	15	63 TO	65	2 3
24	13 TO	15	71 TO	73	2 3
25	13 TO	15	73 TO	75	2 3
26	13 TO	15	75 TO	77	2 3
27	13 TO	15	77 TO	79	2 3
28	13 TO	15	79 TO	81	2 3
29	13 TO	15	81 TO	83	2 3
30	13 TO	15	83 TO	85	2 3
31	13 TO	15	88 TO	90	2 3
32	13 TO	15	172 TO	174	2 3
33	14 TO	16	28 TO	30	2 3
34	14 TO	16	30 TO	32	2 3
35	14 TO	16	32 TO	34	2 3
36	14 TO	16	34 TO	36	2 3
37	14 TO	16	36 TO	38	2 3
38	14 TO	16	72 TO	74	2 3
39	14 TO	16	74 TO	76	2 3
40	14 TO	16	76 TO	78	2 3
41	14 TO	16	78 TO	80	2 3

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
42	14 TO 16		80 TO 82	2	3
43	14 TO 16		82 TO 84	2	3
44	14 TO 16		84 TO 86	2	3
45	14 TO 16		96 TO 98	2	3
46	14 TO 16		194 TO 196	2	3
47	18 TO 20		39 TO 41	2	3
**** FOR	19 TO 21.	SEE	11 TO 13 ABOVE	****	
**** FOR	21 TO 23.	SEE	9 TO 11 ABOVE	****	
48	22 TO 24		242 TO 244	2	3
49	23 TO 25		25 TO 27	2	3
50	23 TO 25		68 TO 70	2	3
51	23 TO 25		101 TO 103	2	3
52	23 TO 25		159 TO 161	2	3
53	23 TO 25		161 TO 163	2	3
54	23 TO 25		163 TO 165	2	3
55	23 TO 25		207 TO 209	2	3
56	23 TO 25		210 TO 212	2	3
57	23 TO 25		215 TO 217	2	3
58	23 TO 25		217 TO 219	2	3
59	23 TO 25		239 TO 241	2	3
60	23 TO 25		243 TO 245	2	3
61	24 TO 26		102 TO 104	2	3
62	24 TO 26		143 TO 145	2	3
63	24 TO 26		152 TO 154	2	3
64	24 TO 26		158 TO 160	2	3
65	24 TO 26		160 TO 162	2	3
66	24 TO 26		162 TO 164	2	3
67	24 TO 26		164 TO 166	2	3
68	24 TO 26		206 TO 208	2	3
69	24 TO 26		211 TO 213	2	3
70	24 TO 26		214 TO 216	2	3
71	24 TO 26		216 TO 218	2	3
72	24 TO 26		238 TO 240	2	3
**** FOR	25 TO 27.	SEE	23 TO 25 ABOVE	****	
73	26 TO 28		240 TO 242	2	3
**** FOR	27 TO 29.	SEE	9 TO 11 ABOVE	****	
**** FOR	28 TO 30.	SEE	14 TO 16 ABOVE	****	
**** FOR	29 TO 31.	SEE	13 TO 15 ABOVE	****	
**** FOR	30 TO 32.	SEE	14 TO 16 ABOVE	****	
**** FOR	31 TO 33.	SEE	13 TO 15 ABOVE	****	
**** FOR	32 TO 34.	SEE	14 TO 16 ABOVE	****	
**** FOR	33 TO 35.	SEE	13 TO 15 ABOVE	****	
**** FOR	34 TO 36.	SEE	14 TO 16 ABOVE	****	
**** FOR	35 TO 37.	SEE	13 TO 15 ABOVE	****	
**** FOR	36 TO 38.	SEE	14 TO 16 ABOVE	****	
**** FOR	37 TO 39.	SEE	1 TO 3 ABOVE	****	
74	38 TO 40		262 TO 264	2	3
**** FOR	39 TO 41.	SEE	18 TO 20 ABOVE	****	
**** FOR	41 TO 43.	SEE	11 TO 13 ABOVE	****	
75	42 TO 44		45 TO 47	2	3
76	42 TO 44		46 TO 48	2	3

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	45 TO	47,	SEE 42 TO	44 ABOVE	****
**** FOR	46 TO	48,	SEE 42 TO	44 ABOVE	****
77	47 TO	49	50 TO	52	2 3
78	48 TO	50	123 TO	125	2 3
**** FOR	50 TO	52,	SEE 47 TO	49 ABOVE	****
79	51 TO	53	119 TO	121	2 3
80	51 TO	53	126 TO	128	2 3
**** FCR	52 TO	54,	SEE 1 TO	3 ABOVE	****
81	53 TO	55	55 TO	57	2 3
82	53 TO	55	178 TO	180	2 3
83	53 TO	55	191 TO	193	2 3
84	54 TO	56	66 TO	68	2 3
85	54 TO	56	174 TO	176	2 3
86	54 TO	56	183 TO	185	2 3
**** FCR	55 TO	57,	SEE 53 TO	55 ABOVE	****
87	56 TO	58	90 TO	92	2 3
88	56 TO	58	93 TO	95	2 3
89	56 TO	58	179 TO	181	2 3
90	56 TO	58	192 TO	194	2 3
91	59 TO	61	110 TO	112	2 3
92	59 TO	61	132 TO	134	2 3
**** FOR	63 TO	65,	SEE 13 TO	15 ABOVE	****
93	64 TO	66	180 TO	182	2 3
**** FOR	66 TO	68,	SEE 54 TO	56 ABOVE	****
**** FOR	68 TO	70,	SEE 23 TO	25 ABOVE	****
94	69 TO	71	244 TO	246	2 3
95	70 TO	72	121 TO	123	2 3
**** FOR	71 TO	73,	SEE 13 TO	15 ABOVE	****
**** FOR	72 TO	74,	SEE 14 TO	16 ABOVE	****
**** FCR	73 TO	75,	SEE 13 TO	15 ABOVE	****
**** FCR	74 TO	76,	SEE 14 TO	16 ABOVE	****
**** FOR	75 TO	77,	SEE 13 TO	15 ABOVE	****
**** FOR	76 TO	78,	SEE 14 TO	16 ABOVE	****
**** FOR	77 TO	79,	SEE 13 TO	15 ABOVE	****
**** FOR	78 TO	80,	SEE 14 TO	16 ABOVE	****
**** FCR	79 TO	81,	SEE 13 TO	15 ABOVE	****
**** FCR	80 TO	82,	SEE 14 TO	16 ABOVE	****
**** FOR	81 TO	83,	SEE 13 TO	15 ABOVE	****
**** FOR	82 TO	84,	SEE 14 TO	16 ABOVE	****
**** FOR	83 TO	85,	SEE 13 TO	15 ABOVE	****
**** FOR	84 TO	86,	SEE 14 TO	16 ABOVE	****
**** FOR	85 TO	87,	SEE 1 TO	3 ABOVE	****
**** FCR	88 TO	90,	SEE 13 TO	15 ABOVE	****
96	89 TO	91	92 TO	94	2 3
97	89 TO	91	173 TO	175	2 3
98	89 TO	91	182 TO	184	2 3
99	89 TO	91	223 TO	225	2 3
**** FCR	90 TO	92,	SEE 56 TO	58 ABOVE	****
100	91 TO	93	133 TO	135	2 3
101	91 TO	93	134 TO	136	2 3
102	91 TO	93	193 TO	195	2 3

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	92 TO 94.	SEE	89 TO 91 ABOVE	****	
**** FOR	93 TO 95.	SEE	56 TO 58 ABOVE	****	
**** FCR	96 TO 98.	SEE	14 TO 16 ABOVE	****	
103	97 TO 99		127 TO 129	2	3
104	98 TO 100		104 TO 106	2	3
105	98 TO 100		221 TO 223	2	3
**** FCR	101 TO 103.	SEE	23 TO 25 ABOVE	****	
**** FCR	102 TO 104.	SEE	24 TO 26 ABOVE	****	
106	103 TO 105		212 TO 214	2	3
**** FOR	104 TO 106.	SEE	98 TO 100 ABOVE	****	
107	105 TO 107		213 TO 215	2	3
108	106 TO 108		139 TO 141	2	3
**** FOR	110 TO 112.	SEE	59 TO 61 ABOVE	****	
109	118 TO 120		122 TO 124	2	3
110	118 TO 120		125 TO 127	2	3
**** FOR	119 TO 121.	SEE	51 TO 53 ABOVE	****	
**** FCR	121 TO 123.	SEE	70 TO 72 ABOVE	****	
**** FOR	122 TO 124.	SEE	118 TO 120 ABOVE	****	
**** FCR	123 TO 125.	SEE	48 TO 50 ABOVE	****	
**** FCR	125 TO 127.	SEE	118 TO 120 ABOVE	****	
**** FCR	126 TO 128.	SEE	51 TO 53 ABOVE	****	
**** FOR	127 TO 129.	SEE	97 TO 99 ABOVE	****	
**** FOR	132 TO 134.	SEE	59 TO 61 ABOVE	****	
**** FOR	133 TO 135.	SEE	91 TO 93 ABOVE	****	
**** FCR	134 TO 136.	SEE	91 TO 93 ABOVE	****	
**** FOR	136 TO 138.	SEE	5 TO 7 ABOVE	****	
**** FCR	139 TO 141.	SEE	106 TO 108 ABOVE	****	
111	140 TO 142		146 TO 148	2	3
112	140 TO 142		155 TO 157	2	3
113	140 TO 142		251 TO 253	2	3
114	141 TO 143		147 TO 149	2	3
115	141 TO 143		150 TO 152	2	3
116	141 TO 143		156 TO 158	2	3
117	142 TO 144		148 TO 150	2	3
118	142 TO 144		151 TO 153	2	3
119	142 TO 144		157 TO 159	2	3
**** FCR	143 TO 145.	SEE	24 TO 26 ABOVE	****	
120	144 TO 146		153 TO 155	2	3
121	144 TO 146		165 TO 167	2	3
122	145 TO 147		154 TO 156	2	3
**** FOR	146 TO 148.	SEE	140 TO 142 ABOVE	****	
**** FOR	147 TO 149.	SEE	141 TO 143 ABOVE	****	
**** FCR	148 TO 150.	SEE	142 TO 144 ABOVE	****	
**** FOR	150 TO 152.	SEE	141 TO 143 ABOVE	****	
**** FOR	151 TO 153.	SEE	142 TO 144 ABOVE	****	
**** FOR	152 TO 154.	SEE	24 TO 26 ABOVE	****	
**** FOR	153 TO 155.	SEE	144 TO 146 ABOVE	****	
**** FCR	154 TO 156.	SEE	145 TO 147 ABOVE	****	
**** FOR	155 TO 157.	SEE	140 TO 142 ABOVE	****	
**** FOR	156 TO 158.	SEE	141 TO 143 ABOVE	****	
**** FOR	157 TO 159.	SEE	142 TO 144 ABOVE	****	

PATTERN	NCES	RELATED TC	NOTES	TEST	LENGTH
**** FOR 158 TO 160.	SEE	24 TO 26	ABOVE ****		
**** FCR 159 TO 161.	SEE	23 TO 25	ABOVE ****		
**** FOR 160 TO 162.	SEE	24 TO 26	ABOVE ****		
**** FOR 161 TO 163.	SEE	23 TO 25	ABOVE ****		
**** FOR 162 TO 164.	SEE	24 TO 26	ABOVE ****		
**** FOR 163 TO 165.	SEE	23 TO 25	ABOVE ****		
**** FOR 164 TO 166.	SEE	24 TO 26	ABOVE ****		
**** FCR 165 TO 167.	SEE	144 TO 146	ABOVE ****		
**** FCR 172 TO 174.	SEE	13 TO 15	ABOVE ****		
**** FOR 173 TO 175.	SEE	89 TO 91	ABOVE ****		
**** FOR 174 TO 176.	SEE	54 TO 56	ABOVE ****		
123 175 TO 177		188 TO 190	2	3	
124 176 TO 178		189 TO 191	2	3	
125 176 TO 178		195 TO 197	2	3	
**** FOR 177 TO 179.	SEE	1 TO 3	ABOVE ****		
**** FOR 178 TO 180.	SEE	53 TO 55	ABOVE ****		
**** FOR 179 TO 181.	SEE	56 TO 58	ABOVE ****		
**** FCR 180 TO 182.	SEE	64 TO 66	ABOVE ****		
126 181 TO 183		222 TO 224	2	3	
**** FOR 182 TO 184.	SEE	89 TO 91	ABOVE ****		
**** FOR 183 TO 185.	SEE	54 TO 56	ABOVE ****		
**** FOR 187 TO 189.	SEE	1 TO 3	ABOVE ****		
**** FOR 188 TO 190.	SEE	175 TO 177	ABOVE ****		
**** FOR 189 TO 191.	SEE	176 TO 178	ABOVE ****		
**** FCR 190 TO 192.	SEE	1 TO 3	ABOVE ****		
**** FCR 191 TO 193.	SEE	53 TO 55	ABOVE ****		
**** FOR 192 TO 194.	SEE	56 TO 58	ABOVE ****		
**** FCR 193 TO 195.	SEE	91 TO 93	ABOVE ****		
**** FOR 194 TO 196.	SEE	14 TO 16	ABOVE ****		
**** FCR 195 TO 197.	SEE	176 TO 178	ABOVE ****		
**** FOR 196 TO 198.	SEE	1 TO 3	ABOVE ****		
**** FCR 197 TO 199.	SEE	2 TO 4	ABOVE ****		
**** FOR 198 TO 200.	SEE	5 TO 7	ABOVE ****		
**** FOR 206 TO 208.	SEE	24 TO 26	ABOVE ****		
**** FOR 207 TO 209.	SEE	23 TO 25	ABOVE ****		
127 208 TO 210		218 TO 220	2	3	
**** FCR 210 TO 212.	SEE	23 TO 25	ABOVE ****		
**** FOR 211 TO 213.	SEE	24 TO 26	ABOVE ****		
**** FOR 212 TO 214.	SEE	103 TO 105	ABOVE ****		
**** FCR 213 TO 215.	SEE	105 TO 107	ABOVE ****		
**** FOR 214 TO 216.	SEE	24 TO 26	ABOVE ****		
**** FCR 215 TO 217.	SEE	23 TO 25	ABOVE ****		
**** FCR 216 TO 218.	SEE	24 TO 26	ABOVE ****		
**** FOR 217 TO 219.	SEE	23 TO 25	ABOVE ****		
**** FCR 218 TO 220.	SEE	208 TO 210	ABOVE ****		
**** FCR 221 TO 223.	SEE	98 TO 100	ABOVE ****		
**** FOR 222 TO 224.	SEE	181 TO 183	ABOVE ****		
**** FOR 223 TO 225.	SEE	89 TO 91	ABOVE ****		
128 226 TO 228		229 TO 231	2	3	
129 226 TO 228		232 TO 234	2	3	
130 227 TO 229		230 TO 232	2	3	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
131	227 TO 229		233 TO 235	2	3
132	228 TO 230		231 TO 233	2	3
**** FOR	229 TO 231.	SEE	226 TO 228 ABOVE	****	
**** FOR	230 TO 232.	SEE	227 TO 229 ABOVE	****	
**** FOR	231 TO 233.	SEE	228 TO 230 ABOVE	****	
**** FOR	232 TO 234.	SEE	226 TO 228 ABOVE	****	
**** FOR	233 TO 235.	SEE	227 TO 229 ABOVE	****	
**** FOR	236 TO 238.	SEE	7 TO 9 ABOVE	****	
**** FOR	238 TO 240.	SEE	24 TO 26 ABOVE	****	
**** FOR	239 TO 241.	SEE	23 TO 25 ABOVE	****	
**** FOR	240 TO 242.	SEE	26 TO 28 ABOVE	****	
**** FOR	241 TO 243.	SEE	9 TO 11 ABOVE	****	
**** FOR	242 TO 244.	SEE	22 TO 24 ABOVE	****	
**** FOR	243 TO 245.	SEE	23 TO 25 ABOVE	****	
**** FOR	244 TO 246.	SEE	69 TO 71 ABOVE	****	
**** FOR	247 TO 249.	SEE	11 TO 13 ABOVE	****	
**** FOR	251 TO 253.	SEE	140 TO 142 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 4 NOTES IN LENGTH --
 EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 195 SECCNDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
133	1 TO 4		196 TO 199	2	4
134	13 TO 16		29 TO 32	2	4
135	13 TO 16		31 TO 34	2	4
136	13 TO 16		33 TO 36	2	4
137	13 TO 16		35 TO 38	2	4
138	13 TO 16		71 TO 74	2	4
139	13 TO 16		73 TO 76	2	4
140	13 TO 16		75 TO 78	2	4
141	13 TO 16		77 TO 80	2	4
142	13 TO 16		79 TO 82	2	4
143	13 TO 16		81 TO 84	2	4
144	13 TO 16		83 TO 86	2	4
145	21 TO 24		241 TO 244	2	4
146	22 TO 25		242 TO 245	2	4
147	23 TO 26		101 TO 104	2	4
148	23 TO 26		159 TO 162	2	4
149	23 TO 26		161 TO 164	2	4
150	23 TO 26		163 TO 166	2	4
151	23 TO 26		210 TO 213	2	4
152	23 TO 26		215 TO 218	2	4
153	24 TO 27		158 TO 161	2	4
154	24 TO 27		160 TO 163	2	4
155	24 TO 27		162 TO 165	2	4
156	24 TO 27		206 TO 209	2	4
157	24 TO 27		214 TO 217	2	4
158	24 TO 27		216 TO 219	2	4
159	24 TO 27		238 TO 241	2	4
160	25 TO 28		239 TO 242	2	4
161	26 TO 29		240 TO 243	2	4
162	28 TO 31		32 TO 35	2	4
163	28 TO 31		34 TO 37	2	4
164	28 TO 31		72 TO 75	2	4
165	28 TO 31		74 TO 77	2	4
166	28 TO 31		76 TO 79	2	4
167	28 TO 31		78 TO 81	2	4
168	28 TO 31		80 TO 83	2	4
169	28 TO 31		82 TO 85	2	4
**** FOR	29 TO 32,	SEE	13 TO 16 ABOVE	****	
**** FOR	30 TO 33,	SEE	28 TO 31 ABOVE	****	
**** FCR	31 TO 34,	SEE	13 TO 16 ABOVE	****	
**** FCR	32 TO 35,	SEE	28 TO 31 ABOVE	****	
**** FCR	33 TO 36,	SEE	13 TO 16 ABOVE	****	
**** FCR	34 TO 37,	SEE	28 TO 31 ABOVE	****	
**** FCR	35 TO 38,	SEE	13 TO 16 ABOVE	****	

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
170	36 TO	39	84 TO	87	2 4
171	52 TO	55	177 TO	180	2 4
172	52 TO	55	190 TO	193	2 4
173	55 TO	58	178 TO	181	2 4
174	55 TO	58	191 TO	194	2 4
175	68 TO	71	243 TO	246	2 4
**** FCR	71 TO	74.	SEE 13 TO	16 ABOVE	****
**** FOR	72 TO	75.	SEE 28 TO	31 ABOVE	****
**** FOR	73 TO	76.	SEE 13 TO	16 ABOVE	****
**** FOR	74 TO	77.	SEE 28 TO	31 ABOVE	****
**** FOR	75 TO	78.	SEE 13 TO	16 ABOVE	****
**** FOR	76 TO	79.	SEE 28 TO	31 ABOVE	****
**** FOR	77 TO	80.	SEE 13 TO	16 ABOVE	****
**** FOR	78 TO	81.	SEE 28 TO	31 ABOVE	****
**** FOR	79 TO	82.	SEE 13 TO	16 ABOVE	****
**** FCR	80 TO	83.	SEE 28 TO	31 ABOVE	****
**** FCR	81 TO	84.	SEE 13 TO	16 ABOVE	****
**** FOR	82 TO	85.	SEE 28 TO	31 ABOVE	****
**** FOR	83 TO	86.	SEE 13 TO	16 ABOVE	****
**** FOR	84 TO	87.	SEE 36 TO	39 ABOVE	****
176	88 TO	91	172 TO	175	2 4
177	89 TO	92	92 TO	95	2 4
178	90 TO	93	192 TO	195	2 4
**** FCR	92 TO	95.	SEE 89 TO	92 ABOVE	****
**** FOR	101 TO	104.	SEE 23 TO	26 ABOVE	****
179	102 TO	105	211 TO	214	2 4
180	118 TO	121	125 TO	128	2 4
**** FCR	125 TO	128.	SEE 118 TO	121 ABOVE	****
181	140 TO	143	146 TO	149	2 4
182	140 TO	143	155 TO	158	2 4
183	141 TO	144	147 TO	150	2 4
184	141 TO	144	150 TO	153	2 4
185	141 TO	144	156 TO	159	2 4
186	142 TO	145	151 TO	154	2 4
187	142 TO	145	157 TO	160	2 4
188	143 TO	146	152 TO	155	2 4
189	143 TO	146	164 TO	167	2 4
190	144 TO	147	153 TO	156	2 4
191	145 TO	148	154 TO	157	2 4
**** FCR	146 TO	149.	SEE 140 TO	143 ABOVE	****
**** FOR	147 TO	150.	SEE 141 TO	144 ABOVE	****
**** FOR	150 TO	153.	SEE 141 TO	144 ABOVE	****
**** FOR	151 TO	154.	SEE 142 TO	145 ABOVE	****
**** FCR	152 TO	155.	SEE 143 TO	146 ABOVE	****
**** FCR	153 TO	156.	SEE 144 TO	147 ABOVE	****
**** FOR	154 TO	157.	SEE 145 TO	148 ABOVE	****
**** FOR	155 TO	158.	SEE 140 TO	143 ABOVE	****
**** FCR	156 TO	159.	SEE 141 TO	144 ABOVE	****
**** FCR	157 TO	160.	SEE 142 TO	145 ABOVE	****
**** FOR	158 TO	161.	SEE 24 TO	27 ABOVE	****
**** FOR	159 TO	162.	SEE 23 TO	26 ABOVE	****

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 160 TO 163.	SEE	24 TO 27	ABOVE ****		
**** FOR 161 TO 164.	SEE	23 TO 26	ABOVE ****		
**** FOR 162 TO 165.	SEE	24 TO 27	ABOVE ****		
**** FOR 163 TO 166.	SEE	23 TO 26	ABOVE ****		
**** FOR 164 TO 167.	SEE	143 TO 146	ABOVE ****		
**** FOR 172 TO 175.	SEE	88 TO 91	ABOVE ****		
192	173 TO 176	182 TO 185	2	4	
193	175 TO 178	188 TO 191	2	4	
194	176 TO 179	189 TO 192	2	4	
195	176 TO 179	195 TO 198	2	4	
**** FOR 177 TO 180.	SEE	52 TO 55	ABOVE ****		
**** FOR 178 TO 181.	SEE	55 TO 58	ABOVE ****		
196	181 TO 184	222 TO 225	2	4	
**** FOR 182 TO 185.	SEE	173 TO 176	ABOVE ****		
**** FOR 188 TO 191.	SEE	175 TO 178	ABOVE ****		
**** FOR 189 TO 192.	SEE	176 TO 179	ABOVE ****		
**** FOR 190 TO 193.	SEE	52 TO 55	ABOVE ****		
**** FOR 191 TO 194.	SEE	55 TO 58	ABOVE ****		
**** FOR 192 TO 195.	SEE	90 TO 93	ABOVE ****		
**** FOR 195 TO 198.	SEE	176 TO 179	ABOVE ****		
**** FOR 196 TO 199.	SEE	1 TO 4	ABOVE ****		
**** FOR 206 TO 209.	SEE	24 TO 27	ABOVE ****		
197	207 TO 210	217 TO 220	2	4	
**** FOR 210 TO 213.	SEE	23 TO 26	ABOVE ****		
**** FOR 211 TO 214.	SEE	102 TO 105	ABOVE ****		
**** FOR 214 TO 217.	SEE	24 TO 27	ABOVE ****		
**** FOR 215 TO 218.	SEE	23 TO 26	ABOVE ****		
**** FOR 216 TO 219.	SEE	24 TO 27	ABOVE ****		
**** FOR 217 TO 220.	SEE	207 TO 210	ABOVE ****		
**** FOR 222 TO 225.	SEE	181 TO 184	ABOVE ****		
198	226 TO 229	229 TO 232	2	4	
199	226 TO 229	232 TO 235	2	4	
200	227 TO 230	230 TO 233	2	4	
201	228 TO 231	231 TO 234	2	4	
**** FOR 229 TO 232.	SEE	226 TO 229	ABOVE ****		
**** FOR 230 TO 233.	SEE	227 TO 230	ABOVE ****		
**** FOR 231 TO 234.	SEE	228 TO 231	ABOVE ****		
**** FOR 232 TO 235.	SEE	226 TO 229	ABOVE ****		
**** FOR 238 TO 241.	SEE	24 TO 27	ABOVE ****		
**** FOR 239 TO 242.	SEE	25 TO 28	ABOVE ****		
**** FOR 240 TO 243.	SEE	26 TO 29	ABOVE ****		
**** FOR 241 TO 244.	SEE	21 TO 24	ABOVE ****		
**** FOR 242 TO 245.	SEE	22 TO 25	ABOVE ****		
**** FOR 243 TO 246.	SEE	68 TO 71	ABOVE ****		

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 5 NOTES IN LENGTH --
 EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 270 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
202	21 TO 25		241 TO 245	2	5
**** FGR	21 TO 25.	SEE	21 TO 25 ABOVE	****	
203	24 TO 28		238 TO 242	2	5
204	25 TO 29		239 TO 243	2	5
**** FGR	25 TO 29.	SEE	25 TO 29 ABOVE	****	
205	35 TO 39		83 TO 87	2	5
**** FOR	83 TO 87.	SEE	35 TO 39 ABOVE	****	
206	101 TO 105		210 TO 214	2	5
207	140 TO 144		146 TO 150	2	5
208	140 TO 144		155 TO 159	2	5
209	141 TO 145		150 TO 154	2	5
210	141 TO 145		156 TO 160	2	5
211	142 TO 146		151 TO 155	2	5
212	143 TO 147		152 TO 156	2	5
**** FOR	143 TO 147.	SEE	143 TO 147 ABOVE	****	
213	144 TO 148		153 TO 157	2	5
214	145 TO 149		154 TO 158	2	5
**** FOR	146 TO 150.	SEE	140 TO 144 ABOVE	****	
**** FOR	150 TO 154.	SEE	141 TO 145 ABOVE	****	
**** FOR	151 TO 155.	SEE	142 TO 146 ABOVE	****	
**** FOR	152 TO 156.	SEE	143 TO 147 ABOVE	****	
**** FGR	153 TO 157.	SEE	144 TO 148 ABOVE	****	
**** FOR	154 TO 158.	SEE	145 TO 149 ABOVE	****	
**** FOR	155 TO 159.	SEE	140 TO 144 ABOVE	****	
**** FGR	156 TO 160.	SEE	141 TO 145 ABOVE	****	
215	175 TO 179		188 TO 192	2	5
216	176 TO 180		189 TO 193	2	5
217	177 TO 181		190 TO 194	2	5
**** FOR	188 TO 192.	SEE	175 TO 179 ABOVE	****	
**** FOR	189 TO 193.	SEE	176 TO 180 ABOVE	****	
**** FOR	190 TO 194.	SEE	177 TO 181 ABOVE	****	
218	206 TO 210		216 TO 220	2	5
**** FOR	210 TO 214.	SEE	101 TO 105 ABOVE	****	
**** FOR	216 TO 220.	SEE	206 TO 210 ABOVE	****	
**** FOR	238 TO 242.	SEE	24 TO 28 ABOVE	****	
**** FOR	239 TO 243.	SEE	25 TO 29 ABOVE	****	
**** FOR	241 TO 245.	SEE	21 TO 25 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 6 NOTES IN LENGTH --
 EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 340 SECONDS INTO EXECUTION.

PATTERN	NCES	RELATED TC	NOTES	TEST	LENGTH
219	24 TC 29		238 TO 243	2	6
220	34 TO 39		82 TO 87	2	6
**** FCR	82 TO 87.	SEE	34 TO 39 ABOVE	****	
221	140 TO 145		155 TO 160	2	6
222	141 TO 146		150 TO 155	2	6
223	142 TO 147		151 TO 156	2	6
224	143 TO 148		152 TO 157	2	6
225	144 TO 149		153 TO 158	2	6
226	145 TO 150		154 TO 159	2	6
**** FOR	150 TO 155.	SEE	141 TO 146 ABOVE	****	
**** FOR	151 TO 156.	SEE	142 TO 147 ABOVE	****	
**** FCR	152 TO 157.	SEE	143 TO 148 ABOVE	****	
**** FOR	153 TO 158.	SEE	144 TO 149 ABOVE	****	
**** FOR	154 TO 159.	SEE	145 TO 150 ABOVE	****	
**** FOR	155 TO 160.	SEE	140 TO 145 ABOVE	****	
227	175 TO 180		188 TO 193	2	6
228	176 TO 181		189 TO 194	2	6
**** FOR	188 TO 193.	SEE	175 TO 180 ABOVE	****	
**** FCR	189 TO 194.	SEE	176 TO 181 ABOVE	****	
**** FOR	238 TO 243.	SEE	24 TO 29 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 7 NOTES IN LENGTH --
EXACT CONTOUR (ORIGINAL)
WAS BEGUN AT 403 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TC	NOTES	TEST	LENGTH
229	141 TO 147		150 TO 156	2	7
230	142 TO 148		151 TO 157	2	7
231	143 TO 149		152 TO 158	2	7
232	144 TO 150		153 TO 159	2	7
233	175 TO 181		188 TO 194	2	7

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 8 NOTES IN LENGTH --
EXACT CONTOUR (ORIGINAL)
WAS BEGUN AT 419 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
234	141 TO 148		150 TO 157	2	8
235	142 TO 149		151 TO 158	2	8
236	143 TO 150		152 TO 159	2	8

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 9 NOTES IN LENGTH --
EXACT CONTOUR (ORIGINAL)
WAS BEGUN AT 434 SECCNDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
237	141 TO 149		150 TO 158	2	9
238	142 TO 150		151 TO 159	2	9

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 10 NOTES IN LENGTH --
EXACT CONTOUR (ORIGINAL)
WAS BEGUN AT 450 SECONDS INTO EXECUTION.

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
239	141 TO 150		150 TO 159	2	10

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 11 NOTES IN LENGTH --
EXACT CONTOUR (ORIGINAL)
WAS BEGUN AT 465 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TC	NOTES	TEST	LENGTH
240	29 TO 39		77 TO 87	2	11

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 12 NOTES IN LENGTH --
EXACT CONTOUR (ORIGINAL)
WAS BEGUN AT 480 SECONDS INTO EXECUTION.

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
241	28 TO 39		76 TO 87	2	12

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 13 NOTES IN LENGTH --
EXACT CONTOUR (ORIGINAL)
WAS BEGUN AT 495 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
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END OF TYPE I LISTING. TOTAL OF 241 PATTERNS LOCATED.

*** TYPE II LISTING ***

EDGAR VARESE DENSITY 21.5 FOR SOLO FLUTE
 EXACT CCNTOUR (ORIGINAL)

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	28 TO 39	2	12
SLBPATTERN	28 TO 31	9	4

*** TEST 2 COMPLETED AT 549 SECONDS INTO EXECUTION ***

***** MUSIC MELODIC PATTERN ANALYSIS *****

EDGARD VARESE DENSITY 21.5 FOR SOLO FLUTE

TEST REQUESTED 3
UNITS OF DATA PER CARD 15

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 15

NOTES 16 THROUGH 30

NOTES 31 THROUGH 45

63 62 63 62 63 62 63 62 64 70 64 58 64 70 53

NCES 46 THROUGH 60
 59 65 71 59 72 78 66 65 67 65 67 65 66 68 55

NOTES	61 THROUGH 75													
56	81	61	60	61	61	59	61	58	61	75	74	75	74	75

NOTES															
	76	THROUGH			90										
	74	75	74	75	74	75	74	75	74	75	74	76	61	60	61

NOTES 91 THROUGH 105
59 60 61 59 60 74 75 74 74 74 54 51 54 51 51

NCES 1C6 THROUGH 120
 51 54 64 51 64 51 52 58 54 58 52 65 81 80 68

ACTES 121 THROUGH 135
67 81 80 68 81 80 68 67 67 57 68 69 56 57 58

NCTES 136 THROUGH 150
59 54 60 70 73 83 73 80 83 80 73 83 73 80 83

NCTES 151 THROUGH 165
 73 8C 83 80 73 83 73 80 83 80 83 80 83 80 83

NOTES 166 THROUGH 180
80 73 74 65 74 65 65 64 65 63 65 64 63 65 63

NOTES 181 THROUGH 195

64	64	65	63	65	61	56	55	57	56	55	57	55	56	57
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0
59 66 72 75 90 85 88 85 88 88

5
85 88 85 88 88 58 58 58 59 57

0
57 74 68 67 74 54 52 51 54 51

5
71 60 54 60 50 54 64 54 50 64

5
5 77 79 85 -99

PATTERN HAVE BEEN DELETED
CH FOLLOW --

E REITERATIONS LONGER THAN
LENGTH

CK CHANGE-OF-DIRECTION

*** TYPE I LISTING ***

EDGARD VARESE DENSITY 21.5 FOR SOLO FLUTE

SEARCH FOR PATTERNS OF 3 NOTES IN LENGTH --
TONAL INVERSION

WAS BEGUN AT 29 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO	3	4 TO	6	3
2	1 TO	3	6 TO	8	3
3	1 TO	3	10 TO	12	3
4	1 TO	3	12 TO	14	3
5	1 TO	3	14 TO	16	3
6	1 TO	3	18 TO	20	3
7	1 TO	3	22 TO	24	3
8	1 TO	3	24 TO	26	3
9	1 TO	3	28 TO	30	3
10	1 TO	3	30 TO	32	3
11	1 TO	3	32 TO	34	3
12	1 TO	3	34 TO	36	3
13	1 TO	3	36 TO	38	3
14	1 TO	3	39 TO	41	3
15	1 TO	3	43 TO	45	3
16	1 TO	3	47 TO	49	3
17	1 TO	3	50 TO	52	3
18	1 TO	3	53 TO	55	3
19	1 TO	3	55 TO	57	3
20	1 TO	3	58 TO	60	3
21	1 TO	3	61 TO	63	3
22	1 TO	3	67 TO	69	3
23	1 TO	3	70 TO	72	3
24	1 TO	3	72 TO	74	3
25	1 TO	3	74 TO	76	3
26	1 TO	3	76 TO	78	3
27	1 TO	3	78 TO	80	3
28	1 TO	3	80 TO	82	3
29	1 TO	3	82 TO	84	3
30	1 TO	3	84 TO	86	3
31	1 TO	3	86 TO	88	3
32	1 TO	3	89 TO	91	3
33	1 TO	3	92 TO	94	3
34	1 TO	3	96 TO	98	3
35	1 TO	3	102 TO	104	3
36	1 TO	3	107 TO	109	3
37	1 TO	3	109 TO	111	3
38	1 TO	3	112 TO	114	3
39	1 TO	3	114 TO	116	3
40	1 TO	3	117 TO	119	3
41	1 TO	3	121 TO	123	3
42	1 TO	3	124 TO	126	3

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
43	1 TO	3	131 TO 133	3	3
44	1 TO	3	135 TO 137	3	3
45	1 TO	3	140 TO 142	3	3
46	1 TO	3	143 TO 145	3	3
47	1 TO	3	146 TO 148	3	3
48	1 TO	3	149 TO 151	3	3
49	1 TO	3	152 TO 154	3	3
50	1 TO	3	155 TO 157	3	3
51	1 TO	3	158 TO 160	3	3
52	1 TO	3	160 TO 162	3	3
53	1 TO	3	162 TO 164	3	3
54	1 TO	3	164 TO 166	3	3
55	1 TO	3	167 TO 169	3	3
56	1 TO	3	169 TO 171	3	3
57	1 TO	3	173 TO 175	3	3
58	1 TO	3	175 TO 177	3	3
59	1 TO	3	178 TO 180	3	3
60	1 TO	3	182 TO 184	3	3
61	1 TO	3	184 TO 186	3	3
62	1 TO	3	188 TO 190	3	3
63	1 TO	3	191 TO 193	3	3
64	1 TO	3	194 TO 196	3	3
65	1 TO	3	197 TO 199	3	3
66	1 TO	3	204 TO 206	3	3
67	1 TO	3	206 TO 208	3	3
68	1 TO	3	211 TO 213	3	3
69	1 TO	3	214 TO 216	3	3
70	1 TO	3	216 TO 218	3	3
71	1 TO	3	223 TO 225	3	3
72	1 TO	3	225 TO 227	3	3
73	1 TO	3	228 TO 230	3	3
74	1 TO	3	231 TO 233	3	3
75	1 TO	3	234 TO 236	3	3
76	1 TO	3	238 TO 240	3	3
77	1 TO	3	242 TO 244	3	3
78	1 TO	3	245 TO 247	3	3
79	1 TO	3	248 TO 250	3	3
80	1 TO	3	251 TO 253	3	3
81	1 TO	3	254 TO 256	3	3
82	2 TO	4	5 TO 7	3	3
83	2 TO	4	8 TO 10	3	3
84	2 TO	4	11 TO 13	3	3
85	2 TO	4	13 TO 15	3	3
86	2 TO	4	17 TO 19	3	3
87	2 TO	4	19 TO 21	3	3
88	2 TO	4	23 TO 25	3	3
89	2 TO	4	25 TO 27	3	3
90	2 TO	4	29 TO 31	3	3
91	2 TO	4	31 TO 33	3	3
92	2 TO	4	33 TO 35	3	3
93	2 TO	4	35 TO 37	3	3

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
94	2 TO	4	37 TO 39	3	3
95	2 TO	4	41 TO 43	3	3
96	2 TO	4	44 TO 46	3	3
97	2 TO	4	48 TO 50	3	3
98	2 TO	4	52 TO 54	3	3
99	2 TO	4	54 TO 56	3	3
100	2 TO	4	56 TO 58	3	3
101	2 TO	4	59 TO 61	3	3
102	2 TO	4	63 TO 65	3	3
103	2 TO	4	66 TO 68	3	3
104	2 TO	4	68 TO 70	3	3
105	2 TO	4	71 TO 73	3	3
106	2 TO	4	73 TO 75	3	3
107	2 TO	4	75 TO 77	3	3
108	2 TO	4	77 TO 79	3	3
109	2 TO	4	79 TO 81	3	3
110	2 TO	4	81 TO 83	3	3
111	2 TO	4	83 TO 85	3	3
112	2 TO	4	85 TO 87	3	3
113	2 TO	4	88 TO 90	3	3
114	2 TO	4	90 TO 92	3	3
115	2 TO	4	93 TO 95	3	3
116	2 TO	4	101 TO 103	3	3
117	2 TO	4	108 TO 110	3	3
118	2 TO	4	110 TO 112	3	3
119	2 TO	4	113 TO 115	3	3
120	2 TO	4	115 TO 117	3	3
121	2 TO	4	120 TO 122	3	3
122	2 TO	4	123 TO 125	3	3
123	2 TO	4	129 TO 131	3	3
124	2 TO	4	132 TO 134	3	3
125	2 TO	4	136 TO 138	3	3
126	2 TO	4	141 TO 143	3	3
127	2 TO	4	145 TO 147	3	3
128	2 TO	4	147 TO 149	3	3
129	2 TO	4	150 TO 152	3	3
130	2 TO	4	154 TO 156	3	3
131	2 TO	4	156 TO 158	3	3
132	2 TO	4	159 TO 161	3	3
133	2 TO	4	161 TO 163	3	3
134	2 TO	4	163 TO 165	3	3
135	2 TO	4	166 TO 168	3	3
136	2 TO	4	168 TO 170	3	3
137	2 TO	4	172 TO 174	3	3
138	2 TO	4	174 TO 176	3	3
139	2 TO	4	177 TO 179	3	3
140	2 TO	4	179 TO 181	3	3
141	2 TO	4	183 TO 185	3	3
142	2 TO	4	187 TO 189	3	3
143	2 TO	4	190 TO 192	3	3
144	2 TO	4	192 TO 194	3	3

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
145	2 TO	4	196 TO	198	3
146	2 TO	4	198 TO	200	3
147	2 TO	4	205 TO	207	3
148	2 TO	4	207 TO	209	3
149	2 TO	4	210 TO	212	3
150	2 TO	4	215 TO	217	3
151	2 TO	4	217 TO	219	3
152	2 TO	4	224 TO	226	3
153	2 TO	4	227 TO	229	3
154	2 TO	4	230 TO	232	3
155	2 TO	4	233 TO	235	3
156	2 TO	4	237 TO	239	3
157	2 TO	4	239 TO	241	3
158	2 TO	4	243 TO	245	3
159	2 TO	4	247 TO	249	3
160	2 TO	4	249 TO	251	3
161	2 TO	4	253 TO	255	3
162	2 TO	4	255 TO	257	3
**** FCR	3 TO	5.	SEE 1 TO	3 ABOVE	****
**** FOR	4 TO	6.	SEE 2 TO	4 ABOVE	****
**** FOR	5 TO	7.	SEE 1 TO	3 ABOVE	****
**** FCR	6 TO	8.	SEE 2 TO	4 ABOVE	****
**** FCR	8 TO	10.	SEE 1 TO	3 ABOVE	****
**** FCR	10 TO	12.	SEE 2 TO	4 ABOVE	****
**** FOR	11 TO	13.	SEE 1 TO	3 ABOVE	****
**** FCR	12 TO	14.	SEE 2 TO	4 ABOVE	****
**** FOR	13 TO	15.	SEE 1 TO	3 ABOVE	****
**** FCR	14 TO	16.	SEE 2 TO	4 ABOVE	****
**** FOR	17 TO	19.	SEE 1 TO	3 ABOVE	****
**** FCR	18 TO	20.	SEE 2 TO	4 ABOVE	****
**** FOR	19 TO	21.	SEE 1 TO	3 ABOVE	****
**** FOR	22 TO	24.	SEE 2 TO	4 ABOVE	****
**** FOR	23 TO	25.	SEE 1 TO	3 ABOVE	****
**** FOR	24 TO	26.	SEE 2 TO	4 ABOVE	****
**** FOR	25 TO	27.	SEE 1 TO	3 ABOVE	****
**** FCR	28 TO	30.	SEE 2 TO	4 ABOVE	****
**** FOR	29 TO	31.	SEE 1 TO	3 ABOVE	****
**** FCR	30 TO	32.	SEE 2 TO	4 ABOVE	****
**** FCR	31 TO	33.	SEE 1 TO	3 ABOVE	****
**** FCR	32 TO	34.	SEE 2 TO	4 ABOVE	****
**** FOR	33 TO	35.	SEE 1 TO	3 ABOVE	****
**** FCR	34 TO	36.	SEE 2 TO	4 ABOVE	****
**** FCR	35 TO	37.	SEE 1 TO	3 ABOVE	****
**** FCR	36 TO	38.	SEE 2 TO	4 ABOVE	****
**** FCR	37 TO	39.	SEE 1 TO	3 ABOVE	****
**** FCR	39 TO	41.	SEE 2 TO	4 ABOVE	****
**** FCR	41 TO	43.	SEE 1 TO	3 ABOVE	****
**** FOR	43 TO	45.	SEE 2 TO	4 ABOVE	****
**** FCR	44 TO	46.	SEE 1 TO	3 ABOVE	****
**** FOR	47 TO	49.	SEE 2 TO	4 ABOVE	****
**** FOR	48 TO	50.	SEE 1 TO	3 ABOVE	****

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	50 TO	52.	SEE	2 TO	4 ABOVE ****
**** FOR	52 TO	54.	SEE	1 TO	3 ABOVE ****
**** FOR	53 TO	55.	SEE	2 TO	4 ABOVE ****
**** FOR	54 TO	56.	SEE	1 TO	3 ABOVE ****
**** FCR	55 TO	57.	SEE	2 TO	4 ABOVE ****
**** FCR	56 TO	58.	SEE	1 TO	3 ABOVE ****
**** FOR	58 TO	60.	SEE	2 TO	4 ABOVE ****
**** FOR	59 TO	61.	SEE	1 TO	3 ABOVE ****
**** FOR	61 TO	63.	SEE	2 TO	4 ABOVE ****
**** FOR	63 TO	65.	SEE	1 TO	3 ABOVE ****
163	64 TO	66		97 TO	99 3 3
164	64 TO	66		103 TO	105 3 3
165	64 TO	66		127 TO	129 3 3
166	64 TO	66		170 TO	172 3 3
167	64 TO	66		212 TO	214 3 3
168	64 TO	66		220 TO	222 3 3
169	65 TO	67		105 TO	107 3 3
170	65 TO	67		181 TO	183 3 3
171	65 TO	67		213 TO	215 3 3
172	65 TO	67		222 TO	224 3 3
**** FOR	66 TO	68.	SEE	1 TO	3 ABOVE ****
**** FOR	67 TO	69.	SEE	2 TO	4 ABOVE ****
**** FCR	68 TO	70.	SEE	1 TO	3 ABOVE ****
**** FOR	70 TO	72.	SEE	2 TO	4 ABOVE ****
**** FOR	71 TO	73.	SEE	1 TO	3 ABOVE ****
**** FOR	72 TO	74.	SEE	2 TO	4 ABOVE ****
**** FOR	73 TO	75.	SEE	1 TO	3 ABOVE ****
**** FOR	74 TO	76.	SEE	2 TO	4 ABOVE ****
**** FCR	75 TO	77.	SEE	1 TO	3 ABOVE ****
**** FOR	76 TO	78.	SEE	2 TO	4 ABOVE ****
**** FOR	77 TO	79.	SEE	1 TO	3 ABOVE ****
**** FOR	78 TO	80.	SEE	2 TO	4 ABOVE ****
**** FCR	79 TO	81.	SEE	1 TO	3 ABOVE ****
**** FCR	80 TO	82.	SEE	2 TO	4 ABOVE ****
**** FOR	81 TO	83.	SEE	1 TO	3 ABOVE ****
**** FOR	82 TO	84.	SEE	2 TO	4 ABOVE ****
**** FOR	83 TO	85.	SEE	1 TO	3 ABOVE ****
**** FOR	84 TO	86.	SEE	2 TO	4 ABOVE ****
**** FOR	85 TO	87.	SEE	1 TO	3 ABOVE ****
**** FCR	86 TO	88.	SEE	2 TO	4 ABOVE ****
**** FOR	88 TO	90.	SEE	1 TO	3 ABOVE ****
**** FOR	89 TO	91.	SEE	2 TO	4 ABOVE ****
**** FCR	90 TO	92.	SEE	1 TO	3 ABOVE ****
**** FOR	92 TO	94.	SEE	2 TO	4 ABOVE ****
**** FCR	93 TO	95.	SEE	1 TO	3 ABOVE ****
**** FCR	96 TO	98.	SEE	2 TO	4 ABOVE ****
173	97 TO	99		180 TO	182 3 3
174	97 TO	99		208 TO	210 3 3
175	97 TO	99		218 TO	220 3 3
**** FCR	99 TO	101.	SEE	65 TO	67 ABOVE ****
**** FCR	101 TO	103.	SEE	1 TO	3 ABOVE ****

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
**** FCR	102 TO 104.	SEE	2 TO 4 ABOVE	****	
**** FOR	103 TO 105.	SEE	97 TO 99 ABOVE	****	
176	105 TO 107		128 TO 130	3	3
177	105 TO 107		171 TO 173	3	3
178	105 TO 107		209 TO 211	3	3
179	105 TO 107		219 TO 221	3	3
**** FOR	107 TO 109.	SEE	2 TO 4 ABOVE	****	
**** FOR	108 TO 110.	SEE	1 TO 3 ABOVE	****	
**** FCR	109 TO 111.	SEE	2 TO 4 ABOVE	****	
**** FCR	110 TO 112.	SEE	1 TO 3 ABOVE	****	
**** FCR	112 TO 114.	SEE	2 TO 4 ABOVE	****	
**** FOR	113 TO 115.	SEE	1 TO 3 ABOVE	****	
**** FOR	114 TO 116.	SEE	2 TO 4 ABOVE	****	
**** FOR	115 TO 117.	SEE	1 TO 3 ABOVE	****	
**** FOR	117 TO 119.	SEE	2 TO 4 ABOVE	****	
**** FOR	120 TO 122.	SEE	1 TO 3 ABOVE	****	
**** FCR	121 TO 123.	SEE	2 TO 4 ABOVE	****	
**** FOR	123 TO 125.	SEE	1 TO 3 ABOVE	****	
**** FOR	124 TO 126.	SEE	2 TO 4 ABOVE	****	
**** FOR	127 TO 129.	SEE	97 TO 99 ABOVE	****	
**** FOR	128 TO 130.	SEE	65 TO 67 ABOVE	****	
**** FCR	129 TO 131.	SEE	1 TO 3 ABOVE	****	
**** FCR	131 TO 133.	SEE	2 TO 4 ABOVE	****	
**** FOR	132 TO 134.	SEE	1 TO 3 ABOVE	****	
**** FOR	135 TO 137.	SEE	2 TO 4 ABOVE	****	
**** FCR	136 TO 138.	SEE	1 TO 3 ABOVE	****	
**** FOR	140 TO 142.	SEE	2 TO 4 ABOVE	****	
**** FOR	141 TO 143.	SEE	1 TO 3 ABOVE	****	
**** FOR	143 TO 145.	SEE	2 TO 4 ABOVE	****	
**** FCR	145 TO 147.	SEE	1 TO 3 ABOVE	****	
**** FOR	146 TO 148.	SEE	2 TO 4 ABOVE	****	
**** FOR	147 TO 149.	SEE	1 TO 3 ABOVE	****	
**** FOR	149 TO 151.	SEE	2 TO 4 ABOVE	****	
**** FCR	150 TO 152.	SEE	1 TO 3 ABOVE	****	
**** FOR	152 TO 154.	SEE	2 TO 4 ABOVE	****	
**** FOR	154 TO 156.	SEE	1 TO 3 ABOVE	****	
**** FCR	155 TO 157.	SEE	2 TO 4 ABOVE	****	
**** FOR	156 TO 158.	SEE	1 TO 3 ABOVE	****	
**** FOR	158 TO 160.	SEE	2 TO 4 ABOVE	****	
**** FOR	159 TO 161.	SEE	1 TO 3 ABOVE	****	
**** FCR	160 TO 162.	SEE	2 TO 4 ABOVE	****	
**** FOR	161 TO 163.	SEE	1 TO 3 ABOVE	****	
**** FOR	162 TO 164.	SEE	2 TO 4 ABOVE	****	
**** FOR	163 TO 165.	SEE	1 TO 3 ABOVE	****	
**** FCR	164 TO 166.	SEE	2 TO 4 ABOVE	****	
**** FCR	166 TO 168.	SEE	1 TO 3 ABOVE	****	
**** FOR	167 TO 169.	SEE	2 TO 4 ABOVE	****	
**** FOR	168 TO 170.	SEE	1 TO 3 ABOVE	****	
**** FOR	169 TO 171.	SEE	2 TO 4 ABOVE	****	
**** FCR	170 TO 172.	SEE	97 TO 99 ABOVE	****	
**** FCR	171 TO 173.	SEE	65 TO 67 ABOVE	****	

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
**** FCR 172 TO 174.	SEE	1 TO	3 ABOVE	****	
**** FOR 173 TO 175.	SEE	2 TO	4 ABOVE	****	
**** FCR 174 TO 176.	SEE	1 TO	3 ABOVE	****	
**** FOR 175 TO 177.	SEE	2 TO	4 ABOVE	****	
**** FOR 177 TO 179.	SEE	1 TO	3 ABOVE	****	
**** FCR 178 TO 180.	SEE	2 TO	4 ABOVE	****	
**** FCR 179 TO 181.	SEE	1 TO	3 ABOVE	****	
**** FOR 180 TO 182.	SEE	64 TO	66 ABOVE	****	
**** FOR 181 TO 183.	SEE	105 TO	107 ABOVE	****	
**** FCR 182 TO 184.	SEE	2 TO	4 ABOVE	****	
**** FCR 183 TO 185.	SEE	1 TO	3 ABOVE	****	
**** FOR 184 TO 186.	SEE	2 TO	4 ABOVE	****	
**** FOR 187 TO 189.	SEE	1 TO	3 ABOVE	****	
**** FOR 188 TO 190.	SEE	2 TO	4 ABOVE	****	
**** FCR 190 TO 192.	SEE	1 TO	3 ABOVE	****	
**** FOR 191 TO 193.	SEE	2 TO	4 ABOVE	****	
**** FOR 192 TO 194.	SEE	1 TO	3 ABOVE	****	
**** FCR 194 TO 196.	SEE	2 TO	4 ABOVE	****	
**** FOR 196 TO 198.	SEE	1 TO	3 ABOVE	****	
**** FOR 197 TO 199.	SEE	2 TO	4 ABOVE	****	
**** FCR 198 TO 200.	SEE	1 TO	3 ABOVE	****	
**** FCR 204 TO 206.	SEE	2 TO	4 ABOVE	****	
**** FCR 205 TO 207.	SEE	1 TO	3 ABOVE	****	
**** FCR 206 TO 208.	SEE	2 TO	4 ABOVE	****	
**** FOR 207 TO 209.	SEE	1 TO	3 ABOVE	****	
**** FOR 208 TO 210.	SEE	64 TO	66 ABOVE	****	
**** FOR 209 TO 211.	SEE	65 TO	67 ABOVE	****	
**** FOR 210 TO 212.	SEE	1 TO	3 ABOVE	****	
**** FCR 211 TO 213.	SEE	2 TO	4 ABOVE	****	
**** FOR 212 TO 214.	SEE	97 TO	99 ABOVE	****	
**** FOR 213 TO 215.	SEE	105 TO	107 ABOVE	****	
**** FOR 214 TO 216.	SEE	2 TO	4 ABOVE	****	
**** FOR 215 TO 217.	SEE	1 TO	3 ABOVE	****	
**** FCR 216 TO 218.	SEE	2 TO	4 ABOVE	****	
**** FCR 217 TO 219.	SEE	1 TO	3 ABOVE	****	
**** FOR 218 TO 220.	SEE	64 TO	66 ABOVE	****	
**** FOR 219 TO 221.	SEE	65 TO	67 ABOVE	****	
**** FCR 220 TO 222.	SEE	97 TO	99 ABOVE	****	
**** FCR 222 TO 224.	SEE	105 TO	107 ABOVE	****	
**** FCR 223 TO 225.	SEE	2 TO	4 ABOVE	****	
**** FOR 224 TO 226.	SEE	1 TO	3 ABOVE	****	
**** FCR 225 TO 227.	SEE	2 TO	4 ABOVE	****	
**** FOR 227 TO 229.	SEE	1 TO	3 ABOVE	****	
**** FOR 228 TO 230.	SEE	2 TO	4 ABOVE	****	
**** FCR 230 TO 232.	SEE	1 TO	3 ABOVE	****	
**** FOR 231 TO 233.	SEE	2 TO	4 ABOVE	****	
**** FOR 233 TO 235.	SEE	1 TO	3 ABOVE	****	
**** FOR 234 TO 236.	SEE	2 TO	4 ABOVE	****	
**** FOR 237 TO 239.	SEE	1 TO	3 ABOVE	****	
**** FCR 238 TO 240.	SEE	2 TO	4 ABOVE	****	
**** FCR 239 TO 241.	SEE	1 TO	3 ABOVE	****	

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
**** FCR	242 TO	244,	SEE	2 TO	4 ABOVE ****
**** FOR	243 TO	245,	SEE	1 TO	3 ABOVE ****
**** FOR	245 TO	247,	SEE	2 TO	4 ABOVE ****
**** FCR	247 TO	249,	SEE	1 TO	3 ABOVE ****
**** FOR	248 TO	250,	SEE	2 TO	4 ABOVE ****
**** FOR	249 TO	251,	SEE	1 TO	3 ABOVE ****
**** FOR	251 TO	253,	SEE	2 TO	4 ABOVE ****
**** FOR	253 TO	255,	SEE	1 TO	3 ABOVE ****
**** FOR	254 TO	256,	SEE	2 TO	4 ABOVE ****
**** FCR	255 TO	257,	SEE	1 TO	3 ABOVE ****

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*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 4 NOTES IN LENGTH --
 TONAL INVERSION
 WAS BEGUN AT 149 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
180	1 TO 4		4 TO 7	3	4
181	1 TO 4		10 TO 13	3	4
182	1 TO 4		12 TO 15	3	4
183	1 TO 4		18 TO 21	3	4
184	1 TO 4		22 TO 25	3	4
185	1 TO 4		24 TO 27	3	4
186	1 TO 4		28 TO 31	3	4
187	1 TO 4		30 TO 33	3	4
188	1 TO 4		32 TO 35	3	4
189	1 TO 4		34 TO 37	3	4
190	1 TO 4		36 TO 39	3	4
191	1 TO 4		43 TO 46	3	4
192	1 TO 4		47 TO 50	3	4
193	1 TO 4		53 TO 56	3	4
194	1 TO 4		55 TO 58	3	4
195	1 TO 4		58 TO 61	3	4
196	1 TO 4		67 TO 70	3	4
197	1 TO 4		70 TO 73	3	4
198	1 TO 4		72 TO 75	3	4
199	1 TO 4		74 TO 77	3	4
200	1 TO 4		76 TO 79	3	4
201	1 TO 4		78 TO 81	3	4
202	1 TO 4		80 TO 83	3	4
203	1 TO 4		82 TO 85	3	4
204	1 TO 4		84 TO 87	3	4
205	1 TO 4		89 TO 92	3	4
206	1 TO 4		92 TO 95	3	4
207	1 TO 4		107 TO 110	3	4
208	1 TO 4		109 TO 112	3	4
209	1 TO 4		112 TO 115	3	4
210	1 TO 4		114 TO 117	3	4
211	1 TO 4		131 TO 134	3	4
212	1 TO 4		135 TO 138	3	4
213	1 TO 4		140 TO 143	3	4
214	1 TO 4		146 TO 149	3	4
215	1 TO 4		149 TO 152	3	4
216	1 TO 4		155 TO 158	3	4
217	1 TO 4		158 TO 161	3	4
218	1 TO 4		160 TO 163	3	4
219	1 TO 4		162 TO 165	3	4
220	1 TO 4		167 TO 170	3	4
221	1 TO 4		173 TO 176	3	4
222	1 TO 4		178 TO 181	3	4
223	1 TO 4		182 TO 185	3	4

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
224	1 TO	4	191 TO 194	3	4
225	1 TO	4	197 TO 200	3	4
226	1 TO	4	204 TO 207	3	4
227	1 TO	4	206 TO 209	3	4
228	1 TO	4	214 TO 217	3	4
229	1 TO	4	216 TO 219	3	4
230	1 TO	4	223 TO 226	3	4
231	1 TO	4	238 TO 241	3	4
232	1 TO	4	242 TO 245	3	4
233	1 TO	4	248 TO 251	3	4
234	1 TO	4	254 TO 257	3	4
235	2 TO	5	5 TO 8	3	4
236	2 TO	5	11 TO 14	3	4
237	2 TO	5	13 TO 16	3	4
238	2 TO	5	17 TO 20	3	4
239	2 TO	5	23 TO 26	3	4
240	2 TO	5	29 TO 32	3	4
241	2 TO	5	31 TO 34	3	4
242	2 TO	5	33 TO 36	3	4
243	2 TO	5	35 TO 38	3	4
244	2 TO	5	52 TO 55	3	4
245	2 TO	5	54 TO 57	3	4
246	2 TO	5	66 TO 69	3	4
247	2 TO	5	71 TO 74	3	4
248	2 TO	5	73 TO 76	3	4
249	2 TO	5	75 TO 78	3	4
250	2 TO	5	77 TO 80	3	4
251	2 TO	5	79 TO 82	3	4
252	2 TO	5	81 TO 84	3	4
253	2 TO	5	83 TO 86	3	4
254	2 TO	5	85 TO 88	3	4
255	2 TO	5	88 TO 91	3	4
256	2 TO	5	101 TO 104	3	4
257	2 TO	5	108 TO 111	3	4
258	2 TO	5	113 TO 116	3	4
259	2 TO	5	120 TO 123	3	4
260	2 TO	5	123 TO 126	3	4
261	2 TO	5	145 TO 148	3	4
262	2 TO	5	154 TO 157	3	4
263	2 TO	5	159 TO 162	3	4
264	2 TO	5	161 TO 164	3	4
265	2 TO	5	163 TO 166	3	4
266	2 TO	5	166 TO 169	3	4
267	2 TO	5	168 TO 171	3	4
268	2 TO	5	172 TO 175	3	4
269	2 TO	5	174 TO 177	3	4
270	2 TO	5	177 TO 180	3	4
271	2 TO	5	183 TO 186	3	4
272	2 TO	5	187 TO 190	3	4
273	2 TO	5	190 TO 193	3	4
274	2 TO	5	196 TO 199	3	4

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PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
275	2 TO	5	205 TO 208	3	4
276	2 TO	5	210 TO 213	3	4
277	2 TO	5	215 TO 218	3	4
278	2 TO	5	224 TO 227	3	4
279	2 TO	5	227 TO 230	3	4
280	2 TO	5	230 TO 233	3	4
281	2 TO	5	233 TO 236	3	4
282	2 TO	5	237 TO 240	3	4
283	2 TO	5	247 TO 250	3	4
284	2 TO	5	253 TO 256	3	4
**** FOR	3 TO	6.	SEE 1 TO 4 ABOVE ****		
**** FOR	4 TO	7.	SEE 2 TO 5 ABOVE ****		
**** FOR	5 TO	8.	SEE 1 TO 4 ABOVE ****		
285	6 TO	9	19 TO 22	3	4
286	6 TO	9	25 TO 28	3	4
287	6 TO	9	37 TO 40	3	4
288	6 TO	9	41 TO 44	3	4
289	6 TO	9	44 TO 47	3	4
290	6 TO	9	48 TO 51	3	4
291	6 TO	9	56 TO 59	3	4
292	6 TO	9	59 TO 62	3	4
293	6 TO	9	68 TO 71	3	4
294	6 TO	9	90 TO 93	3	4
295	6 TO	9	93 TO 96	3	4
296	6 TO	9	110 TO 113	3	4
297	6 TO	9	115 TO 118	3	4
298	6 TO	9	129 TO 132	3	4
299	6 TO	9	132 TO 135	3	4
300	6 TO	9	136 TO 139	3	4
301	6 TO	9	141 TO 144	3	4
302	6 TO	9	147 TO 150	3	4
303	6 TO	9	150 TO 153	3	4
304	6 TO	9	156 TO 159	3	4
305	6 TO	9	192 TO 195	3	4
306	6 TO	9	198 TO 201	3	4
307	6 TO	9	239 TO 242	3	4
308	6 TO	9	243 TO 246	3	4
309	6 TO	9	249 TO 252	3	4
310	6 TO	9	255 TO 258	3	4
311	7 TO	10	21 TO 24	3	4
312	7 TO	10	27 TO 30	3	4
313	7 TO	10	38 TO 41	3	4
314	7 TO	10	42 TO 45	3	4
315	7 TO	10	46 TO 49	3	4
316	7 TO	10	49 TO 52	3	4
317	7 TO	10	57 TO 60	3	4
318	7 TO	10	60 TO 63	3	4
319	7 TO	10	69 TO 72	3	4
320	7 TO	10	91 TO 94	3	4
321	7 TO	10	95 TO 98	3	4
322	7 TO	10	106 TO 109	3	4

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PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
323	7 TO	10	111 TO 114	3	4
324	7 TO	10	116 TO 119	3	4
325	7 TO	10	130 TO 133	3	4
326	7 TO	10	134 TO 137	3	4
327	7 TO	10	139 TO 142	3	4
328	7 TO	10	142 TO 145	3	4
329	7 TO	10	148 TO 151	3	4
330	7 TO	10	151 TO 154	3	4
331	7 TO	10	157 TO 160	3	4
332	7 TO	10	193 TO 196	3	4
333	7 TO	10	203 TO 206	3	4
334	7 TO	10	241 TO 244	3	4
335	7 TO	10	244 TO 247	3	4
336	7 TO	10	250 TO 253	3	4
337	8 TO	11	14 TO 17	3	4
338	8 TO	11	39 TO 42	3	4
339	8 TO	11	50 TO 53	3	4
340	8 TO	11	61 TO 64	3	4
341	8 TO	11	86 TO 89	3	4
342	8 TO	11	117 TO 120	3	4
343	8 TO	11	121 TO 124	3	4
344	8 TO	11	124 TO 127	3	4
345	8 TO	11	143 TO 146	3	4
346	8 TO	11	152 TO 155	3	4
347	8 TO	11	164 TO 167	3	4
348	8 TO	11	175 TO 178	3	4
349	8 TO	11	184 TO 187	3	4
350	8 TO	11	188 TO 191	3	4
351	8 TO	11	194 TO 197	3	4
352	8 TO	11	225 TO 228	3	4
353	8 TO	11	228 TO 231	3	4
354	8 TO	11	231 TO 234	3	4
355	8 TO	11	234 TO 237	3	4
356	8 TO	11	245 TO 248	3	4
357	8 TO	11	251 TO 254	3	4
358	9 TO	12	16 TO 19	3	4
359	9 TO	12	40 TO 43	3	4
360	9 TO	12	51 TO 54	3	4
361	9 TO	12	62 TO 65	3	4
362	9 TO	12	87 TO 90	3	4
363	9 TO	12	100 TO 103	3	4
364	9 TO	12	119 TO 122	3	4
365	9 TO	12	122 TO 125	3	4
366	9 TO	12	144 TO 147	3	4
367	9 TO	12	153 TO 156	3	4
368	9 TO	12	165 TO 168	3	4
369	9 TO	12	176 TO 179	3	4
370	9 TO	12	186 TO 189	3	4
371	9 TO	12	189 TO 192	3	4
372	9 TO	12	195 TO 198	3	4
373	9 TO	12	226 TO 229	3	4

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
374	9 TO	12	229 TO	232	3 4
375	9 TO	12	232 TO	235	3 4
376	9 TO	12	236 TO	239	3 4
377	9 TO	12	246 TO	249	3 4
378	9 TO	12	252 TO	255	3 4
**** FOR	10 TO	13.	SEE	2 TO	5 ABOVE ****
**** FOR	11 TO	14.	SEE	1 TO	4 ABOVE ****
**** FOR	12 TO	15.	SEE	2 TO	5 ABOVE ****
**** FOR	13 TO	16.	SEE	1 TO	4 ABOVE ****
**** FOR	14 TO	17.	SEE	6 TO	9 ABOVE ****
**** FOR	16 TO	19.	SEE	7 TO	10 ABOVE ****
**** FOR	17 TO	20.	SEE	1 TO	4 ABOVE ****
**** FOR	18 TO	21.	SEE	2 TO	5 ABOVE ****
**** FOR	19 TO	22.	SEE	8 TO	11 ABOVE ****
**** FOR	21 TO	24.	SEE	9 TO	12 ABOVE ****
**** FOR	22 TO	25.	SEE	2 TO	5 ABOVE ****
**** FOR	23 TO	26.	SEE	1 TO	4 ABOVE ****
**** FOR	24 TO	27.	SEE	2 TO	5 ABOVE ****
**** FOR	25 TO	28.	SEE	8 TO	11 ABOVE ****
**** FOR	27 TO	30.	SEE	9 TO	12 ABOVE ****
**** FOR	28 TO	31.	SEE	2 TO	5 ABOVE ****
**** FOR	29 TO	32.	SEE	1 TO	4 ABOVE ****
**** FOR	30 TO	33.	SEE	2 TO	5 ABOVE ****
**** FOR	31 TO	34.	SEE	1 TO	4 ABOVE ****
**** FOR	32 TO	35.	SEE	2 TO	5 ABOVE ****
**** FOR	33 TO	36.	SEE	1 TO	4 ABOVE ****
**** FOR	34 TO	37.	SEE	2 TO	5 ABOVE ****
**** FOR	35 TO	38.	SEE	1 TO	4 ABOVE ****
**** FOR	36 TO	39.	SEE	2 TO	5 ABOVE ****
**** FOR	37 TO	40.	SEE	8 TO	11 ABOVE ****
**** FOR	38 TO	41.	SEE	9 TO	12 ABOVE ****
**** FOR	39 TO	42.	SEE	6 TO	9 ABOVE ****
**** FOR	40 TO	43.	SEE	7 TO	10 ABOVE ****
**** FOR	41 TO	44.	SEE	8 TO	11 ABOVE ****
**** FOR	42 TO	45.	SEE	9 TO	12 ABOVE ****
**** FOR	43 TO	46.	SEE	2 TO	5 ABOVE ****
**** FOR	44 TO	47.	SEE	8 TO	11 ABOVE ****
**** FOR	46 TO	49.	SEE	9 TO	12 ABOVE ****
**** FOR	47 TO	50.	SEE	2 TO	5 ABOVE ****
**** FOR	48 TO	51.	SEE	8 TO	11 ABOVE ****
**** FOR	49 TO	52.	SEE	9 TO	12 ABOVE ****
**** FOR	50 TO	53.	SEE	6 TO	9 ABOVE ****
**** FOR	51 TO	54.	SEE	7 TO	10 ABOVE ****
**** FOR	52 TO	55.	SEE	1 TO	4 ABOVE ****
**** FOR	53 TO	56.	SEE	2 TO	5 ABOVE ****
**** FOR	54 TO	57.	SEE	1 TO	4 ABOVE ****
**** FOR	55 TO	58.	SEE	2 TO	5 ABOVE ****
**** FOR	56 TO	59.	SEE	8 TO	11 ABOVE ****
**** FOR	57 TO	60.	SEE	9 TO	12 ABOVE ****
**** FOR	58 TO	61.	SEE	2 TO	5 ABOVE ****
**** FOR	59 TO	62.	SEE	8 TO	11 ABOVE ****

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
**** FCR	60 TO	63.	SEE 9 TO	12 ABOVE	****
**** FCR	61 TO	64.	SEE 6 TO	9 ABOVE	****
**** FCR	62 TO	65.	SEE 7 TO	10 ABOVE	****
379	63 TO	66	96 TO	99	3 4
380	63 TO	66	102 TO	105	3 4
381	63 TO	66	169 TO	172	3 4
382	63 TO	66	211 TO	214	3 4
383	64 TO	67	212 TO	215	3 4
384	65 TO	68	181 TO	184	3 4
385	65 TO	68	213 TO	216	3 4
386	65 TO	68	222 TO	225	3 4
**** FOR	66 TO	69.	SEE 1 TO	4 ABOVE	****
**** FOR	67 TO	70.	SEE 2 TO	5 ABOVE	****
**** FCR	68 TO	71.	SEE 8 TO	11 ABOVE	****
**** FOR	69 TO	72.	SEE 9 TO	12 ABOVE	****
**** FOR	70 TO	73.	SEE 2 TO	5 ABOVE	****
**** FOR	71 TO	74.	SEE 1 TO	4 ABOVE	****
**** FCR	72 TO	75.	SEE 2 TO	5 ABOVE	****
**** FCR	73 TO	76.	SEE 1 TO	4 ABOVE	****
**** FCR	74 TO	77.	SEE 2 TO	5 ABOVE	****
**** FOR	75 TO	78.	SEE 1 TO	4 ABOVE	****
**** FOR	76 TO	79.	SEE 2 TO	5 ABOVE	****
**** FCR	77 TO	80.	SEE 1 TO	4 ABOVE	****
**** FOR	78 TO	81.	SEE 2 TO	5 ABOVE	****
**** FCR	79 TO	82.	SEE 1 TO	4 ABOVE	****
**** FOR	80 TO	83.	SEE 2 TO	5 ABOVE	****
**** FCR	81 TO	84.	SEE 1 TO	4 ABOVE	****
**** FOR	82 TO	85.	SEE 2 TO	5 ABOVE	****
**** FCR	83 TO	86.	SEE 1 TO	4 ABOVE	****
**** FCR	84 TO	87.	SEE 2 TO	5 ABOVE	****
**** FCR	85 TO	88.	SEE 1 TO	4 ABOVE	****
**** FCR	86 TO	89.	SEE 6 TO	9 ABOVE	****
**** FOR	87 TO	90.	SEE 7 TO	10 ABOVE	****
**** FCR	88 TO	91.	SEE 1 TO	4 ABOVE	****
**** FOR	89 TO	92.	SEE 2 TO	5 ABOVE	****
**** FOR	90 TO	93.	SEE 8 TO	11 ABOVE	****
**** FOR	91 TO	94.	SEE 9 TO	12 ABOVE	****
**** FOR	92 TO	95.	SEE 2 TO	5 ABOVE	****
**** FOR	93 TO	96.	SEE 8 TO	11 ABOVE	****
**** FOR	95 TO	98.	SEE 9 TO	12 ABOVE	****
387	96 TO	99	179 TO	182	3 4
388	96 TO	99	207 TO	210	3 4
389	96 TO	99	217 TO	220	3 4
390	98 TO	101	104 TO	107	3 4
391	98 TO	101	221 TO	224	3 4
392	99 TO	102	105 TO	108	3 4
**** FOR	100 TO	103.	SEE 7 TO	10 ABOVE	****
**** FCR	101 TO	104.	SEE 1 TO	4 ABOVE	****
**** FOR	102 TO	105.	SEE 96 TO	99 ABOVE	****
**** FOR	106 TO	109.	SEE 9 TO	12 ABOVE	****
**** FOR	107 TO	110.	SEE 2 TO	5 ABOVE	****

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
**** FCR	108 TO 111.	SEE	1 TO 4 ABOVE	****	
**** FOR	109 TO 112.	SEE	2 TO 5 ABOVE	****	
**** FOR	110 TO 113.	SEE	8 TO 11 ABOVE	****	
**** FCR	111 TO 114.	SEE	9 TO 12 ABOVE	****	
**** FOR	112 TO 115.	SEE	2 TO 5 ABOVE	****	
**** FCR	113 TO 116.	SEE	1 TO 4 ABOVE	****	
**** FOR	114 TO 117.	SEE	2 TO 5 ABOVE	****	
**** FOR	115 TO 118.	SEE	8 TO 11 ABOVE	****	
**** FCR	116 TO 119.	SEE	9 TO 12 ABOVE	****	
**** FOR	117 TO 120.	SEE	6 TO 9 ABOVE	****	
**** FCR	119 TO 122.	SEE	7 TO 10 ABOVE	****	
**** FOR	120 TO 123.	SEE	1 TO 4 ABOVE	****	
**** FOR	121 TO 124.	SEE	6 TO 9 ABOVE	****	
**** FCR	122 TO 125.	SEE	7 TO 10 ABOVE	****	
**** FOR	123 TO 126.	SEE	1 TO 4 ABOVE	****	
**** FOR	124 TO 127.	SEE	6 TO 9 ABOVE	****	
353	127 TO 130		180 TO 183	3	4
**** FOR	128 TO 131.	SEE	65 TO 68 ABOVE	****	
**** FCR	129 TO 132.	SEE	8 TO 11 ABOVE	****	
**** FCR	130 TO 133.	SEE	9 TO 12 ABOVE	****	
**** FOR	131 TO 134.	SEE	2 TO 5 ABOVE	****	
**** FOR	132 TO 135.	SEE	8 TO 11 ABOVE	****	
**** FOR	134 TO 137.	SEE	9 TO 12 ABOVE	****	
**** FCR	135 TO 138.	SEE	2 TO 5 ABOVE	****	
**** FCR	136 TO 139.	SEE	8 TO 11 ABOVE	****	
**** FOR	139 TO 142.	SEE	9 TO 12 ABOVE	****	
**** FOR	140 TO 143.	SEE	2 TO 5 ABOVE	****	
**** FCR	141 TO 144.	SEE	8 TO 11 ABOVE	****	
**** FOR	142 TO 145.	SEE	9 TO 12 ABOVE	****	
**** FOR	143 TO 146.	SEE	6 TO 9 ABOVE	****	
**** FOR	144 TO 147.	SEE	7 TO 10 ABOVE	****	
**** FCR	145 TO 148.	SEE	1 TO 4 ABOVE	****	
**** FOR	146 TO 149.	SEE	2 TO 5 ABOVE	****	
**** FOR	147 TO 150.	SEE	8 TO 11 ABOVE	****	
**** FCR	148 TO 151.	SEE	9 TO 12 ABOVE	****	
**** FCR	149 TO 152.	SEE	2 TO 5 ABOVE	****	
**** FCR	150 TO 153.	SEE	8 TO 11 ABOVE	****	
**** FOR	151 TO 154.	SEE	9 TO 12 ABOVE	****	
**** FOR	152 TO 155.	SEE	6 TO 9 ABOVE	****	
**** FOR	153 TO 156.	SEE	7 TO 10 ABOVE	****	
**** FOR	154 TO 157.	SEE	1 TO 4 ABOVE	****	
**** FOR	155 TO 158.	SEE	2 TO 5 ABOVE	****	
**** FOR	156 TO 159.	SEE	8 TO 11 ABOVE	****	
**** FOR	157 TO 160.	SEE	9 TO 12 ABOVE	****	
**** FOR	158 TO 161.	SEE	2 TO 5 ABOVE	****	
**** FOR	159 TO 162.	SEE	1 TO 4 ABOVE	****	
**** FOR	160 TO 163.	SEE	2 TO 5 ABOVE	****	
**** FCR	161 TO 164.	SEE	1 TO 4 ABOVE	****	
**** FOR	162 TO 165.	SEE	2 TO 5 ABOVE	****	
**** FOR	163 TO 166.	SEE	1 TO 4 ABOVE	****	
**** FOR	164 TO 167.	SEE	6 TO 9 ABOVE	****	

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
**** FCR	165 TO 168.	SEE	7 TO 10 ABOVE	****	
**** FOR	166 TO 169.	SEE	1 TO 4 ABOVE	****	
**** FOR	167 TO 170.	SEE	2 TO 5 ABOVE	****	
**** FOR	168 TO 171.	SEE	1 TO 4 ABOVE	****	
**** FOR	169 TO 172.	SEE	96 TO 99 ABOVE	****	
**** FOR	170 TO 173.	SEE	127 TO 130 ABOVE	****	
**** FOR	171 TO 174.	SEE	65 TO 68 ABOVE	****	
**** FCR	172 TO 175.	SEE	1 TO 4 ABOVE	****	
**** FOR	173 TO 176.	SEE	2 TO 5 ABOVE	****	
**** FOR	174 TO 177.	SEE	1 TO 4 ABOVE	****	
**** FOR	175 TO 178.	SEE	6 TO 9 ABOVE	****	
**** FOR	176 TO 179.	SEE	7 TO 10 ABOVE	****	
**** FOR	177 TO 180.	SEE	1 TO 4 ABOVE	****	
**** FCR	178 TO 181.	SEE	2 TO 5 ABOVE	****	
**** FOR	179 TO 182.	SEE	63 TO 66 ABOVE	****	
394	181 TO 184		209 TO 212	3	4
**** FOR	182 TO 185.	SEE	2 TO 5 ABOVE	****	
**** FCR	183 TO 186.	SEE	1 TO 4 ABOVE	****	
**** FOR	184 TO 187.	SEE	6 TO 9 ABOVE	****	
**** FCR	186 TO 189.	SEE	7 TO 10 ABOVE	****	
**** FOR	187 TO 190.	SEE	1 TO 4 ABOVE	****	
**** FOR	188 TO 191.	SEE	6 TO 9 ABOVE	****	
**** FOR	189 TO 192.	SEE	7 TO 10 ABOVE	****	
**** FOR	190 TO 193.	SEE	1 TO 4 ABOVE	****	
**** FCR	191 TO 194.	SEE	2 TO 5 ABOVE	****	
**** FOR	192 TO 195.	SEE	8 TO 11 ABOVE	****	
**** FOR	193 TO 196.	SEE	9 TO 12 ABOVE	****	
**** FCR	194 TO 197.	SEE	6 TO 9 ABOVE	****	
**** FOR	195 TO 198.	SEE	7 TO 10 ABOVE	****	
**** FOR	196 TO 199.	SEE	1 TO 4 ABOVE	****	
**** FCR	197 TO 200.	SEE	2 TO 5 ABOVE	****	
**** FOR	198 TO 201.	SEE	8 TO 11 ABOVE	****	
**** FOR	203 TO 206.	SEE	9 TO 12 ABOVE	****	
**** FOR	204 TO 207.	SEE	2 TO 5 ABOVE	****	
**** FOR	205 TO 208.	SEE	1 TO 4 ABOVE	****	
**** FCR	206 TO 209.	SEE	2 TO 5 ABOVE	****	
**** FCR	207 TO 210.	SEE	63 TO 66 ABOVE	****	
**** FOR	208 TO 211.	SEE	64 TO 67 ABOVE	****	
**** FOR	209 TO 212.	SEE	65 TO 68 ABOVE	****	
**** FOR	210 TO 213.	SEE	1 TO 4 ABOVE	****	
**** FCR	211 TO 214.	SEE	96 TO 99 ABOVE	****	
395	212 TO 215		218 TO 221	3	4
**** FOR	213 TO 216.	SEE	181 TO 184 ABOVE	****	
**** FOR	214 TO 217.	SEE	2 TO 5 ABOVE	****	
**** FOR	215 TO 218.	SEE	1 TO 4 ABOVE	****	
**** FOR	216 TO 219.	SEE	2 TO 5 ABOVE	****	
**** FOR	217 TO 220.	SEE	63 TO 66 ABOVE	****	
**** FCR	218 TO 221.	SEE	64 TO 67 ABOVE	****	
**** FOR	222 TO 225.	SEE	181 TO 184 ABOVE	****	
**** FCR	223 TO 226.	SEE	2 TO 5 ABOVE	****	
**** FCR	224 TO 227.	SEE	1 TO 4 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST LENGTH
**** FCR 225 TO 228.	SEE	6 TO 9 ABOVE	****	
**** FOR 226 TO 229.	SEE	7 TO 10 ABOVE	****	
**** FOR 227 TO 230.	SEE	1 TO 4 ABOVE	****	
**** FCR 228 TO 231.	SEE	6 TO 9 ABOVE	****	
**** FOR 229 TO 232.	SEE	7 TO 10 ABOVE	****	
**** FOR 230 TO 233.	SEE	1 TO 4 ABOVE	****	
**** FOR 231 TO 234.	SEE	6 TO 9 ABOVE	****	
**** FOR 232 TO 235.	SEE	7 TO 10 ABOVE	****	
**** FCR 233 TO 236.	SEE	1 TO 4 ABOVE	****	
**** FOR 234 TO 237.	SEE	6 TO 9 ABOVE	****	
**** FCR 236 TO 239.	SEE	7 TO 10 ABOVE	****	
**** FCR 237 TO 240.	SEE	1 TO 4 ABOVE	****	
**** FOR 238 TO 241.	SEE	2 TO 5 ABOVE	****	
**** FCR 239 TO 242.	SEE	8 TO 11 ABOVE	****	
**** FCR 241 TO 244.	SEE	9 TO 12 ABOVE	****	
**** FCR 242 TO 245.	SEE	2 TO 5 ABOVE	****	
**** FOR 243 TO 246.	SEE	8 TO 11 ABOVE	****	
**** FCR 244 TO 247.	SEE	9 TO 12 ABOVE	****	
**** FCR 245 TO 248.	SEE	6 TO 9 ABOVE	****	
**** FOR 246 TO 249.	SEE	7 TO 10 ABOVE	****	
**** FOR 247 TO 250.	SEE	1 TO 4 ABOVE	****	
**** FOR 248 TO 251.	SEE	2 TO 5 ABOVE	****	
**** FOR 249 TO 252.	SEE	8 TO 11 ABOVE	****	
**** FOR 250 TO 253.	SEE	9 TO 12 ABOVE	****	
**** FCR 251 TO 254.	SEE	6 TO 9 ABOVE	****	
**** FOR 252 TO 255.	SEE	7 TO 10 ABOVE	****	
**** FOR 253 TO 256.	SEE	1 TO 4 ABOVE	****	
**** FOR 254 TO 257.	SEE	2 TO 5 ABOVE	****	
**** FOR 255 TO 258.	SEE	8 TO 11 ABOVE	****	

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*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 5 NOTES IN LENGTH --
 TONAL INVERSION
 WAS BEGUN AT 294 SECCNDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
396	1 TO	5	10 TO 14	3	5
397	1 TO	5	12 TO 16	3	5
398	1 TO	5	22 TO 26	3	5
399	1 TO	5	28 TO 32	3	5
400	1 TO	5	30 TO 34	3	5
401	1 TO	5	32 TO 36	3	5
402	1 TO	5	34 TO 38	3	5
403	1 TO	5	53 TO 57	3	5
404	1 TO	5	70 TO 74	3	5
405	1 TO	5	72 TO 76	3	5
406	1 TO	5	74 TO 78	3	5
407	1 TO	5	76 TO 80	3	5
408	1 TO	5	78 TO 82	3	5
409	1 TO	5	80 TO 84	3	5
410	1 TO	5	82 TO 86	3	5
411	1 TO	5	84 TO 88	3	5
412	1 TO	5	107 TO 111	3	5
413	1 TO	5	112 TO 116	3	5
414	1 TO	5	158 TO 162	3	5
415	1 TO	5	160 TO 164	3	5
416	1 TO	5	162 TO 166	3	5
417	1 TO	5	167 TO 171	3	5
418	1 TO	5	173 TO 177	3	5
419	1 TO	5	182 TO 186	3	5
420	1 TO	5	204 TO 208	3	5
421	1 TO	5	214 TO 218	3	5
422	1 TO	5	223 TO 227	3	5
423	2 TO	6	11 TO 15	3	5
424	2 TO	6	17 TO 21	3	5
425	2 TO	6	23 TO 27	3	5
426	2 TO	6	29 TO 33	3	5
427	2 TO	6	31 TO 35	3	5
428	2 TO	6	33 TO 37	3	5
429	2 TO	6	35 TO 39	3	5
430	2 TO	6	52 TO 56	3	5
431	2 TO	6	54 TO 58	3	5
432	2 TO	6	66 TO 70	3	5
433	2 TO	6	71 TO 75	3	5
434	2 TO	6	73 TO 77	3	5
435	2 TO	6	75 TO 79	3	5
436	2 TO	6	77 TO 81	3	5
437	2 TO	6	79 TO 83	3	5
438	2 TO	6	81 TO 85	3	5
439	2 TO	6	83 TO 87	3	5

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PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
440	2 TO 6		88 TO 92	3	5
441	2 TO 6		108 TO 112	3	5
442	2 TO 6		113 TO 117	3	5
443	2 TO 6		145 TO 149	3	5
444	2 TO 6		154 TO 158	3	5
445	2 TO 6		159 TO 163	3	5
446	2 TO 6		161 TO 165	3	5
447	2 TO 6		166 TO 170	3	5
448	2 TO 6		172 TO 176	3	5
449	2 TO 6		177 TO 181	3	5
450	2 TO 6		190 TO 194	3	5
451	2 TO 6		196 TO 200	3	5
452	2 TO 6		205 TO 209	3	5
453	2 TO 6		215 TO 219	3	5
454	2 TO 6		237 TO 241	3	5
455	2 TO 6		247 TO 251	3	5
456	2 TO 6		253 TO 257	3	5
**** FOR	3 TO 7.	SEE	1 TO 5	ABOVE ****	
**** FOR	4 TO 8.	SEE	2 TO 6	ABOVE ****	
457	5 TO 9		18 TO 22	3	5
458	5 TO 9		24 TO 28	3	5
459	5 TO 9		36 TO 40	3	5
460	5 TO 9		43 TO 47	3	5
461	5 TO 9		47 TO 51	3	5
462	5 TO 9		55 TO 59	3	5
463	5 TO 9		58 TO 62	3	5
464	5 TO 9		67 TO 71	3	5
465	5 TO 9		89 TO 93	3	5
466	5 TO 9		92 TO 96	3	5
467	5 TO 9		109 TO 113	3	5
468	5 TO 9		114 TO 118	3	5
469	5 TO 9		131 TO 135	3	5
470	5 TO 9		135 TO 139	3	5
471	5 TO 9		140 TO 144	3	5
472	5 TO 9		146 TO 150	3	5
473	5 TO 9		149 TO 153	3	5
474	5 TO 9		155 TO 159	3	5
475	5 TO 9		191 TO 195	3	5
476	5 TO 9		197 TO 201	3	5
477	5 TO 9		238 TO 242	3	5
478	5 TO 9		242 TO 246	3	5
479	5 TO 9		248 TO 252	3	5
480	5 TO 9		254 TO 258	3	5
481	6 TO 10		37 TO 41	3	5
482	6 TO 10		41 TO 45	3	5
483	6 TO 10		48 TO 52	3	5
484	6 TO 10		56 TO 60	3	5
485	6 TO 10		59 TO 63	3	5
486	6 TO 10		68 TO 72	3	5
487	6 TO 10		90 TO 94	3	5
488	6 TO 10		110 TO 114	3	5

PATTERN	NOTES		RELATED TO	NOTES		TEST	LENGTH
489	6	TO	10	115	TO	119	3 5
490	6	TO	10	129	TO	133	3 5
491	6	TO	10	141	TO	145	3 5
492	6	TO	10	147	TO	151	3 5
493	6	TO	10	150	TO	154	3 5
494	6	TO	10	156	TO	160	3 5
495	6	TO	10	192	TO	196	3 5
496	6	TO	10	243	TO	247	3 5
497	6	TO	10	249	TO	253	3 5
**** FCR	6	TO	10.	SEE	6	TO	10 ABOVE ****
498	7	TO	11	38	TO	42	3 5
499	7	TO	11	49	TO	53	3 5
500	7	TO	11	60	TO	64	3 5
501	7	TO	11	116	TO	120	3 5
502	7	TO	11	142	TO	146	3 5
503	7	TO	11	151	TO	155	3 5
504	7	TO	11	193	TO	197	3 5
505	7	TO	11	244	TO	248	3 5
506	7	TO	11	250	TO	254	3 5
507	8	TO	12	39	TO	43	3 5
508	8	TO	12	50	TO	54	3 5
509	8	TO	12	61	TO	65	3 5
510	8	TO	12	86	TO	90	3 5
511	8	TO	12	121	TO	125	3 5
512	8	TO	12	143	TO	147	3 5
513	8	TO	12	152	TO	156	3 5
514	8	TO	12	164	TO	168	3 5
515	8	TO	12	175	TO	179	3 5
516	8	TO	12	188	TO	192	3 5
517	8	TO	12	194	TO	198	3 5
518	8	TO	12	225	TO	229	3 5
519	8	TO	12	228	TO	232	3 5
520	8	TO	12	231	TO	235	3 5
521	8	TO	12	245	TO	249	3 5
522	8	TO	12	251	TO	255	3 5
**** FOR	8	TO	12.	SEE	8	TO	12 ABOVE ****
523	9	TO	13	16	TO	20	3 5
524	9	TO	13	51	TO	55	3 5
525	9	TO	13	87	TO	91	3 5
526	9	TO	13	100	TO	104	3 5
527	9	TO	13	119	TO	123	3 5
528	9	TO	13	122	TO	126	3 5
529	9	TO	13	144	TO	148	3 5
530	9	TO	13	153	TO	157	3 5
531	9	TO	13	165	TO	169	3 5
532	9	TO	13	176	TO	180	3 5
533	9	TO	13	186	TO	190	3 5
534	9	TO	13	189	TO	193	3 5
535	9	TO	13	195	TO	199	3 5
536	9	TO	13	226	TO	230	3 5
537	9	TO	13	229	TO	233	3 5

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
538	9 TO	13	232 TO	236	3 5
539	9 TO	13	236 TO	240	3 5
540	9 TO	13	246 TO	250	3 5
541	9 TO	13	252 TO	256	3 5
**** FOR	10 TO	14.	SEE 2 TO	6 ABOVE	****
**** FOR	11 TO	15.	SEE 1 TO	5 ABOVE	****
**** FOR	12 TO	16.	SEE 2 TO	6 ABOVE	****
**** FOR	13 TO	17.	SEE 5 TO	9 ABOVE	****
542	14 TO	18	19 TO	23	3 5
543	14 TO	18	25 TO	29	3 5
544	14 TO	18	44 TO	48	3 5
545	14 TO	18	93 TO	97	3 5
546	14 TO	18	132 TO	136	3 5
547	14 TO	18	136 TO	140	3 5
548	14 TO	18	198 TO	202	3 5
549	14 TO	18	239 TO	243	3 5
550	14 TO	18	255 TO	259	3 5
551	15 TO	19	20 TO	24	3 5
552	15 TO	19	26 TO	30	3 5
553	15 TO	19	45 TO	49	3 5
554	15 TO	19	94 TO	98	3 5
555	15 TO	19	133 TO	137	3 5
556	15 TO	19	138 TO	142	3 5
557	15 TO	19	202 TO	206	3 5
558	15 TO	19	240 TO	244	3 5
**** FOR	15 TO	19.	SEE 15 TO	19 ABOVE	****
559	16 TO	20	21 TO	25	3 5
560	16 TO	20	27 TO	31	3 5
561	16 TO	20	42 TO	46	3 5
562	16 TO	20	46 TO	50	3 5
563	16 TO	20	57 TO	61	3 5
564	16 TO	20	69 TO	73	3 5
565	16 TO	20	91 TO	95	3 5
566	16 TO	20	106 TO	110	3 5
567	16 TO	20	111 TO	115	3 5
568	16 TO	20	130 TO	134	3 5
569	16 TO	20	134 TO	138	3 5
570	16 TO	20	139 TO	143	3 5
571	16 TO	20	148 TO	152	3 5
572	16 TO	20	157 TO	161	3 5
573	16 TO	20	203 TO	207	3 5
574	16 TO	20	241 TO	245	3 5
**** FOR	17 TO	21.	SEE 1 TO	5 ABOVE	****
575	18 TO	22	85 TO	89	3 5
576	18 TO	22	120 TO	124	3 5
577	18 TO	22	123 TO	127	3 5
578	18 TO	22	163 TO	167	3 5
579	18 TO	22	174 TO	178	3 5
580	18 TO	22	183 TO	187	3 5
581	18 TO	22	187 TO	191	3 5
582	18 TO	22	224 TO	228	3 5

PATTERN	NGTES	RELATED TO	NOTES	TEST	LENGTH
583	18 TO 22		227 TO 231	3	5
584	18 TO 22		230 TO 234	3	5
585	18 TO 22		233 TO 237	3	5
586	19 TO 23		117 TO 121	3	5
587	19 TO 23		124 TO 128	3	5
588	19 TO 23		184 TO 188	3	5
589	19 TO 23		234 TO 238	3	5
590	20 TO 24		118 TO 122	3	5
591	20 TO 24		185 TO 189	3	5
592	20 TO 24		235 TO 239	3	5
**** FOR	20 TO 24.	SEE	20 TO 24 ABOVE	****	
**** FOR	21 TO 25.	SEE	9 TO 13 ABOVE	****	
**** FOR	22 TO 26.	SEE	2 TO 6 ABOVE	****	
**** FOR	24 TO 28.	SEE	18 TO 22 ABOVE	****	
**** FOR	25 TO 29.	SEE	19 TO 23 ABOVE	****	
**** FOR	26 TO 30.	SEE	20 TO 24 ABOVE	****	
**** FOR	27 TO 31.	SEE	9 TO 13 ABOVE	****	
**** FOR	35 TO 39.	SEE	1 TO 5 ABOVE	****	
**** FOR	36 TO 40.	SEE	18 TO 22 ABOVE	****	
**** FOR	37 TO 41.	SEE	8 TO 12 ABOVE	****	
**** FOR	39 TO 43.	SEE	6 TO 10 ABOVE	****	
**** FOR	40 TO 44.	SEE	7 TO 11 ABOVE	****	
**** FOR	41 TO 45.	SEE	8 TO 12 ABOVE	****	
**** FOR	42 TO 46.	SEE	9 TO 13 ABOVE	****	
**** FOR	43 TO 47.	SEE	18 TO 22 ABOVE	****	
**** FOR	44 TO 48.	SEE	19 TO 23 ABOVE	****	
**** FOR	45 TO 49.	SEE	20 TO 24 ABOVE	****	
**** FOR	46 TO 50.	SEE	9 TO 13 ABOVE	****	
**** FOR	47 TO 51.	SEE	18 TO 22 ABOVE	****	
**** FOR	48 TO 52.	SEE	8 TO 12 ABOVE	****	
**** FOR	50 TO 54.	SEE	6 TO 10 ABOVE	****	
**** FOR	51 TO 55.	SEE	16 TO 20 ABOVE	****	
**** FOR	52 TO 56.	SEE	1 TO 5 ABOVE	****	
**** FOR	54 TO 58.	SEE	1 TO 5 ABOVE	****	
**** FOR	55 TO 59.	SEE	18 TO 22 ABOVE	****	
**** FOR	56 TO 60.	SEE	8 TO 12 ABOVE	****	
**** FOR	57 TO 61.	SEE	9 TO 13 ABOVE	****	
**** FOR	58 TO 62.	SEE	18 TO 22 ABOVE	****	
**** FOR	59 TO 63.	SEE	8 TO 12 ABOVE	****	
**** FOR	61 TO 65.	SEE	6 TO 10 ABOVE	****	
593	62 TO 66		95 TO 99	3	5
594	63 TO 67		211 TO 215	3	5
**** FOR	63 TO 67.	SEE	63 TO 67 ABOVE	****	
595	64 TO 68		212 TO 216	3	5
596	65 TO 69		181 TO 185	3	5
597	65 TO 69		213 TO 217	3	5
598	65 TO 69		222 TO 226	3	5
**** FOR	66 TO 70.	SEE	1 TO 5 ABOVE	****	
**** FOR	67 TO 71.	SEE	18 TO 22 ABOVE	****	
**** FOR	68 TO 72.	SEE	8 TO 12 ABOVE	****	
**** FOR	69 TO 73.	SEE	9 TO 13 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FCR	70 TO	74.	SEE	2 TO	6 ABOVE ****
**** FOR	83 TO	87.	SEE	1 TO	5 ABOVE ****
**** FOR	84 TO	88.	SEE	2 TO	6 ABOVE ****
**** FOR	85 TO	89.	SEE	5 TO	9 ABOVE ****
**** FCR	86 TO	90.	SEE	6 TO	10 ABOVE ****
**** FOR	87 TO	91.	SEE	16 TO	20 ABOVE ****
**** FOR	88 TO	92.	SEE	1 TO	5 ABOVE ****
**** FOR	89 TO	93.	SEE	18 TO	22 ABOVE ****
**** FCR	90 TO	94.	SEE	8 TO	12 ABOVE ****
**** FOR	91 TO	95.	SEE	9 TO	13 ABOVE ****
**** FOR	92 TO	96.	SEE	18 TO	22 ABOVE ****
**** FOR	93 TO	97.	SEE	19 TO	23 ABOVE ****
**** FOR	94 TO	98.	SEE	20 TO	24 ABOVE ****
599	98 TO	102		104 TO	108 3 5
600	99 TO	103		105 TO	109 3 5
**** FOR	99 TO	103.	SEE	99 TO	103 ABOVE ****
**** FOR	100 TO	104.	SEE	16 TO	20 ABOVE ****
601	101 TO	105		178 TO	182 3 5
602	101 TO	105		206 TO	210 3 5
603	101 TO	105		216 TO	220 3 5
**** FOR	106 TO	110.	SEE	9 TO	13 ABOVE ****
**** FOR	107 TO	111.	SEE	2 TO	6 ABOVE ****
**** FOR	108 TO	112.	SEE	1 TO	5 ABOVE ****
**** FOR	109 TO	113.	SEE	18 TO	22 ABOVE ****
**** FOR	110 TO	114.	SEE	8 TO	12 ABOVE ****
**** FOR	111 TO	115.	SEE	9 TO	13 ABOVE ****
**** FOR	112 TO	116.	SEE	2 TO	6 ABOVE ****
**** FCR	113 TO	117.	SEE	1 TO	5 ABOVE ****
**** FOR	114 TO	118.	SEE	18 TO	22 ABOVE ****
**** FOR	115 TO	119.	SEE	8 TO	12 ABOVE ****
**** FCR	117 TO	121.	SEE	14 TO	18 ABOVE ****
**** FOR	118 TO	122.	SEE	15 TO	19 ABOVE ****
**** FOR	119 TO	123.	SEE	16 TO	20 ABOVE ****
**** FCR	120 TO	124.	SEE	5 TO	9 ABOVE ****
**** FOR	121 TO	125.	SEE	6 TO	10 ABOVE ****
**** FOR	122 TO	126.	SEE	16 TO	20 ABOVE ****
**** FOR	123 TO	127.	SEE	5 TO	9 ABOVE ****
**** FOR	124 TO	128.	SEE	14 TO	18 ABOVE ****
604	127 TO	131		180 TO	184 3 5
**** FOR	127 TO	131.	SEE	127 TO	131 ABOVE ****
**** FOR	129 TO	133.	SEE	8 TO	12 ABOVE ****
**** FOR	130 TO	134.	SEE	9 TO	13 ABOVE ****
**** FOR	131 TO	135.	SEE	18 TO	22 ABOVE ****
**** FCR	132 TO	136.	SEE	19 TO	23 ABOVE ****
**** FCR	133 TO	137.	SEE	20 TO	24 ABOVE ****
**** FOR	134 TO	138.	SEE	9 TO	13 ABOVE ****
**** FOR	135 TO	139.	SEE	18 TO	22 ABOVE ****
**** FCR	136 TO	140.	SEE	19 TO	23 ABOVE ****
**** FOR	138 TO	142.	SEE	20 TO	24 ABOVE ****
**** FCR	139 TO	143.	SEE	9 TO	13 ABOVE ****
**** FOR	140 TO	144.	SEE	18 TO	22 ABOVE ****

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 141 TO 145.	SEE	8 TO 12	ABOVE	****	
**** FOR 143 TO 147.	SEE	6 TO 10	ABOVE	****	
**** FOR 144 TO 148.	SEE	16 TO 20	ABOVE	****	
**** FOR 145 TO 149.	SEE	1 TO 5	ABOVE	****	
**** FCR 146 TO 150.	SEE	18 TO 22	ABOVE	****	
**** FOR 147 TO 151.	SEE	8 TO 12	ABOVE	****	
**** FOR 148 TO 152.	SEE	9 TO 13	ABOVE	****	
**** FOR 149 TO 153.	SEE	18 TO 22	ABOVE	****	
**** FCR 150 TO 154.	SEE	8 TO 12	ABOVE	****	
**** FOR 152 TO 156.	SEE	6 TO 10	ABOVE	****	
**** FOR 153 TO 157.	SEE	16 TO 20	ABOVE	****	
**** FOR 154 TO 158.	SEE	1 TO 5	ABOVE	****	
**** FOR 155 TO 159.	SEE	18 TO 22	ABOVE	****	
**** FOR 156 TO 160.	SEE	8 TO 12	ABOVE	****	
**** FOR 157 TO 161.	SEE	9 TO 13	ABOVE	****	
**** FCR 163 TO 167.	SEE	5 TO 9	ABOVE	****	
**** FOR 164 TO 168.	SEE	6 TO 10	ABOVE	****	
**** FOR 165 TO 169.	SEE	16 TO 20	ABOVE	****	
**** FOR 166 TO 170.	SEE	1 TO 5	ABOVE	****	
**** FCR 167 TO 171.	SEE	2 TO 6	ABOVE	****	
**** FCR 168 TO 172.	SEE	101 TO 105	ABOVE	****	
605 169 TO 173		179 TO 183		3	5
**** FOR 170 TO 174.	SEE	127 TO 131	ABOVE	****	
**** FOR 171 TO 175.	SEE	65 TO 69	ABOVE	****	
**** FOR 172 TO 176.	SEE	1 TO 5	ABOVE	****	
**** FOR 173 TO 177.	SEE	2 TO 6	ABOVE	****	
**** FCR 174 TO 178.	SEE	5 TO 9	ABOVE	****	
**** FOR 175 TO 179.	SEE	6 TO 10	ABOVE	****	
**** FOR 176 TO 180.	SEE	16 TO 20	ABOVE	****	
**** FOR 177 TO 181.	SEE	1 TO 5	ABOVE	****	
606 178 TO 182		210 TO 214		3	5
607 181 TO 185		209 TO 213		3	5
**** FOR 181 TO 185.	SEE	181 TO 185	ABOVE	****	
**** FOR 182 TO 186.	SEE	2 TO 6	ABOVE	****	
**** FOR 183 TO 187.	SEE	5 TO 9	ABOVE	****	
**** FOR 184 TO 188.	SEE	14 TO 18	ABOVE	****	
**** FOR 185 TO 189.	SEE	15 TO 19	ABOVE	****	
**** FOR 186 TO 190.	SEE	16 TO 20	ABOVE	****	
**** FOR 187 TO 191.	SEE	5 TO 9	ABOVE	****	
**** FOR 188 TO 192.	SEE	6 TO 10	ABOVE	****	
**** FOR 189 TO 193.	SEE	16 TO 20	ABOVE	****	
**** FOR 190 TO 194.	SEE	1 TO 5	ABOVE	****	
**** FCR 191 TO 195.	SEE	18 TO 22	ABOVE	****	
**** FOR 192 TO 196.	SEE	8 TO 12	ABOVE	****	
**** FOR 194 TO 198.	SEE	6 TO 10	ABOVE	****	
**** FOR 195 TO 199.	SEE	16 TO 20	ABOVE	****	
**** FOR 196 TO 200.	SEE	1 TO 5	ABOVE	****	
**** FCR 197 TO 201.	SEE	18 TO 22	ABOVE	****	
**** FOR 198 TO 202.	SEE	19 TO 23	ABOVE	****	
**** FCR 202 TO 206.	SEE	20 TO 24	ABOVE	****	
**** FOR 203 TO 207.	SEE	9 TO 13	ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	204 TO 208.	SEE	2 TO 6 ABOVE	****	
**** FOR	205 TO 209.	SEE	1 TO 5 ABOVE	****	
**** FCR	206 TO 210.	SEE	178 TO 182 ABOVE	****	
**** FCR	207 TO 211.	SEE	63 TO 67 ABOVE	****	
**** FOR	208 TO 212.	SEE	64 TO 68 ABOVE	****	
**** FCR	209 TO 213.	SEE	65 TO 69 ABOVE	****	
**** FOR	210 TO 214.	SEE	101 TO 105 ABOVE	****	
6C8	211 TO 215		217 TO 221	3	5
**** FOR	213 TO 217.	SEE	181 TO 185 ABOVE	****	
**** FCR	216 TO 220.	SEE	178 TO 182 ABOVE	****	
**** FOR	217 TO 221.	SEE	63 TO 67 ABOVE	****	
**** FOR	222 TO 226.	SEE	181 TO 185 ABOVE	****	
**** FOR	223 TO 227.	SEE	2 TO 6 ABOVE	****	
**** FOR	224 TO 228.	SEE	5 TO 9 ABOVE	****	
**** FOR	225 TO 229.	SEE	6 TO 10 ABOVE	****	
**** FCR	226 TO 230.	SEE	16 TO 20 ABOVE	****	
**** FOR	227 TO 231.	SEE	5 TO 9 ABOVE	****	
**** FOR	228 TO 232.	SEE	6 TO 10 ABOVE	****	
**** FOR	229 TO 233.	SEE	16 TO 20 ABOVE	****	
**** FCR	230 TO 234.	SEE	5 TO 9 ABOVE	****	
**** FOR	231 TO 235.	SEE	6 TO 10 ABOVE	****	
**** FOR	232 TO 236.	SEE	16 TO 20 ABOVE	****	
**** FOR	233 TO 237.	SEE	5 TO 9 ABOVE	****	
**** FOR	234 TO 238.	SEE	14 TO 18 ABOVE	****	
**** FOR	235 TO 239.	SEE	15 TO 19 ABOVE	****	
**** FOR	236 TO 240.	SEE	16 TO 20 ABOVE	****	
**** FCR	237 TO 241.	SEE	1 TO 5 ABOVE	****	
**** FOR	238 TO 242.	SEE	18 TO 22 ABOVE	****	
**** FOR	239 TO 243.	SEE	19 TO 23 ABOVE	****	
**** FOR	240 TO 244.	SEE	20 TO 24 ABOVE	****	
**** FOR	241 TO 245.	SEE	9 TO 13 ABOVE	****	
**** FOR	242 TO 246.	SEE	18 TO 22 ABOVE	****	
**** FOR	243 TO 247.	SEE	8 TO 12 ABOVE	****	
**** FCR	245 TO 249.	SEE	6 TO 10 ABOVE	****	
**** FOR	246 TO 250.	SEE	16 TO 20 ABOVE	****	
**** FOR	247 TO 251.	SEE	1 TO 5 ABOVE	****	
**** FCR	248 TO 252.	SEE	18 TO 22 ABOVE	****	
**** FOR	249 TO 253.	SEE	8 TO 12 ABOVE	****	
**** FCR	251 TO 255.	SEE	6 TO 10 ABOVE	****	
**** FOR	252 TO 256.	SEE	16 TO 20 ABOVE	****	
**** FOR	253 TO 257.	SEE	1 TO 5 ABOVE	****	
**** FOR	254 TO 258.	SEE	18 TO 22 ABOVE	****	
**** FOR	255 TO 259.	SEE	19 TO 23 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 6 NOTES IN LENGTH --
 TONAL INVERSION
 WAS BEGUN AT 477 SECONDS INTO EXECUTION.

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
609	1 TO	6	10 TO 15	3	6
610	1 TO	6	22 TO 27	3	6
611	1 TO	6	28 TO 33	3	6
612	1 TO	6	30 TO 35	3	6
613	1 TO	6	32 TO 37	3	6
614	1 TO	6	34 TO 39	3	6
615	1 TO	6	53 TO 58	3	6
616	1 TO	6	70 TO 75	3	6
617	1 TO	6	72 TO 77	3	6
618	1 TO	6	74 TO 79	3	6
619	1 TO	6	76 TO 81	3	6
620	1 TO	6	78 TO 83	3	6
621	1 TO	6	80 TO 85	3	6
622	1 TO	6	82 TO 87	3	6
623	1 TO	6	107 TO 112	3	6
624	1 TO	6	112 TO 117	3	6
625	1 TO	6	158 TO 163	3	6
626	1 TO	6	160 TO 165	3	6
627	1 TO	6	204 TO 209	3	6
628	1 TO	6	214 TO 219	3	6
629	2 TO	7	11 TO 16	3	6
630	2 TO	7	29 TO 34	3	6
631	2 TO	7	31 TO 36	3	6
632	2 TO	7	33 TO 38	3	6
633	2 TO	7	52 TO 57	3	6
634	2 TO	7	71 TO 76	3	6
635	2 TO	7	73 TO 78	3	6
636	2 TO	7	75 TO 80	3	6
637	2 TO	7	77 TO 82	3	6
638	2 TO	7	79 TO 84	3	6
639	2 TO	7	81 TO 86	3	6
640	2 TO	7	83 TO 88	3	6
641	2 TO	7	159 TO 164	3	6
642	2 TO	7	161 TO 166	3	6
643	2 TO	7	166 TO 171	3	6
644	2 TO	7	172 TO 177	3	6
**** FOR	3 TO	8.	SEE 1 TO 6	ABOVE ****	
645	4 TO	9	17 TO 22	3	6
646	4 TO	9	23 TO 28	3	6
647	4 TO	9	35 TO 40	3	6
648	4 TO	9	54 TO 59	3	6
649	4 TO	9	66 TO 71	3	6
650	4 TO	9	88 TO 93	3	6
651	4 TO	9	108 TO 113	3	6

PATTERN	NCTES	RELATED TC	NOTES	TEST	LENGTH
652	4 TO 9		113 TO 118	3	6
653	4 TO 9		145 TO 150	3	6
654	4 TO 9		154 TO 159	3	6
655	4 TO 9		190 TO 195	3	6
656	4 TO 9		196 TO 201	3	6
657	4 TO 9		237 TO 242	3	6
658	4 TO 9		247 TO 252	3	6
659	4 TO 9		253 TO 258	3	6
660	5 TO 10		36 TO 41	3	6
661	5 TO 10		47 TO 52	3	6
662	5 TO 10		55 TO 60	3	6
663	5 TO 10		58 TO 63	3	6
664	5 TO 10		67 TO 72	3	6
665	5 TO 10		89 TO 94	3	6
666	5 TO 10		109 TO 114	3	6
667	5 TO 10		114 TO 119	3	6
668	5 TO 10		140 TO 145	3	6
669	5 TO 10		146 TO 151	3	6
670	5 TO 10		149 TO 154	3	6
671	5 TO 10		155 TO 160	3	6
672	5 TO 10		191 TO 196	3	6
673	5 TO 10		242 TO 247	3	6
674	5 TO 10		248 TO 253	3	6
**** FOR	5 TO 10,	SEE	5 TO 10	ABOVE ****	
675	6 TO 11		37 TO 42	3	6
676	6 TO 11		48 TO 53	3	6
677	6 TO 11		59 TO 64	3	6
678	6 TO 11		115 TO 120	3	6
679	6 TO 11		141 TO 146	3	6
680	6 TO 11		150 TO 155	3	6
681	6 TO 11		192 TO 197	3	6
682	6 TO 11		243 TO 248	3	6
683	6 TO 11		249 TO 254	3	6
684	7 TO 12		38 TO 43	3	6
685	7 TO 12		49 TO 54	3	6
686	7 TO 12		60 TO 65	3	6
687	7 TO 12		142 TO 147	3	6
688	7 TO 12		151 TO 156	3	6
689	7 TO 12		193 TO 198	3	6
690	7 TO 12		244 TO 249	3	6
691	7 TO 12		250 TO 255	3	6
692	8 TO 13		50 TO 55	3	6
693	8 TO 13		86 TO 91	3	6
694	8 TO 13		121 TO 126	3	6
695	8 TO 13		143 TO 148	3	6
696	8 TO 13		152 TO 157	3	6
697	8 TO 13		164 TO 169	3	6
698	8 TO 13		175 TO 180	3	6
699	8 TO 13		188 TO 193	3	6
700	8 TO 13		194 TO 199	3	6
701	8 TO 13		225 TO 230	3	6

PATTERN	NCTES	RELATED TC	NOTES	TEST	LENGTH
702	8 TO 13		228 TO 233	3	6
703	8 TO 13		231 TO 236	3	6
704	8 TO 13		245 TO 250	3	6
705	8 TO 13		251 TO 256	3	6
706	9 TO 14		16 TO 21	3	6
707	9 TO 14		51 TO 56	3	6
708	9 TO 14		87 TO 92	3	6
709	9 TO 14		144 TO 149	3	6
710	9 TO 14		153 TO 158	3	6
711	9 TO 14		165 TO 170	3	6
712	9 TO 14		176 TO 181	3	6
713	9 TO 14		189 TO 194	3	6
714	9 TO 14		195 TO 200	3	6
715	9 TO 14		236 TO 241	3	6
716	9 TO 14		246 TO 251	3	6
717	9 TO 14		252 TO 257	3	6
**** FCR	10 TO 15.	SEE	2 TO 7	ABOVE ****	
**** FCR	11 TO 16.	SEE	1 TO 6	ABOVE ****	
**** FCR	12 TO 17.	SEE	4 TO 9	ABOVE ****	
718	13 TO 18		18 TO 23	3	6
719	13 TO 18		24 TO 29	3	6
720	13 TO 18		43 TO 48	3	6
721	13 TO 18		92 TO 97	3	6
722	13 TO 18		131 TO 136	3	6
723	13 TO 18		135 TO 140	3	6
724	13 TO 18		197 TO 202	3	6
725	13 TO 18		238 TO 243	3	6
726	13 TO 18		254 TO 259	3	6
727	14 TO 19		19 TO 24	3	6
728	14 TO 19		25 TO 30	3	6
729	14 TO 19		44 TO 49	3	6
730	14 TO 19		93 TO 98	3	6
731	14 TO 19		132 TO 137	3	6
732	14 TO 19		239 TO 244	3	6
**** FCR	14 TO 19.	SEE	14 TO 19	ABOVE ****	
733	15 TO 20		20 TO 25	3	6
734	15 TO 20		26 TO 31	3	6
735	15 TO 20		45 TO 50	3	6
736	15 TO 20		133 TO 138	3	6
737	15 TO 20		138 TO 143	3	6
738	15 TO 20		202 TO 207	3	6
739	15 TO 20		240 TO 245	3	6
740	16 TO 21		21 TO 26	3	6
741	16 TO 21		27 TO 32	3	6
742	16 TO 21		69 TO 74	3	6
743	16 TO 21		106 TO 111	3	6
744	16 TO 21		111 TO 116	3	6
745	16 TO 21		157 TO 162	3	6
746	16 TO 21		203 TO 208	3	6
**** FCR	16 TO 21.	SEE	16 TO 21	ABOVE ****	
747	17 TO 22		84 TO 89	3	6

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
748	17 TO	22	162 TO	167	3 6
749	17 TO	22	173 TO	178	3 6
750	17 TO	22	182 TO	187	3 6
751	17 TO	22	223 TO	228	3 6
752	18 TO	23	123 TO	128	3 6
753	18 TO	23	183 TO	188	3 6
754	18 TO	23	233 TO	238	3 6
**** FOR	18 TO	23.	SEE 18 TO	23 ABOVE	****
755	19 TO	24	117 TO	122	3 6
756	19 TO	24	184 TO	189	3 6
757	19 TO	24	234 TO	239	3 6
**** FCR	19 TO	24.	SEE 19 TO	24 ABOVE	****
758	20 TO	25	118 TO	123	3 6
759	20 TO	25	185 TO	190	3 6
760	20 TO	25	235 TO	240	3 6
**** FOR	21 TO	26.	SEE 9 TO	14 ABOVE	****
**** FCR	22 TO	27.	SEE 2 TO	7 ABOVE	****
**** FOR	23 TO	28.	SEE 17 TO	22 ABOVE	****
**** FOR	24 TO	29.	SEE 18 TO	23 ABOVE	****
**** FOR	25 TO	30.	SEE 19 TO	24 ABOVE	****
**** FOR	26 TO	31.	SEE 20 TO	25 ABOVE	****
**** FOR	27 TO	32.	SEE 9 TO	14 ABOVE	****
**** FCR	34 TO	39.	SEE 2 TO	7 ABOVE	****
**** FOR	35 TO	40.	SEE 17 TO	22 ABOVE	****
761	36 TO	41	85 TO	90	3 6
762	36 TO	41	120 TO	125	3 6
763	36 TO	41	163 TO	168	3 6
764	36 TO	41	174 TO	179	3 6
765	36 TO	41	187 TO	192	3 6
766	36 TO	41	224 TO	229	3 6
767	36 TO	41	227 TO	232	3 6
768	36 TO	41	230 TO	235	3 6
**** FOR	39 TO	44.	SEE 6 TO	11 ABOVE	****
**** FOR	40 TO	45.	SEE 7 TO	12 ABOVE	****
**** FCR	41 TO	46.	SEE 8 TO	13 ABOVE	****
769	42 TO	47	119 TO	124	3 6
770	42 TO	47	122 TO	127	3 6
771	42 TO	47	186 TO	191	3 6
772	42 TO	47	226 TO	231	3 6
773	42 TO	47	229 TO	234	3 6
774	42 TO	47	232 TO	237	3 6
**** FOR	43 TO	48.	SEE 18 TO	23 ABOVE	****
**** FOR	44 TO	49.	SEE 19 TO	24 ABOVE	****
**** FOR	45 TO	50.	SEE 20 TO	25 ABOVE	****
**** FOR	46 TO	51.	SEE 42 TO	47 ABOVE	****
**** FCR	47 TO	52.	SEE 36 TO	41 ABOVE	****
775	50 TO	55	56 TO	61	3 6
776	50 TO	55	68 TO	73	3 6
777	50 TO	55	90 TO	95	3 6
778	50 TO	55	110 TO	115	3 6
779	50 TO	55	129 TO	134	3 6

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
780	50 TO	55	147 TO	152	3 6
781	50 TO	55	156 TO	161	3 6
**** FOR	51 TO	56.	SEE 16 TO	21 ABOVE	****
**** FOR	52 TO	57.	SEE 1 TO	6 ABOVE	****
**** FOR	53 TO	58.	SEE 2 TO	7 ABOVE	****
**** FOR	54 TO	59.	SEE 17 TO	22 ABOVE	****
**** FOR	55 TO	60.	SEE 36 TO	41 ABOVE	****
**** FOR	56 TO	61.	SEE 8 TO	13 ABOVE	****
**** FOR	57 TO	62.	SEE 42 TO	47 ABOVE	****
**** FOR	58 TO	63.	SEE 36 TO	41 ABOVE	****
782	63 TO	68	211 TO	216	3 6
783	64 TO	69	212 TO	217	3 6
784	65 TO	70	181 TO	186	3 6
785	65 TO	70	213 TO	218	3 6
786	65 TO	70	222 TO	227	3 6
**** FOR	66 TO	71.	SEE 17 TO	22 ABOVE	****
**** FOR	67 TO	72.	SEE 36 TO	41 ABOVE	****
**** FOR	68 TO	73.	SEE 8 TO	13 ABOVE	****
**** FOR	69 TO	74.	SEE 9 TO	14 ABOVE	****
**** FOR	70 TO	75.	SEE 2 TO	7 ABOVE	****
**** FOR	82 TO	87.	SEE 2 TO	7 ABOVE	****
**** FOR	83 TO	88.	SEE 1 TO	6 ABOVE	****
**** FOR	84 TO	89.	SEE 4 TO	9 ABOVE	****
**** FOR	85 TO	90.	SEE 5 TO	10 ABOVE	****
**** FOR	86 TO	91.	SEE 50 TO	55 ABOVE	****
**** FOR	87 TO	92.	SEE 16 TO	21 ABOVE	****
**** FOR	88 TO	93.	SEE 17 TO	22 ABOVE	****
**** FOR	89 TO	94.	SEE 36 TO	41 ABOVE	****
**** FOR	90 TO	95.	SEE 8 TO	13 ABOVE	****
**** FOR	91 TO	96.	SEE 42 TO	47 ABOVE	****
**** FOR	92 TO	97.	SEE 18 TO	23 ABOVE	****
**** FOR	93 TO	98.	SEE 19 TO	24 ABOVE	****
787	98 TO	103	104 TO	109	3 6
788	99 TO	104	105 TO	110	3 6
**** FOR	106 TO	111.	SEE 9 TO	14 ABOVE	****
**** FOR	107 TO	112.	SEE 2 TO	7 ABOVE	****
**** FOR	108 TO	113.	SEE 17 TO	22 ABOVE	****
**** FOR	109 TO	114.	SEE 36 TO	41 ABOVE	****
**** FOR	110 TO	115.	SEE 8 TO	13 ABOVE	****
**** FOR	111 TO	116.	SEE 9 TO	14 ABOVE	****
**** FOR	112 TO	117.	SEE 2 TO	7 ABOVE	****
**** FOR	113 TO	118.	SEE 17 TO	22 ABOVE	****
**** FOR	114 TO	119.	SEE 36 TO	41 ABOVE	****
**** FOR	117 TO	122.	SEE 14 TO	19 ABOVE	****
**** FOR	118 TO	123.	SEE 15 TO	20 ABOVE	****
789	119 TO	124	130 TO	135	3 6
790	119 TO	124	134 TO	139	3 6
791	119 TO	124	139 TO	144	3 6
792	119 TO	124	148 TO	153	3 6
793	119 TO	124	241 TO	246	3 6
**** FOR	120 TO	125.	SEE 5 TO	10 ABOVE	****

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FCR	121 TO 126.	SEE	50 TO 55 ABOVE	****	
**** FOR	122 TO 127.	SEE	119 TO 124 ABOVE	****	
**** FCR	123 TO 128.	SEE	13 TO 18 ABOVE	****	
**** FCR	129 TO 134.	SEE	8 TO 13 ABOVE	****	
**** FOR	130 TO 135.	SEE	42 TO 47 ABOVE	****	
**** FOR	131 TO 136.	SEE	18 TO 23 ABOVE	****	
**** FOR	132 TO 137.	SEE	19 TO 24 ABOVE	****	
**** FCR	133 TO 138.	SEE	20 TO 25 ABOVE	****	
**** FOR	134 TO 139.	SEE	42 TO 47 ABOVE	****	
**** FOR	135 TO 140.	SEE	18 TO 23 ABOVE	****	
**** FCR	138 TO 143.	SEE	20 TO 25 ABOVE	****	
**** FOR	139 TO 144.	SEE	42 TO 47 ABOVE	****	
**** FOR	140 TO 145.	SEE	36 TO 41 ABOVE	****	
**** FOR	143 TO 148.	SEE	50 TO 55 ABOVE	****	
**** FCR	144 TO 149.	SEE	16 TO 21 ABOVE	****	
**** FOR	145 TO 150.	SEE	17 TO 22 ABOVE	****	
**** FOR	146 TO 151.	SEE	36 TO 41 ABOVE	****	
**** FOR	147 TO 152.	SEE	8 TO 13 ABOVE	****	
**** FOR	148 TO 153.	SEE	42 TO 47 ABOVE	****	
**** FCR	149 TO 154.	SEE	36 TO 41 ABOVE	****	
**** FOR	152 TO 157.	SEE	50 TO 55 ABOVE	****	
**** FOR	153 TO 158.	SEE	16 TO 21 ABOVE	****	
**** FCR	154 TO 159.	SEE	17 TO 22 ABOVE	****	
**** FOR	155 TO 160.	SEE	36 TO 41 ABOVE	****	
**** FOR	156 TO 161.	SEE	8 TO 13 ABOVE	****	
**** FOR	157 TO 162.	SEE	9 TO 14 ABOVE	****	
**** FOR	162 TO 167.	SEE	4 TO 9 ABOVE	****	
**** FOR	163 TO 168.	SEE	5 TO 10 ABOVE	****	
**** FOR	164 TO 169.	SEE	50 TO 55 ABOVE	****	
**** FOR	165 TO 170.	SEE	16 TO 21 ABOVE	****	
**** FOR	166 TO 171.	SEE	1 TO 6 ABOVE	****	
794	167 TO 172		177 TO 182	3	6
795	167 TO 172		205 TO 210	3	6
796	167 TO 172		215 TO 220	3	6
797	168 TO 173		178 TO 183	3	6
798	169 TO 174		179 TO 184	3	6
**** FOR	169 TO 174.	SEE	169 TO 174 ABOVE	****	
799	170 TO 175		180 TO 185	3	6
**** FOR	171 TO 176.	SEE	65 TO 70 ABOVE	****	
**** FOR	172 TO 177.	SEE	1 TO 6 ABOVE	****	
**** FOR	173 TO 178.	SEE	4 TO 9 ABOVE	****	
**** FCR	174 TO 179.	SEE	5 TO 10 ABOVE	****	
**** FOR	175 TO 180.	SEE	50 TO 55 ABOVE	****	
**** FOR	176 TO 181.	SEE	16 TO 21 ABOVE	****	
**** FOR	182 TO 187.	SEE	4 TO 9 ABOVE	****	
**** FOR	183 TO 188.	SEE	13 TO 18 ABOVE	****	
**** FOR	184 TO 189.	SEE	14 TO 19 ABOVE	****	
**** FOR	185 TO 190.	SEE	15 TO 20 ABOVE	****	
**** FOR	186 TO 191.	SEE	119 TO 124 ABOVE	****	
**** FOR	187 TO 192.	SEE	5 TO 10 ABOVE	****	
**** FOR	188 TO 193.	SEE	50 TO 55 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	189 TO 194.	SEE	16 TO 21 ABOVE	****	
**** FOR	190 TO 195.	SEE	17 TO 22 ABOVE	****	
**** FOR	191 TO 196.	SEE	36 TO 41 ABOVE	****	
**** FOR	194 TO 199.	SEE	50 TO 55 ABOVE	****	
**** FOR	195 TO 200.	SEE	16 TO 21 ABOVE	****	
**** FOR	196 TO 201.	SEE	17 TO 22 ABOVE	****	
**** FOR	197 TO 202.	SEE	18 TO 23 ABOVE	****	
**** FOR	202 TO 207.	SEE	20 TO 25 ABOVE	****	
**** FOR	203 TO 208.	SEE	9 TO 14 ABOVE	****	
**** FCR	204 TO 209.	SEE	2 TO 7 ABOVE	****	
**** FCR	207 TO 212.	SEE	63 TO 68 ABOVE	****	
**** FCR	208 TO 213.	SEE	64 TO 69 ABOVE	****	
800	210 TO 215		216 TO 221	3	6
**** FOR	223 TO 228.	SEE	4 TO 9 ABOVE	****	
**** FOR	224 TO 229.	SEE	5 TO 10 ABOVE	****	
**** FCR	225 TO 230.	SEE	50 TO 55 ABOVE	****	
**** FOR	226 TO 231.	SEE	119 TO 124 ABOVE	****	
**** FOR	227 TO 232.	SEE	5 TO 10 ABOVE	****	
**** FOR	228 TO 233.	SEE	50 TO 55 ABOVE	****	
**** FCR	229 TO 234.	SEE	119 TO 124 ABOVE	****	
**** FOR	230 TO 235.	SEE	5 TO 10 ABOVE	****	
**** FCR	231 TO 236.	SEE	50 TO 55 ABOVE	****	
**** FCR	232 TO 237.	SEE	119 TO 124 ABOVE	****	
**** FOR	233 TO 238.	SEE	13 TO 18 ABOVE	****	
**** FOR	234 TO 239.	SEE	14 TO 19 ABOVE	****	
**** FOR	235 TO 240.	SEE	15 TO 20 ABOVE	****	
**** FOR	236 TO 241.	SEE	16 TO 21 ABOVE	****	
**** FCR	237 TO 242.	SEE	17 TO 22 ABOVE	****	
**** FOR	238 TO 243.	SEE	18 TO 23 ABOVE	****	
**** FOR	239 TO 244.	SEE	19 TO 24 ABOVE	****	
**** FCR	240 TO 245.	SEE	20 TO 25 ABOVE	****	
**** FOR	241 TO 246.	SEE	42 TO 47 ABOVE	****	
**** FOR	242 TO 247.	SEE	36 TO 41 ABOVE	****	
**** FOR	245 TO 250.	SEE	50 TO 55 ABOVE	****	
**** FOR	246 TO 251.	SEE	16 TO 21 ABOVE	****	
**** FOR	247 TO 252.	SEE	17 TO 22 ABOVE	****	
**** FCR	248 TO 253.	SEE	36 TO 41 ABOVE	****	
**** FCR	251 TO 256.	SEE	50 TO 55 ABOVE	****	
**** FCR	252 TO 257.	SEE	16 TO 21 ABOVE	****	
**** FOR	253 TO 258.	SEE	17 TO 22 ABOVE	****	
**** FOR	254 TO 259.	SEE	18 TO 23 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 7 NOTES IN LENGTH --
 TONAL INVERSION
 WAS BEGUN AT 692 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
8001	1 TO	7	10 TO	16	3 7
8002	1 TO	7	28 TO	34	3 7
8003	1 TO	7	30 TO	36	3 7
8004	1 TO	7	32 TO	38	3 7
8005	1 TO	7	70 TO	76	3 7
8006	1 TO	7	72 TO	78	3 7
8007	1 TO	7	74 TO	80	3 7
8008	1 TO	7	76 TO	82	3 7
8009	1 TO	7	78 TO	84	3 7
8010	1 TO	7	80 TO	86	3 7
8011	1 TO	7	82 TO	88	3 7
8012	1 TO	7	158 TO	164	3 7
8013	1 TO	7	160 TO	166	3 7
8014	2 TO	8	29 TO	35	3 7
8015	2 TO	8	31 TO	37	3 7
8016	2 TO	8	33 TO	39	3 7
8017	2 TO	8	52 TO	58	3 7
8018	2 TO	8	71 TO	77	3 7
8019	2 TO	8	73 TO	79	3 7
8020	2 TO	8	75 TO	81	3 7
8021	2 TO	8	77 TO	83	3 7
8022	2 TO	8	79 TO	85	3 7
8023	2 TO	8	81 TO	87	3 7
8024	2 TO	8	159 TO	165	3 7
8025	4 TO	10	35 TO	41	3 7
8026	4 TO	10	54 TO	60	3 7
8027	4 TO	10	66 TO	72	3 7
8028	4 TO	10	88 TO	94	3 7
8029	4 TO	10	108 TO	114	3 7
8030	4 TO	10	113 TO	119	3 7
8031	4 TO	10	145 TO	151	3 7
8032	4 TO	10	154 TO	160	3 7
8033	4 TO	10	190 TO	196	3 7
8034	4 TO	10	247 TO	253	3 7
8035	5 TO	11	36 TO	42	3 7
8036	5 TO	11	47 TO	53	3 7
8037	5 TO	11	58 TO	64	3 7
8038	5 TO	11	114 TO	120	3 7
8039	5 TO	11	140 TO	146	3 7
8040	5 TO	11	149 TO	155	3 7
8041	5 TO	11	191 TO	197	3 7
8042	5 TO	11	242 TO	248	3 7
8043	5 TO	11	248 TO	254	3 7
8044	6 TO	12	37 TO	43	3 7

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
845	6 TO 12		48 TO 54	3	7
846	6 TO 12		59 TO 65	3	7
847	6 TO 12		141 TO 147	3	7
848	6 TO 12		150 TO 156	3	7
849	6 TO 12		192 TO 198	3	7
850	6 TO 12		243 TO 249	3	7
851	6 TO 12		249 TO 255	3	7
852	7 TO 13		49 TO 55	3	7
853	7 TO 13		142 TO 148	3	7
854	7 TO 13		151 TO 157	3	7
855	7 TO 13		193 TO 199	3	7
856	7 TO 13		244 TO 250	3	7
857	7 TO 13		250 TO 256	3	7
858	8 TO 14		50 TO 56	3	7
859	8 TO 14		86 TO 92	3	7
860	8 TO 14		143 TO 149	3	7
861	8 TO 14		152 TO 158	3	7
862	8 TO 14		164 TO 170	3	7
863	8 TO 14		175 TO 181	3	7
864	8 TO 14		188 TO 194	3	7
865	8 TO 14		194 TO 200	3	7
866	8 TO 14		245 TO 251	3	7
867	8 TO 14		251 TO 257	3	7
868	9 TO 15		51 TO 57	3	7
869	9 TO 15		165 TO 171	3	7
870	13 TO 19		24 TO 30	3	7
871	13 TO 19		43 TO 49	3	7
872	13 TO 19		92 TO 98	3	7
873	13 TO 19		131 TO 137	3	7
874	13 TO 19		238 TO 244	3	7
875	14 TO 20		25 TO 31	3	7
876	14 TO 20		44 TO 50	3	7
877	14 TO 20		132 TO 138	3	7
878	14 TO 20		239 TO 245	3	7
879	15 TO 21		26 TO 32	3	7
880	15 TO 21		202 TO 208	3	7
881	17 TO 23		182 TO 188	3	7
882	18 TO 24		183 TO 189	3	7
883	18 TO 24		233 TO 239	3	7
884	19 TO 25		117 TO 123	3	7
885	19 TO 25		184 TO 190	3	7
886	19 TO 25		234 TO 240	3	7
887	20 TO 26		235 TO 241	3	7
888	42 TO 48		122 TO 128	3	7
889	42 TO 48		232 TO 238	3	7
890	50 TO 56		68 TO 74	3	7
891	50 TO 56		110 TO 116	3	7
892	50 TO 56		156 TO 162	3	7
893	63 TO 69		211 TO 217	3	7
894	64 TO 70		212 TO 218	3	7
895	65 TO 71		181 TO 187	3	7

PAT TERN	NCTES	RELATED TC	NOTES	TEST	LFNGTH
856	65 TO 71		222 TO 228	3	7
857	98 TO 104		104 TO 110	3	7
898	119 TO 125		139 TO 145	3	7
899	119 TO 125		148 TO 154	3	7
900	119 TO 125		241 TO 247	3	7
901	167 TO 173		177 TO 183	3	7
902	168 TO 174		178 TO 184	3	7
903	169 TO 175		179 TO 185	3	7
904	170 TO 176		180 TO 186	3	7

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 8 NOTES IN LENGTH --
 TONAL INVERSION
 WAS BEGUN AT 716 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
905	1 TO 8		28 TO 35	3	8
906	1 TO 8		30 TO 37	3	8
907	1 TO 8		32 TO 39	3	8
908	1 TO 8		70 TO 77	3	8
909	1 TO 8		72 TO 79	3	8
910	1 TO 8		74 TO 81	3	8
911	1 TO 8		76 TO 83	3	8
912	1 TO 8		78 TO 85	3	8
913	1 TO 8		80 TO 87	3	8
914	1 TO 8		158 TO 165	3	8
915	2 TO 9		33 TO 40	3	8
916	2 TO 9		52 TO 59	3	8
917	4 TO 11		35 TO 42	3	8
918	4 TO 11		113 TO 120	3	8
919	4 TO 11		190 TO 197	3	8
920	4 TO 11		247 TO 254	3	8
921	5 TO 12		36 TO 43	3	8
922	5 TO 12		47 TO 54	3	8
923	5 TO 12		58 TO 65	3	8
924	5 TO 12		140 TO 147	3	8
925	5 TO 12		149 TO 156	3	8
926	5 TO 12		191 TO 198	3	8
927	5 TO 12		242 TO 249	3	8
928	5 TO 12		248 TO 255	3	8
929	6 TO 13		48 TO 55	3	8
930	6 TO 13		141 TO 148	3	8
931	6 TO 13		150 TO 157	3	8
932	6 TO 13		192 TO 199	3	8
933	6 TO 13		243 TO 250	3	8
934	6 TO 13		249 TO 256	3	8
935	7 TO 14		49 TO 56	3	8
936	7 TO 14		142 TO 149	3	8
937	7 TO 14		151 TO 158	3	8
938	7 TO 14		193 TO 200	3	8
939	7 TO 14		244 TO 251	3	8
940	7 TO 14		250 TO 257	3	8
941	8 TO 15		50 TO 57	3	8
942	8 TO 15		164 TO 171	3	8
943	9 TO 16		51 TO 58	3	8
944	13 TO 20		24 TO 31	3	8
945	13 TO 20		43 TO 50	3	8
946	13 TO 20		131 TO 138	3	8
947	13 TO 20		238 TO 245	3	8
948	14 TO 21		25 TO 32	3	8

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
549	17 TO 24		182 TO 189	3	8
950	18 TO 25		183 TO 190	3	8
951	18 TO 25		233 TO 240	3	8
952	19 TO 26		234 TO 241	3	8
953	42 TO 49		232 TO 239	3	8
954	50 TO 57		68 TO 75	3	8
955	50 TO 57		110 TO 117	3	8
956	50 TO 57		156 TO 163	3	8
957	63 TO 70		211 TO 218	3	8
958	65 TO 72		222 TO 229	3	8
959	167 TO 174		177 TO 184	3	8
960	168 TO 175		178 TO 185	3	8
961	169 TO 176		179 TO 186	3	8

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 9 NOTES IN LENGTH --
 TONAL INVERSION
 WAS BEGUN AT 736 SECCNDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
962	1 TO 9		32 TO 40	3	9
963	2 TO 10		33 TO 41	3	9
964	2 TO 10		52 TO 60	3	9
965	4 TO 12		35 TO 43	3	9
966	4 TO 12		190 TO 198	3	9
967	4 TO 12		247 TO 255	3	9
968	5 TO 13		47 TO 55	3	9
969	5 TO 13		140 TO 148	3	9
970	5 TO 13		149 TO 157	3	9
971	5 TO 13		191 TO 199	3	9
972	5 TO 13		242 TO 250	3	9
973	5 TO 13		248 TO 256	3	9
974	6 TO 14		48 TO 56	3	9
975	6 TO 14		141 TO 149	3	9
976	6 TO 14		150 TO 158	3	9
977	6 TO 14		192 TO 200	3	9
978	6 TO 14		243 TO 251	3	9
979	6 TO 14		249 TO 257	3	9
980	7 TO 15		49 TO 57	3	9
981	8 TO 16		50 TO 58	3	9
982	9 TO 17		51 TO 59	3	9
983	13 TO 21		24 TO 32	3	9
984	17 TO 25		182 TO 190	3	9
985	18 TO 26		233 TO 241	3	9
986	42 TO 50		232 TO 240	3	9
987	50 TO 58		68 TO 76	3	9
988	50 TO 58		156 TO 164	3	9
989	65 TO 73		222 TO 230	3	9
990	167 TO 175		177 TO 185	3	9
991	168 TO 176		178 TO 186	3	9

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 10 NOTES IN LENGTH --
 TONAL INVERSION
 WAS BEGUN AT 754 SECONDS INTO EXECUTION.

PAT TERN	NCTES	RELATED TC	NOTES	TEST	LENGTH
992	1 TO 10		32 TO 41	3	10
993	2 TO 11		33 TO 42	3	10
994	4 TO 13		190 TO 199	3	10
995	4 TO 13		247 TO 256	3	10
996	5 TO 14		47 TO 56	3	10
997	5 TO 14		140 TO 149	3	10
998	5 TO 14		149 TO 158	3	10
999	5 TO 14		191 TO 200	3	10
1000	5 TO 14		242 TO 251	3	10
1001	5 TO 14		248 TO 257	3	10
1002	6 TO 15		48 TO 57	3	10
1003	7 TO 16		49 TO 58	3	10
1004	8 TO 17		50 TO 59	3	10
1005	167 TO 176		177 TO 186	3	10

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 11 NOTES IN LENGTH --
 TONAL INVERSION
 WAS BEGUN AT 770 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TC	NOTES	TEST	LENGTH
1006	1 TO 11		32 TO 42	3	11
1007	2 TO 12		33 TO 43	3	11
1008	4 TO 14		190 TO 200	3	11
1009	4 TO 14		247 TO 257	3	11
1010	5 TO 15		47 TO 57	3	11
1011	6 TO 16		48 TO 58	3	11
1012	7 TO 17		49 TO 59	3	11

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 12 NOTES IN LENGTH --
 TONAL INVERSION
 WAS BEGUN AT 786 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1013	1 TO 12		32 TO 43	3	12
1014	5 TO 16		47 TO 58	3	12
1015	6 TO 17		48 TO 59	3	12

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 13 NOTES IN LENGTH --
TONAL INVERSION
WAS BEGUN AT 801 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
I 016	5 TO 17		47 TO 59	3	13

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 14 NOTES IN LENGTH --
TONAL INVERSION
WAS BEGUN AT 816 SECONDS INTO EXECUTION.

P A T T E R N	NOTES	RELATED TO	NOTES	TEST	LENGTH
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E N D OF TYPE I LISTING. TOTAL OF 1016 PATTERNS LOCATED.

*** TYPE II LISTING ***

EDGARD VARESE
TUNAL INVERSION

DENSITY 21.5 FOR SOLO FLUTF

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	5 TO 17	2	13
SUBPATTERN	5 TO 14	7	10
SUBPATTERN	6 TO 14	7	9
SUBPATTERN	5 TO 13	7	9
SUBPATTERN	7 TO 14	7	8
SUBPATTERN	6 TO 13	7	8
SUBPATTERN	5 TO 12	9	8
SUBPATTERN	8 TO 14	11	7
SUBPATTERN	7 TO 13	7	7
SUBPATTERN	6 TO 12	9	7
SUBPATTERN	5 TO 11	10	7
SUBPATTERN	9 TO 14	13	6
SUBPATTERN	8 TO 13	15	6
SUBPATTERN	7 TO 12	9	6
SUBPATTERN	6 TO 11	10	6
SUBPATTERN	5 TO 10	16	6
SUBPATTERN	9 TO 13	20	5
SUBPATTERN	8 TO 12	17	5
SUBPATTERN	7 TO 11	10	5
SUBPATTERN	6 TO 10	18	5
SUBPATTERN	5 TO 9	25	5
SUBPATTERN	9 TO 12	22	4
SUBPATTERN	8 TO 11	22	4
SUBPATTERN	7 TO 10	27	4
SUBPATTERN	6 TO 9	27	4

*** TEST 3 COMPLETED AT 1000 SECONDS INTO EXECUTION ****

TEST REQUESTED 4
UNITS OF DATA PER CARD 15

NOTES	55	54	56	51	56	51	57	55	54	56	57	51	57	56	57
NOTES	56	54	51	57	51	57	59	60	57	60	57	60	62	63	62
NOTES	63	62	63	62	63	62	63	62	64	70	64	58	64	70	53
NOTES	59	65	71	59	72	78	66	65	67	65	67	65	66	68	55
NOTES	56	81	61	60	61	61	59	61	58	61	75	74	75	74	75
NOTES	74	75	74	75	74	75	74	75	74	75	74	76	61	60	61
NOTES	59	60	61	59	60	74	75	74	74	74	54	51	54	51	51
NOTES	51	54	64	51	64	51	52	58	54	58	52	65	81	80	68
NOTES	67	81	80	68	81	80	68	67	67	57	68	69	56	57	58
NOTES	59	54	60	70	73	83	73	80	83	80	73	83	73	80	83
NOTES	73	80	83	80	73	83	73	80	83	80	83	80	83	80	83
NOTES	80	73	74	65	74	65	65	64	65	63	65	64	63	65	63
NOTES	64	64	65	63	65	61	56	55	57	56	55	57	55	56	57

ACTES 196 THROUGH 210

56 55 57 52 58 59 66 72 75 90 85 88 85 88 88

ACTES 211 THROUGH 225

85 88 85 85 88 85 88 85 88 88 58 58 58 59 57

ACTES 226 THROUGH 240

74 68 67 74 68 67 74 68 67 74 54 52 51 54 51

ACTES 241 THROUGH 255

54 56 57 54 57 71 60 54 60 50 54 64 54 50 64

ACTES 256 THROUGH 265

50 54 60 64 68 75 77 79 85 -99

**THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --**

**PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH**

*** TYPE I LISTING ***

EDGARD VARESE

DENSITY 21.5 FOR SOLO FLUTE

SEARCH FOR PATTERNS OF 3 NOTES IN LENGTH --
 EXACT INVERSION
 WAS BEGUN AT 28 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO 3		89 TO 91	4	3
2	1 TO 3		92 TO 94	4	3
3	1 TO 3		173 TO 175	4	3
4	1 TO 3		182 TO 184	4	3
5	1 TO 3		223 TO 225	4	3
6	7 TO 9		9 TO 11	4	3
7	7 TO 9		21 TO 23	4	3
8	7 TO 9		27 TO 29	4	3
9	7 TO 9		241 TO 243	4	3
→ → ** FOR	8 TO 10.	SEE	1 TO 3	ABOVE ****	
10	9 TO 11		236 TO 238	4	3
11	11 TO 13		18 TO 20	4	3
12	11 TO 13		39 TO 41	4	3
13	13 TO 15		28 TO 30	4	3
14	13 TO 15		30 TO 32	4	3
15	13 TO 15		32 TO 34	4	3
16	13 TO 15		34 TO 36	4	3
17	13 TO 15		36 TO 38	4	3
18	13 TO 15		72 TO 74	4	3
19	13 TO 15		74 TO 76	4	3
20	13 TO 15		76 TO 78	4	3
21	13 TO 15		78 TO 80	4	3
22	13 TO 15		80 TO 82	4	3
23	13 TO 15		82 TO 84	4	3
24	13 TO 15		84 TO 86	4	3
25	13 TO 15		96 TO 98	4	3
26	13 TO 15		194 TO 196	4	3
27	14 TO 16		29 TO 31	4	3
28	14 TO 16		31 TO 33	4	3
29	14 TO 16		33 TO 35	4	3
30	14 TO 16		35 TO 37	4	3
31	14 TO 16		63 TO 65	4	3
32	14 TO 16		71 TO 73	4	3
33	14 TO 16		73 TO 75	4	3
34	14 TO 16		75 TO 77	4	3
35	14 TO 16		77 TO 79	4	3
36	14 TO 16		79 TO 81	4	3
37	14 TO 16		81 TO 83	4	3
38	14 TO 16		83 TO 85	4	3
39	14 TO 16		88 TO 90	4	3
40	14 TO 16		172 TO 174	4	3
41	15 TO 17		57 TO 59	4	3

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
42	18 TO	20	41 TO	43	4 3
43	18 TO	20	247 TO	249	4 3
*** FOR	19 TO	21,	SEE 11 TO	13 ABOVE	****
*** FOR	21 TO	23,	SEE 9 TO	11 ABOVE	****
44	22 TO	24	237 TO	239	4 3
45	23 TO	25	102 TO	104	4 3
46	23 TO	25	143 TO	145	4 3
47	23 TO	25	152 TO	154	4 3
48	23 TO	25	158 TO	160	4 3
49	23 TO	25	160 TO	162	4 3
50	23 TO	25	162 TO	164	4 3
51	23 TO	25	164 TO	166	4 3
52	23 TO	25	206 TO	208	4 3
53	23 TO	25	211 TO	213	4 3
54	23 TO	25	214 TO	216	4 3
55	23 TO	25	216 TO	218	4 3
56	23 TO	25	238 TO	240	4 3
57	24 TO	26	68 TO	70	4 3
58	24 TO	26	101 TO	103	4 3
59	24 TO	26	159 TO	161	4 3
60	24 TO	26	161 TO	163	4 3
61	24 TO	26	163 TO	165	4 3
62	24 TO	26	207 TO	209	4 3
63	24 TO	26	210 TO	212	4 3
64	24 TO	26	215 TO	217	4 3
65	24 TO	26	217 TO	219	4 3
66	24 TO	26	239 TO	241	4 3
67	24 TO	26	243 TO	245	4 3
*** FOR	25 TO	27,	SEE 23 TO	25 ABOVE	****
*** FOR	27 TO	29,	SEE 9 TO	11 ABOVE	****
*** FOR	28 TO	30,	SEE 14 TO	16 ABOVE	****
*** FOR	29 TO	31,	SEE 13 TO	15 ABOVE	****
*** FOR	30 TO	32,	SEE 14 TO	16 ABOVE	****
*** FOR	31 TO	33,	SEE 13 TO	15 ABOVE	****
*** FOR	32 TO	34,	SEE 14 TO	16 ABOVE	****
*** FOR	33 TO	35,	SEE 13 TO	15 ABOVE	****
*** FOR	34 TO	36,	SEE 14 TO	16 ABOVE	****
*** FOR	35 TO	37,	SEE 13 TO	15 ABOVE	****
*** FOR	36 TO	38,	SEE 14 TO	16 ABOVE	****
*** FOR	37 TO	39,	SEE 1 TO	3 ABOVE	****
*** FOR	39 TO	41,	SEE 18 TO	20 ABOVE	****
68	40 TO	42	42 TO	44	4 3
69	40 TO	42	45 TO	47	4 3
70	40 TO	42	46 TO	48	4 3
**** FOR	41 TO	43,	SEE 11 TO	13 ABOVE	****
71	44 TO	46	225 TO	227	4 3
**** FOR	52 TO	54,	SEE 1 TO	3 ABOVE	****
72	53 TO	55	66 TO	68	4 3
73	53 TO	55	174 TO	176	4 3
74	53 TO	55	183 TO	185	4 3
75	54 TO	56	178 TO	180	4 3

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
76	54 TO	56	191 TO	193	4 3
*** FOR	55 TO	57.	SEE 53 TO	55 ABOVE	**** 3
77	56 TO	58	175 TO	177	4 3
78	56 TO	58	188 TO	190	4 3
79	59 TO	61	124 TO	126	4 3
*** FCR	63 TO	65.	SEE 13 TO	15 ABOVE	**** 3
80	64 TO	66	97 TO	99	4 3
81	64 TO	66	127 TO	129	4 3
*** FOR	66 TO	68.	SEE 54 TO	56 ABOVE	****
*** FOR	68 TO	70.	SEE 23 TO	25 ABOVE	****
*** FOR	71 TO	73.	SEE 13 TO	15 ABOVE	****
*** FOR	72 TO	74.	SEE 14 TO	16 ABOVE	****
*** FOR	73 TO	75.	SEE 13 TO	15 ABOVE	****
*** FOR	74 TO	76.	SEE 14 TO	16 ABOVE	****
*** FOR	75 TO	77.	SEE 13 TO	15 ABOVE	****
*** FOR	76 TO	78.	SEE 14 TO	16 ABOVE	****
*** FOR	77 TO	79.	SEE 13 TO	15 ABOVE	****
*** FOR	78 TO	80.	SEE 14 TO	16 ABOVE	****
*** FOR	79 TO	81.	SEE 13 TO	15 ABOVE	****
*** FOR	80 TO	82.	SEE 14 TO	16 ABOVE	****
*** FOR	81 TO	83.	SEE 13 TO	15 ABOVE	****
*** FOR	82 TO	84.	SEE 14 TO	16 ABOVE	****
*** FCR	83 TO	85.	SEE 13 TO	15 ABOVE	****
*** FOR	84 TO	86.	SEE 14 TO	16 ABOVE	****
*** FOR	85 TO	87.	SEE 1 TO	3 ABOVE	****
*** FOR	88 TO	90.	SEE 13 TO	15 ABOVE	****
82	89 TO	91	177 TO	179	4 3
83	89 TO	91	187 TO	189	4 3
84	89 TO	91	190 TO	192	4 3
85	89 TO	91	196 TO	198	4 3
*** FOR	90 TO	92.	SEE 56 TO	58 ABOVE	**** 3
86	91 TO	93	176 TO	178	4 3
87	91 TO	93	189 TO	191	4 3
88	91 TO	93	195 TO	197	4 3
*** FCR	92 TO	94.	SEE 89 TO	91 ABOVE	****
*** FOR	93 TO	95.	SEE 56 TO	58 ABOVE	****
*** FOR	96 TO	98.	SEE 14 TO	16 ABOVE	****
89	97 TO	99	180 TO	182	4 3
90	98 TO	100	104 TO	106	4 3
91	98 TO	100	221 TO	223	4 3
*** FOR	101 TO	103.	SEE 23 TO	25 ABOVE	****
*** FOR	102 TO	104.	SEE 24 TO	26 ABOVE	****
92	103 TO	105	208 TO	210	4 3
93	103 TO	105	218 TO	220	4 3
*** FOR	104 TO	106.	SEE 98 TO	100 ABOVE	****
94	105 TO	107	209 TO	211	4 3
*** FCR	110 TO	112.	SEE 59 TO	61 ABOVE	****
95	124 TO	126	132 TO	134	4 3
*** FOR	127 TO	129.	SEE 97 TO	99 ABOVE	****
*** FOR	132 TO	134.	SEE 59 TO	61 ABOVE	****
*** FCR	133 TO	135.	SEE 91 TO	93 ABOVE	****

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
*** FOR	134 TO 136.	SEE	91 TO 93 ABOVE	****	
*** FOR	143 TO 145.	SEE	24 TO 26 ABOVE	****	
*** FOR	152 TO 154.	SEE	24 TO 26 ABOVE	****	
*** FOR	158 TO 160.	SEE	24 TO 26 ABOVE	****	
*** FOR	159 TO 161.	SEE	23 TO 25 ABOVE	****	
*** FOR	160 TO 162.	SEE	24 TO 26 ABOVE	****	
*** FOR	161 TO 163.	SEE	23 TO 25 ABOVE	****	
*** FOR	162 TO 164.	SEE	24 TO 26 ABOVE	****	
*** FOR	163 TO 165.	SEE	23 TO 25 ABOVE	****	
*** FOR	164 TO 166.	SEE	24 TO 26 ABOVE	****	
96	171 TO 173		181 TO 183	4	3
97	171 TO 173		222 TO 224	4	3
*** FOR	172 TO 174.	SEE	13 TO 15 ABOVE	****	
*** FOR	173 TO 175.	SEE	89 TO 91 ABOVE	****	
*** FOR	174 TO 176.	SEE	54 TO 56 ABOVE	****	
98	175 TO 177		179 TO 181	4	3
99	175 TO 177		192 TO 194	4	3
100	176 TO 178		193 TO 195	4	3
*** FOR	177 TO 179.	SEE	1 TO 3 ABOVE	****	
*** FOR	178 TO 180.	SEE	53 TO 55 ABOVE	****	
*** FOR	179 TO 181.	SEE	56 TO 58 ABOVE	****	
*** FOR	180 TO 182.	SEE	64 TO 66 ABOVE	****	
*** FOR	182 TO 184.	SEE	89 TO 91 ABOVE	****	
*** FOR	183 TO 185.	SEE	54 TO 56 ABOVE	****	
*** FOR	187 TO 189.	SEE	1 TO 3 ABOVE	****	
*** FOR	188 TO 190.	SEE	175 TO 177 ABOVE	****	
*** FOR	189 TO 191.	SEE	176 TO 178 ABOVE	****	
*** FOR	190 TO 192.	SEE	1 TO 3 ABOVE	****	
*** FOR	191 TO 193.	SEE	53 TO 55 ABOVE	****	
*** FOR	192 TO 194.	SEE	56 TO 58 ABOVE	****	
*** FOR	193 TO 195.	SEE	91 TO 93 ABOVE	****	
*** FOR	194 TO 196.	SEE	14 TO 16 ABOVE	****	
*** FOR	195 TO 197.	SEE	176 TO 178 ABOVE	****	
*** FOR	196 TO 198.	SEE	1 TO 3 ABOVE	****	
101	199 TO 201		226 TO 228	4	3
102	199 TO 201		229 TO 231	4	3
103	199 TO 201		232 TO 234	4	3
*** FOR	206 TO 208.	SEE	24 TO 26 ABOVE	****	
*** FOR	207 TO 209.	SEE	23 TO 25 ABOVE	****	
104	208 TO 210		212 TO 214	4	3
105	209 TO 211		213 TO 215	4	3
*** FOR	210 TO 212.	SEE	23 TO 25 ABOVE	****	
*** FOR	211 TO 213.	SEE	24 TO 26 ABOVE	****	
*** FOR	212 TO 214.	SEE	103 TO 105 ABOVE	****	
*** FOR	213 TO 215.	SEE	105 TO 107 ABOVE	****	
*** FOR	214 TO 216.	SEE	24 TO 26 ABOVE	****	
*** FOR	215 TO 217.	SEE	23 TO 25 ABOVE	****	
*** FOR	216 TO 218.	SEE	24 TO 26 ABOVE	****	
*** FOR	217 TO 219.	SEE	23 TO 25 ABOVE	****	
*** FOR	218 TO 220.	SEE	208 TO 210 ABOVE	****	
*** FOR	221 TO 223.	SEE	98 TO 100 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	223 TO 225.	SEE	89 TO 91 ABOVE	****	
**** FOR	236 TO 238.	SEE	7 TO 9 ABOVE	****	
106	237 TO 239		242 TO 244	4	3
**** FOR	238 TO 240.	SEE	24 TO 26 ABOVE	****	
**** FOR	239 TO 241.	SEE	23 TO 25 ABOVE	****	
**** FOR	241 TO 243.	SEE	9 TO 11 ABOVE	****	
**** FOR	242 TO 244.	SEE	22 TO 24 ABOVE	****	
**** FOR	243 TO 245.	SEE	23 TO 25 ABOVE	****	
**** FOR	247 TO 249.	SEE	11 TO 13 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 4 NOTES IN LENGTH --
 EXACT INVERSION
 WAS BEGUN AT 195 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
107	13 TO 16		28 TO 31	4	4
108	13 TO 16		30 TO 33	4	4
109	13 TO 16		32 TO 35	4	4
110	13 TO 16		34 TO 37	4	4
111	13 TO 16		72 TO 75	4	4
112	13 TO 16		74 TO 77	4	4
113	13 TO 16		76 TO 79	4	4
114	13 TO 16		78 TO 81	4	4
115	13 TO 16		80 TO 83	4	4
116	13 TO 16		82 TO 85	4	4
117	21 TO 24		236 TO 239	4	4
118	22 TO 25		237 TO 240	4	4
119	23 TO 26		158 TO 161	4	4
120	23 TO 26		160 TO 163	4	4
121	23 TO 26		162 TO 165	4	4
122	23 TO 26		206 TO 209	4	4
123	23 TO 26		214 TO 217	4	4
124	23 TO 26		216 TO 219	4	4
125	23 TO 26		238 TO 241	4	4
126	24 TO 27		101 TO 104	4	4
127	24 TO 27		159 TO 162	4	4
128	24 TO 27		161 TO 164	4	4
129	24 TO 27		163 TO 166	4	4
130	24 TO 27		210 TO 213	4	4
131	24 TO 27		215 TO 218	4	4
132	28 TO 31		31 TO 34	4	4
133	28 TO 31		33 TO 36	4	4
134	28 TO 31		35 TO 38	4	4
135	28 TO 31		71 TO 74	4	4
136	28 TO 31		73 TO 76	4	4
137	28 TO 31		75 TO 78	4	4
138	28 TO 31		77 TO 80	4	4
139	28 TO 31		79 TO 82	4	4
140	28 TO 31		81 TO 84	4	4
141	28 TO 31		83 TO 86	4	4
**** FOR	29 TO 32,	SEE	13 TO 16 ABOVE	****	
**** FOR	30 TO 33,	SEE	28 TO 31 ABOVE	****	
**** FOR	31 TO 34,	SEE	13 TO 16 ABOVE	****	
**** FOR	32 TO 35,	SEE	28 TO 31 ABOVE	****	
**** FOR	33 TO 36,	SEE	13 TO 16 ABOVE	****	
**** FOR	34 TO 37,	SEE	28 TO 31 ABOVE	****	
**** FOR	35 TO 38,	SEE	13 TO 16 ABOVE	****	
142	36 TO 39		88 TO 91	4	4
143	36 TO 39		172 TO 175	4	4

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
144	52 TO 55		173 TO 176	4	4
145	52 TO 55		182 TO 185	4	4
146	55 TO 58		174 TO 177	4	4
147	63 TO 66		96 TO 99	4	4
**** FOR	71 TO 74.	SEE	13 TO 16 ABOVE	****	
**** FOR	72 TO 75.	SEE	28 TO 31 ABOVE	****	
**** FOR	73 TO 76.	SEE	13 TO 16 ABOVE	****	
**** FOR	74 TO 77.	SEE	28 TO 31 ABOVE	****	
**** FOR	75 TO 78.	SEE	13 TO 16 ABOVE	****	
**** FOR	76 TO 79.	SEE	28 TO 31 ABOVE	****	
**** FOR	77 TO 80.	SEE	13 TO 16 ABOVE	****	
**** FOR	78 TO 81.	SEE	28 TO 31 ABOVE	****	
**** FOR	79 TO 82.	SEE	13 TO 16 ABOVE	****	
**** FOR	80 TO 83.	SEE	28 TO 31 ABOVE	****	
**** FOR	81 TO 84.	SEE	13 TO 16 ABOVE	****	
**** FOR	82 TO 85.	SEE	28 TO 31 ABOVE	****	
**** FOR	83 TO 86.	SEE	13 TO 16 ABOVE	****	
**** FOR	84 TO 87.	SEE	36 TO 39 ABOVE	****	
148	89 TO 92		187 TO 190	4	4
149	90 TO 93		175 TO 178	4	4
150	90 TO 93		188 TO 191	4	4
151	91 TO 94		176 TO 179	4	4
152	91 TO 94		189 TO 192	4	4
153	91 TO 94		195 TO 198	4	4
**** FOR	92 TO 95.	SEE	89 TO 92 ABOVE	****	
**** FOR	101 TO 104.	SEE	23 TO 26 ABOVE	****	
154	102 TO 105		207 TO 210	4	4
155	102 TO 105		217 TO 220	4	4
**** FOR	158 TO 161.	SEE	24 TO 27 ABOVE	****	
**** FOR	159 TO 162.	SEE	23 TO 26 ABOVE	****	
**** FOR	160 TO 163.	SEE	24 TO 27 ABOVE	****	
**** FOR	161 TO 164.	SEE	23 TO 26 ABOVE	****	
**** FOR	162 TO 165.	SEE	24 TO 27 ABOVE	****	
**** FOR	163 TO 166.	SEE	23 TO 26 ABOVE	****	
156	173 TO 176		177 TO 180	4	4
157	173 TO 176		190 TO 193	4	4
158	174 TO 177		178 TO 181	4	4
159	174 TO 177		191 TO 194	4	4
160	175 TO 178		192 TO 195	4	4
**** FOR	177 TO 180.	SEE	52 TO 55 ABOVE	****	
**** FOR	178 TO 181.	SEE	55 TO 58 ABOVE	****	
**** FOR	182 TO 185.	SEE	173 TO 176 ABOVE	****	
**** FOR	188 TO 191.	SEE	175 TO 178 ABOVE	****	
**** FOR	190 TO 193.	SEE	52 TO 55 ABOVE	****	
**** FOR	191 TO 194.	SEE	55 TO 58 ABOVE	****	
**** FOR	192 TO 195.	SEE	90 TO 93 ABOVE	****	
**** FOR	206 TO 209.	SEE	24 TO 27 ABOVE	****	
161	207 TO 210		211 TO 214	4	4
162	208 TO 211		212 TO 215	4	4
163	209 TO 212		213 TO 216	4	4
**** FOR	210 TO 213.	SEE	23 TO 26 ABOVE	****	

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 211 TO 214.	SEE	102 TO 105	ABOVE ****		
**** FOR 214 TO 217.	SEE	24 TO 27	ABOVE ****		
**** FCR 215 TO 218.	SEE	23 TO 26	ABOVE ****		
**** FOR 216 TO 219.	SEE	24 TO 27	ABOVE ****		
**** FCR 217 TO 220.	SEE	207 TO 210	ABOVE ****		
164 236 TO 239		241 TO 244	4	4	
165 237 TO 240		242 TO 245	4	4	
**** FOR 238 TO 241.	SEE	24 TO 27	ABOVE ****		
**** FCR 241 TO 244.	SEE	21 TO 24	ABOVE ****		
**** FCR 242 TO 245.	SEE	22 TO 25	ABOVE ****		

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 5 NOTES IN LENGTH --
 EXACT INVERSION
 WAS BEGUN AT 255 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
166	21 TO 25		236 TO 240	4	5
**** FOR	21 TO 25.	SEE	21 TO 25 ABOVE	****	
167	22 TO 26		237 TO 241	4	5
168	89 TO 93		187 TO 191	4	5
169	90 TO 94		175 TO 179	4	5
170	90 TO 94		188 TO 192	4	5
**** FOR	90 TO 94.	SEE	90 TO 94 ABOVE	****	
171	101 TO 105		206 TO 210	4	5
172	101 TO 105		216 TO 220	4	5
173	173 TO 177		177 TO 181	4	5
174	173 TO 177		190 TO 194	4	5
**** FOR	173 TO 177.	SEE	173 TO 177 ABOVE	****	
175	174 TO 178		191 TO 195	4	5
**** FOR	174 TO 178.	SEE	174 TO 178 ABOVE	****	
176	206 TO 210		210 TO 214	4	5
177	207 TO 211		211 TO 215	4	5
**** FOR	207 TO 211.	SEE	207 TO 211 ABOVE	****	
178	208 TO 212		212 TO 216	4	5
179	209 TO 213		213 TO 217	4	5
**** FOR	210 TO 214.	SEE	101 TO 105 ABOVE	****	
**** FOR	216 TO 220.	SEE	206 TO 210 ABOVE	****	
180	236 TO 240		241 TO 245	4	5
**** FOR	236 TO 240.	SEE	236 TO 240 ABOVE	****	
**** FOR	241 TO 245.	SEE	21 TO 25 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 6 NOTES IN LENGTH --
EXACT INVERSION
WAS BEGUN AT 311 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
181	21 TO 26		236 TO 241	4	6
182	89 TO 94		187 TO 192	4	6
183	173 TO 178		190 TO 195	4	6

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 7 NOTES IN LENGTH --
EXACT INVERSION
WAS BEGUN AT 361 SECONDS INTO EXECUTION.

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
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END OF TYPE I LISTING. TOTAL OF 183 PATTERNS LOCATED.

*** TYPE II LISTING ***

EDGARD VARESE
EXACT INVERSION

DENSITY 21.5 FOR SOLO FLUTE

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	173 TO 178	2	6
ORIGINAL PATTERN	89 TO 94	2	6
SUBPATTERN	91 TO 94	4	4
SUBPATTERN	91 TO 93	4	3
SUBPATTERN	89 TO 91	5	3
ORIGINAL PATTERN	21 TO 26	2	6
SUBPATTERN	23 TO 26	8	4
SUBPATTERN	24 TO 26	12	3
SUBPATTERN	23 TO 25	13	3

*** TEST 4 COMPLETED AT 493 SECONDS INTO EXECUTION ***

***** MUSIC MELODIC PATTERN ANALYSIS *****

EDGARD VARESE DENSITY 21.5 FOR SOLO FLUTE

TEST REQUESTED 5
UNITS OF DATA PER CARD 15

CCMPLTER REFERENCE NUMBER ASSIGNMENT

NOTES	1	THROUGH	15												
55	54	56	51	56	51	57	55	54	56	57	51	57	56	57	
NOTES	16	THROUGH	30												
56	54	51	57	51	57	59	60	57	60	57	60	62	63	62	
NOTES	31	THROUGH	45												
63	62	63	62	63	62	63	62	64	70	64	58	64	70	53	
NOTES	46	THROUGH	60												
59	65	71	59	72	78	66	65	67	65	67	65	66	68	55	
NOTES	61	THROUGH	75												
56	81	61	60	61	61	59	61	58	61	75	74	75	74	75	
NOTES	76	THROUGH	90												
74	75	74	75	74	75	74	75	74	75	74	76	61	60	61	
NOTES	91	THROUGH	105												
55	60	61	59	60	74	75	74	74	74	54	51	54	51	51	
NOTES	106	THROUGH	120												
51	54	64	51	64	51	52	58	54	58	52	65	81	80	68	
NOTES	121	THROUGH	135												
67	81	80	68	81	80	68	67	67	57	68	69	56	57	58	
NOTES	136	THROUGH	150												
55	54	60	70	73	83	73	80	83	80	73	83	73	80	83	
NOTES	151	THROUGH	165												
73	80	63	80	73	83	73	80	83	80	83	80	83	80	83	
NOTES	166	THROUGH	180												
80	73	74	65	74	65	65	64	65	63	65	64	63	65	63	
NOTES	181	THROUGH	195												
64	64	65	63	65	61	56	55	57	56	55	57	55	56	57	

NOTES 196 THRCUGH 210

56 55 57 52 58 59 66 72 75 90 85 88 85 88 88

NOTES 211 THRCUGH 225

85 88 85 85 88 85 88 85 88 88 58 58 58 59 57

NOTES 226 THRCUGH 240

74 68 67 74 68 67 74 68 67 74 54 52 51 54 51

NOTES 241 THRCUGH 255

54 56 57 54 57 71 60 54 60 50 54 64 54 50 64

NOTES 256 THRCUGH 265

50 54 60 64 68 75 77 79 85 -99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

PATTERNS WHICH LACK CHANGE-OF-DIRECTION

*** TYPE I LISTING ***

EDGARD VARESE

DENSITY 21.5 FOR SOLO FLUTE

SEARCH FOR PATTERNS OF 3 NOTES IN LENGTH --
 TONAL RETROGRADE
 WAS BEGUN AT 31 SECONDS INTO EXECUTION.

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO	3	3 TO 5	5	3
2	1 TO	3	5 TO 7	5	3
3	1 TO	3	8 TO 10	5	3
4	1 TO	3	11 TO 13	5	3
5	1 TO	3	13 TO 15	5	3
6	1 TO	3	17 TO 19	5	3
7	1 TO	3	19 TO 21	5	3
8	1 TO	3	23 TO 25	5	3
9	1 TO	3	25 TO 27	5	3
10	1 TO	3	29 TO 31	5	3
11	1 TO	3	31 TO 33	5	3
12	1 TO	3	33 TO 35	5	3
13	1 TO	3	35 TO 37	5	3
14	1 TO	3	37 TO 39	5	3
15	1 TO	3	41 TO 43	5	3
16	1 TO	3	44 TO 46	5	3
17	1 TO	3	48 TO 50	5	3
18	1 TO	3	52 TO 54	5	3
19	1 TO	3	54 TO 56	5	3
20	1 TO	3	56 TO 58	5	3
21	1 TO	3	59 TO 61	5	3
22	1 TO	3	63 TO 65	5	3
23	1 TO	3	66 TO 68	5	3
24	1 TO	3	68 TO 70	5	3
25	1 TO	3	71 TO 73	5	3
26	1 TO	3	73 TO 75	5	3
27	1 TO	3	75 TO 77	5	3
28	1 TO	3	77 TO 79	5	3
29	1 TO	3	79 TO 81	5	3
30	1 TO	3	81 TO 83	5	3
31	1 TO	3	83 TO 85	5	3
32	1 TO	3	85 TO 87	5	3
33	1 TO	3	88 TO 90	5	3
34	1 TO	3	90 TO 92	5	3
35	1 TO	3	93 TO 95	5	3
36	1 TO	3	101 TO 103	5	3
37	1 TO	3	108 TO 110	5	3
38	1 TO	3	110 TO 112	5	3
39	1 TO	3	113 TO 115	5	3
40	1 TO	3	115 TO 117	5	3
41	1 TO	3	120 TO 122	5	3
42	1 TO	3	123 TO 125	5	3

PATTERN	NCTES	RELATED TC	NOTES	TEST	LENGTH
43	1 TC	3	129 TO 131	5	3
44	1 TC	3	132 TO 134	5	3
45	1 TO	3	136 TO 138	5	3
46	1 TO	3	141 TO 143	5	3
47	1 TO	3	145 TO 147	5	3
48	1 TO	3	147 TO 149	5	3
49	1 TO	3	150 TO 152	5	3
50	1 TO	3	154 TO 156	5	3
51	1 TO	3	156 TO 158	5	3
52	1 TO	3	159 TO 161	5	3
53	1 TO	3	161 TO 163	5	3
54	1 TO	3	163 TO 165	5	3
55	1 TO	3	166 TO 168	5	3
56	1 TO	3	168 TO 170	5	3
57	1 TO	3	172 TO 174	5	3
58	1 TO	3	174 TO 176	5	3
59	1 TO	3	177 TO 179	5	3
60	1 TO	3	179 TO 181	5	3
61	1 TO	3	183 TO 185	5	3
62	1 TO	3	187 TO 189	5	3
63	1 TO	3	190 TO 192	5	3
64	1 TO	3	192 TO 194	5	3
65	1 TO	3	196 TO 198	5	3
66	1 TO	3	198 TO 200	5	3
67	1 TO	3	205 TO 207	5	3
68	1 TO	3	207 TO 209	5	3
69	1 TO	3	210 TO 212	5	3
70	1 TO	3	215 TO 217	5	3
71	1 TO	3	217 TO 219	5	3
72	1 TO	3	224 TO 226	5	3
73	1 TO	3	227 TO 229	5	3
74	1 TO	3	230 TO 232	5	3
75	1 TO	3	233 TO 235	5	3
76	1 TO	3	237 TO 239	5	3
77	1 TO	3	239 TO 241	5	3
78	1 TO	3	243 TO 245	5	3
79	1 TO	3	247 TO 249	5	3
80	1 TO	3	249 TO 251	5	3
81	1 TO	3	253 TO 255	5	3
82	1 TO	3	255 TO 257	5	3
83	2 TO	4	4 TO 6	5	3
84	2 TO	4	6 TO 8	5	3
85	2 TO	4	10 TO 12	5	3
86	2 TO	4	12 TO 14	5	3
87	2 TO	4	14 TO 16	5	3
88	2 TO	4	18 TO 20	5	3
89	2 TO	4	22 TO 24	5	3
90	2 TO	4	24 TO 26	5	3
91	2 TO	4	28 TO 30	5	3
92	2 TO	4	30 TO 32	5	3
93	2 TO	4	32 TO 34	5	3

PAT TERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
04	2 TO	4	34 TO 36	5	3
05	2 TO	4	36 TO 38	5	3
06	2 TO	4	39 TO 41	5	3
07	2 TO	4	43 TO 45	5	3
08	2 TO	4	47 TO 49	5	3
09	2 TO	4	50 TO 52	5	3
100	2 TO	4	53 TO 55	5	3
101	2 TO	4	55 TO 57	5	3
102	2 TO	4	58 TO 60	5	3
103	2 TO	4	61 TO 63	5	3
1C4	2 TO	4	67 TO 69	5	3
105	2 TO	4	70 TO 72	5	3
1C6	2 TO	4	72 TO 74	5	3
1C7	2 TO	4	74 TO 76	5	3
1C8	2 TO	4	76 TO 78	5	3
109	2 TO	4	78 TO 80	5	3
110	2 TO	4	80 TO 82	5	3
111	2 TO	4	82 TO 84	5	3
112	2 TO	4	84 TO 86	5	3
113	2 TC	4	86 TO 88	5	3
114	2 TO	4	89 TO 91	5	3
115	2 TO	4	92 TO 94	5	3
116	2 TO	4	96 TO 98	5	3
117	2 TO	4	102 TO 104	5	3
118	2 TO	4	107 TO 109	5	3
119	2 TO	4	109 TO 111	5	3
120	2 TO	4	112 TO 114	5	3
121	2 TO	4	114 TO 116	5	3
122	2 TO	4	117 TO 119	5	3
123	2 TO	4	121 TO 123	5	3
124	2 TO	4	124 TO 126	5	3
125	2 TO	4	131 TO 133	5	3
126	2 TO	4	135 TO 137	5	3
127	2 TO	4	140 TO 142	5	3
128	2 TO	4	143 TO 145	5	3
129	2 TO	4	146 TO 148	5	3
130	2 TO	4	149 TO 151	5	3
131	2 TO	4	152 TO 154	5	3
132	2 TO	4	155 TO 157	5	3
133	2 TO	4	158 TO 160	5	3
134	2 TO	4	160 TO 162	5	3
135	2 TO	4	162 TO 164	5	3
136	2 TO	4	164 TO 166	5	3
137	2 TO	4	167 TO 169	5	3
138	2 TO	4	169 TO 171	5	3
139	2 TO	4	173 TO 175	5	3
140	2 TO	4	175 TO 177	5	3
141	2 TO	4	178 TO 180	5	3
142	2 TO	4	182 TO 184	5	3
143	2 TO	4	184 TO 186	5	3
144	2 TO	4	188 TO 190	5	3

PAT TERN	NCES	RELATED TC	NOTES	TEST	LENGTH
145	2 TO	4	191 TO	193	5 3
146	2 TO	4	194 TO	196	5 3
147	2 TO	4	197 TO	199	5 3
148	2 TO	4	204 TO	206	5 3
149	2 TO	4	206 TO	208	5 3
150	2 TO	4	211 TO	213	5 3
151	2 TO	4	214 TO	216	5 3
152	2 TO	4	216 TO	218	5 3
153	2 TO	4	223 TO	225	5 3
154	2 TO	4	225 TO	227	5 3
155	2 TO	4	228 TO	230	5 3
156	2 TO	4	231 TO	233	5 3
157	2 TO	4	234 TO	236	5 3
158	2 TO	4	238 TO	240	5 3
159	2 TO	4	242 TO	244	5 3
160	2 TO	4	245 TO	247	5 3
161	2 TO	4	248 TO	250	5 3
162	2 TO	4	251 TO	253	5 3
163	2 TO	4	254 TO	256	5 3
** * * FOR	3 TO	5.	SEE 1 TO	3 ABOVE	****
** * * FOR	4 TO	6.	SEE 2 TO	4 ABOVE	****
** * * FOR	5 TO	7.	SEE 1 TO	3 ABOVE	****
** * * FOR	6 TO	8.	SEE 2 TO	4 ABOVE	****
** * * FOR	8 TO	10.	SEE 1 TO	3 ABOVE	****
** * * FOR	10 TO	12.	SEE 2 TO	4 ABOVE	****
** * * FOR	11 TO	13.	SEE 1 TO	3 ABOVE	****
** * * FOR	12 TO	14.	SEE 2 TO	4 ABOVE	****
** * * FOR	13 TO	15.	SEE 1 TO	3 ABOVE	****
** * * FCR	14 TO	16.	SEE 2 TO	4 ABOVE	****
** * * FCR	17 TO	19.	SEE 1 TO	3 ABOVE	****
** * * FOR	18 TO	20.	SEE 2 TO	4 ABOVE	****
** * * FOR	19 TO	21.	SEE 1 TO	3 ABOVE	****
** * * FCR	22 TO	24.	SEE 2 TO	4 ABOVE	****
** * * FOR	23 TO	25.	SEE 1 TO	3 ABOVE	****
** * * FCR	24 TO	26.	SEE 2 TO	4 ABOVE	****
** * * FOR	25 TO	27.	SEE 1 TO	3 ABOVE	****
** * * FCR	28 TO	30.	SEE 2 TO	4 ABOVE	****
** * * FOR	29 TO	31.	SEE 1 TO	3 ABOVE	****
** * * FOR	30 TO	32.	SEE 2 TO	4 ABOVE	****
** * * FCR	31 TO	33.	SEE 1 TO	3 ABOVE	****
** * * FCR	32 TO	34.	SEE 2 TO	4 ABOVE	****
** * * FOR	33 TO	35.	SEE 1 TO	3 ABOVE	****
** * * FOR	34 TO	36.	SEE 2 TO	4 ABOVE	****
** * * FOR	35 TO	37.	SEE 1 TO	3 ABOVE	****
** * * FCR	36 TO	38.	SEE 2 TO	4 ABOVE	****
** * * FCR	37 TO	39.	SEE 1 TO	3 ABOVE	****
** * * FCR	39 TO	41.	SEE 2 TO	4 ABOVE	****
** * * FOR	41 TO	43.	SEE 1 TO	3 ABOVE	****
** * * FOR	43 TO	45.	SEE 2 TO	4 ABOVE	****
** * * FCR	44 TO	46.	SEE 1 TO	3 ABOVE	****
** * * FCR	47 TO	49.	SEE 2 TO	4 ABOVE	****

PAT	ERN	NCES	RELATED TO	NCES	TEST	LENGTH
***	FOR	48 TO	50,	SEE	1 TO	3 ABOVE ****
***	FOR	50 TO	52,	SEE	2 TO	4 ABOVE ****
***	FOR	52 TO	54,	SEE	1 TO	3 ABOVE ****
***	FOR	53 TO	55,	SEE	2 TO	4 ABOVE ****
***	FOR	54 TO	56,	SEE	1 TO	3 ABOVE ****
***	FOR	55 TO	57,	SEE	2 TO	4 ABOVE ****
***	FOR	56 TO	58,	SEE	1 TO	3 ABOVE ****
***	FOR	58 TO	60,	SEE	2 TO	4 ABOVE ****
***	FOR	59 TO	61,	SEE	1 TO	3 ABOVE ****
***	FOR	61 TO	63,	SEE	2 TO	4 ABOVE ****
***	FOR	63 TO	65,	SEE	1 TO	3 ABOVE ****
164		64 TO	66		99 TO	101 5 3
165		64 TO	66		128 TO	130 5 3
166		64 TO	66		171 TO	173 5 3
167		64 TO	66		209 TO	211 5 3
168		64 TO	66		219 TO	221 5 3
169		65 TO	67		180 TO	182 5 3
170		65 TO	67		208 TO	210 5 3
171		65 TO	67		218 TO	220 5 3
**	FOR	66 TO	68,	SEE	1 TO	3 ABOVE ****
**	FOR	67 TO	69,	SEE	2 TO	4 ABOVE ****
**	FOR	68 TO	70,	SEE	1 TO	3 ABOVE ****
**	FOR	70 TO	72,	SEE	2 TO	4 ABOVE ****
**	FOR	71 TO	73,	SEE	1 TO	3 ABOVE ****
**	FOR	72 TO	74,	SEE	2 TO	4 ABOVE ****
***	FOR	73 TO	75,	SEE	1 TO	3 ABOVE ****
***	FOR	74 TO	76,	SEE	2 TO	4 ABOVE ****
***	FOR	75 TO	77,	SEE	1 TO	3 ABOVE ****
***	FOR	76 TO	78,	SEE	2 TO	4 ABOVE ****
***	FOR	77 TO	79,	SEE	1 TO	3 ABOVE ****
***	FOR	78 TO	80,	SEE	2 TO	4 ABOVE ****
***	FOR	79 TO	81,	SEE	1 TO	3 ABOVE ****
***	FOR	80 TO	82,	SEE	2 TO	4 ABOVE ****
***	FOR	81 TO	83,	SEE	1 TO	3 ABOVE ****
***	FOR	82 TO	84,	SEE	2 TO	4 ABOVE ****
***	FOR	83 TO	85,	SEE	1 TO	3 ABOVE ****
***	FOR	84 TO	86,	SEE	2 TO	4 ABOVE ****
***	FOR	85 TO	87,	SEE	1 TO	3 ABOVE ****
***	FOR	86 TO	88,	SEE	2 TO	4 ABOVE ****
***	FOR	88 TO	90,	SEE	1 TO	3 ABOVE ****
***	FOR	89 TO	91,	SEE	2 TO	4 ABOVE ****
***	FOR	90 TO	92,	SEE	1 TO	3 ABOVE ****
***	FOR	92 TO	94,	SEE	2 TO	4 ABOVE ****
***	FOR	93 TO	95,	SEE	1 TO	3 ABOVE ****
***	FOR	96 TO	98,	SEE	2 TO	4 ABOVE ****
172		97 TO	99		105 TO	107 5 3
173		97 TO	99		181 TO	183 5 3
174		97 TO	99		213 TO	215 5 3
175		97 TO	99		222 TO	224 5 3
***	FOR	99 TO	101,	SEE	65 TO	67 ABOVE ****
***	FOR	101 TO	103,	SEE	1 TO	3 ABOVE ****

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
➡ FOR	102 TO 104.	SEE	2 TO 4 ABOVE	*	
➡ FCR	103 TO 105.	SEE	97 TO 99 ABOVE	*	
176	105 TO 107		127 TO 129	5	3
177	105 TO 107		170 TO 172	5	3
178	105 TO 107		212 TO 214	5	3
179	105 TO 107		220 TO 222	5	3
➡ FOR	107 TO 109.	SEE	2 TO 4 ABOVE	*	
➡ FOR	108 TO 110.	SEE	1 TO 3 ABOVE	*	
➡ FOR	109 TO 111.	SEE	2 TO 4 ABOVE	*	
➡ FOR	110 TO 112.	SEE	1 TO 3 ABOVE	*	
➡ FOR	112 TO 114.	SEE	2 TO 4 ABOVE	*	
➡ FOR	113 TO 115.	SEE	1 TO 3 ABOVE	*	
➡ FOR	114 TO 116.	SEE	2 TO 4 ABOVE	*	
➡ FOR	115 TO 117.	SEE	1 TO 3 ABOVE	*	
➡ FOR	117 TO 119.	SEE	2 TO 4 ABOVE	*	
➡ FOR	120 TO 122.	SEE	1 TO 3 ABOVE	*	
➡ FOR	121 TO 123.	SEE	2 TO 4 ABOVE	*	
➡ FCR	123 TO 125.	SEE	1 TO 3 ABOVE	*	
➡ FOR	124 TO 126.	SEE	2 TO 4 ABOVE	*	
➡ FOR	127 TO 129.	SEE	97 TO 99 ABOVE	*	
➡ FCR	128 TO 130.	SEE	65 TO 67 ABOVE	*	
➡ FOR	129 TO 131.	SEE	1 TO 3 ABOVE	*	
➡ FOR	131 TO 133.	SEE	2 TO 4 ABOVE	*	
➡ FOR	132 TO 134.	SEE	1 TO 3 ABOVE	*	
➡ FOR	135 TO 137.	SEE	2 TO 4 ABOVE	*	
➡ FOR	136 TO 138.	SEE	1 TO 3 ABOVE	*	
➡ FOR	140 TO 142.	SEE	2 TO 4 ABOVE	*	
➡ FOR	141 TO 143.	SEE	1 TO 3 ABOVE	*	
➡ FCR	143 TO 145.	SEE	2 TO 4 ABOVE	*	
➡ FCR	145 TO 147.	SEE	1 TO 3 ABOVE	*	
➡ FOR	146 TO 148.	SEE	2 TO 4 ABOVE	*	
➡ FOR	147 TO 149.	SEE	1 TO 3 ABOVE	*	
➡ FOR	149 TO 151.	SEE	2 TO 4 ABOVE	*	
➡ FOR	150 TO 152.	SEE	1 TO 3 ABOVE	*	
➡ FOR	152 TO 154.	SEE	2 TO 4 ABOVE	*	
➡ FOR	154 TO 156.	SEE	1 TO 3 ABOVE	*	
➡ FOR	155 TO 157.	SEE	2 TO 4 ABOVE	*	
➡ FOR	156 TO 158.	SEE	1 TO 3 ABOVE	*	
➡ FOR	158 TO 160.	SEE	2 TO 4 ABOVE	*	
➡ FOR	159 TO 161.	SEE	1 TO 3 ABOVE	*	
➡ FCR	160 TO 162.	SEE	2 TO 4 ABOVE	*	
➡ FOR	161 TO 163.	SEE	1 TO 3 ABOVE	*	
➡ FOR	162 TO 164.	SEE	2 TO 4 ABOVE	*	
➡ FOR	163 TO 165.	SEE	1 TO 3 ABOVE	*	
➡ FOR	164 TO 166.	SEE	2 TO 4 ABOVE	*	
➡ FOR	166 TO 168.	SEE	1 TO 3 ABOVE	*	
➡ FOR	167 TO 169.	SEE	2 TO 4 ABOVE	*	
➡ FOR	168 TO 170.	SEE	1 TO 3 ABOVE	*	
➡ FOR	169 TO 171.	SEE	2 TO 4 ABOVE	*	
➡ FOR	170 TO 172.	SEE	97 TO 99 ABOVE	*	
➡ FOR	171 TO 173.	SEE	65 TO 67 ABOVE	*	

PAT TERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
*** FGR	172 TO 174.	SEE	1 TO 3 ABOVE	****	
*** FGR	173 TO 175.	SEE	2 TO 4 ABOVE	****	
*** FOR	174 TO 176.	SEE	1 TO 3 ABOVE	****	
*** FCR	175 TO 177.	SEE	2 TO 4 ABOVE	****	
*** FOR	177 TO 179.	SEE	1 TO 3 ABOVE	****	
*** FGR	178 TO 180.	SEE	2 TO 4 ABOVE	****	
*** FCR	179 TO 181.	SEE	1 TO 3 ABOVE	****	
** FGR	180 TO 182.	SEE	64 TO 66 ABOVE	****	
** FOR	181 TO 183.	SEE	105 TO 107 ABOVE	****	
** FOR	182 TO 184.	SEE	2 TO 4 ABOVE	****	
** FOR	183 TO 185.	SEE	1 TO 3 ABOVE	****	
** FCR	184 TO 186.	SEE	2 TO 4 ABOVE	****	
* FOR	187 TO 189.	SEE	1 TO 3 ABOVE	****	
* FOR	188 TO 190.	SEE	2 TO 4 ABOVE	****	
* FOR	190 TO 192.	SEE	1 TO 3 ABOVE	****	
* FOR	191 TO 193.	SEE	2 TO 4 ABOVE	****	
* FOR	192 TO 194.	SEE	1 TO 3 ABOVE	****	
* FCR	194 TO 196.	SEE	2 TO 4 ABOVE	****	
* FOR	196 TO 198.	SEE	1 TO 3 ABOVE	****	
* FOR	197 TO 199.	SEE	2 TO 4 ABOVE	****	
* FOR	198 TO 200.	SEE	1 TO 3 ABOVE	****	
* FCR	204 TO 206.	SEE	2 TO 4 ABOVE	****	
* FOR	205 TO 207.	SEE	1 TO 3 ABOVE	****	
* FOR	206 TO 208.	SEE	2 TO 4 ABOVE	****	
* FOR	207 TO 209.	SEE	1 TO 3 ABOVE	****	
** FOR	208 TO 210.	SEE	64 TO 66 ABOVE	****	
** FGR	209 TO 211.	SEE	65 TO 67 ABOVE	****	
** FGR	210 TO 212.	SEE	1 TO 3 ABOVE	****	
** FOR	211 TO 213.	SEE	2 TO 4 ABOVE	****	
** FOR	212 TO 214.	SEE	97 TO 99 ABOVE	****	
** FOR	213 TO 215.	SEE	105 TO 107 ABOVE	****	
** FOR	214 TO 216.	SEE	2 TO 4 ABOVE	****	
** FOR	215 TO 217.	SEE	1 TO 3 ABOVE	****	
** FOR	216 TO 218.	SEE	2 TO 4 ABOVE	****	
** FOR	217 TO 219.	SEE	1 TO 3 ABOVE	****	
** FOR	218 TO 220.	SEE	64 TO 66 ABOVE	****	
** FOR	219 TO 221.	SEE	65 TO 67 ABOVE	****	
** FOR	220 TO 222.	SEE	97 TO 99 ABOVE	****	
** FOR	222 TO 224.	SEE	105 TO 107 ABOVE	****	
** FOR	223 TO 225.	SEE	2 TO 4 ABOVE	****	
** FOR	224 TO 226.	SEE	1 TO 3 ABOVE	****	
** FOR	225 TO 227.	SEE	2 TO 4 ABOVE	****	
** FOR	227 TO 229.	SEE	1 TO 3 ABOVE	****	
** FOR	228 TO 230.	SEE	2 TO 4 ABOVE	****	
** FOR	230 TO 232.	SEE	1 TO 3 ABOVE	****	
** FCR	231 TO 233.	SEE	2 TO 4 ABOVE	****	
** FCR	233 TO 235.	SEE	1 TO 3 ABOVE	****	
** FOR	234 TO 236.	SEE	2 TO 4 ABOVE	****	
** FOR	237 TO 239.	SEE	1 TO 3 ABOVE	****	
** FOR	238 TO 240.	SEE	2 TO 4 ABOVE	****	
** FOR	239 TO 241.	SEE	1 TO 3 ABOVE	****	

PAT T ERN	NC TES	REL AT ED TO	NOT ES	TEST LENGTH
*** ➡ FOR	242 TO	244.	SEE	2 TO 4 ABOVE ****
*** ➡ FOR	243 TO	245.	SEE	1 TO 3 ABOVE ****
*** ➡ FOR	245 TO	247.	SEE	2 TO 4 ABOVE ****
*** ➡ FOR	247 TO	249.	SEE	1 TO 3 ABOVE ****
*** ➡ FOR	248 TO	250.	SEE	2 TO 4 ABOVE ****
*** ➡ FOR	249 TO	251.	SEE	1 TO 3 ABOVE ****
*** ➡ FOR	251 TO	253.	SEE	2 TO 4 ABOVE ****
*** ➡ FOR	253 TO	255.	SEE	1 TO 3 ABOVE ****
*** ➡ FOR	254 TO	256.	SEE	2 TO 4 ABOVE ****
*** ➡ FOR	255 TO	257.	SEE	1 TO 3 ABOVE ****

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 4 NOTES IN LENGTH --
 TCNAL RETROGRADE
 WAS BEGUN AT 165 SECONDS INTO EXECUTION.

PATTERN	NCOTES	RELATED TO	NOTES	TEST	LENGTH
180	1 TO	4	4 TO 7	5	4
181	1 TO	4	10 TO 13	5	4
182	1 TO	4	12 TO 15	5	4
183	1 TO	4	18 TO 21	5	4
184	1 TO	4	22 TO 25	5	4
185	1 TO	4	24 TO 27	5	4
186	1 TO	4	28 TO 31	5	4
187	1 TO	4	30 TO 33	5	4
188	1 TO	4	32 TO 35	5	4
189	1 TO	4	34 TO 37	5	4
190	1 TO	4	36 TO 39	5	4
191	1 TO	4	43 TO 46	5	4
192	1 TO	4	47 TO 50	5	4
193	1 TO	4	53 TO 56	5	4
194	1 TO	4	55 TO 58	5	4
195	1 TO	4	58 TO 61	5	4
196	1 TO	4	67 TO 70	5	4
197	1 TO	4	70 TO 73	5	4
198	1 TO	4	72 TO 75	5	4
199	1 TO	4	74 TO 77	5	4
200	1 TO	4	76 TO 79	5	4
201	1 TO	4	78 TO 81	5	4
202	1 TO	4	80 TO 83	5	4
203	1 TO	4	82 TO 85	5	4
204	1 TO	4	84 TO 87	5	4
205	1 TO	4	89 TO 92	5	4
206	1 TO	4	92 TO 95	5	4
207	1 TO	4	107 TO 110	5	4
208	1 TO	4	109 TO 112	5	4
209	1 TO	4	112 TO 115	5	4
210	1 TO	4	114 TO 117	5	4
211	1 TO	4	131 TO 134	5	4
212	1 TO	4	135 TO 138	5	4
213	1 TO	4	140 TO 143	5	4
214	1 TO	4	146 TO 149	5	4
215	1 TO	4	149 TO 152	5	4
216	1 TO	4	155 TO 158	5	4
217	1 TO	4	158 TO 161	5	4
218	1 TO	4	160 TO 163	5	4
219	1 TO	4	162 TO 165	5	4
220	1 TO	4	167 TO 170	5	4
221	1 TO	4	173 TO 176	5	4
222	1 TO	4	178 TO 181	5	4
223	1 TO	4	182 TO 185	5	4

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
224	1 TO	4	191 TO	194	5 4
225	1 TO	4	197 TO	200	5 4
226	1 TO	4	204 TO	207	5 4
227	1 TO	4	206 TO	209	5 4
228	1 TO	4	214 TO	217	5 4
229	1 TO	4	216 TO	219	5 4
230	1 TO	4	223 TO	226	5 4
231	1 TO	4	238 TO	241	5 4
232	1 TO	4	242 TO	245	5 4
233	1 TO	4	248 TO	251	5 4
234	1 TO	4	254 TO	257	5 4
235	2 TO	5	5 TO	8	5 4
236	2 TO	5	11 TO	14	5 4
237	2 TO	5	13 TO	16	5 4
238	2 TO	5	17 TO	20	5 4
239	2 TO	5	23 TO	26	5 4
240	2 TO	5	29 TO	32	5 4
241	2 TO	5	31 TO	34	5 4
242	2 TO	5	33 TO	36	5 4
243	2 TO	5	35 TO	38	5 4
244	2 TO	5	52 TO	55	5 4
245	2 TO	5	54 TO	57	5 4
246	2 TO	5	66 TO	69	5 4
247	2 TO	5	71 TO	74	5 4
248	2 TO	5	73 TO	76	5 4
249	2 TO	5	75 TO	78	5 4
250	2 TO	5	77 TO	80	5 4
251	2 TO	5	79 TO	82	5 4
252	2 TO	5	81 TO	84	5 4
253	2 TO	5	83 TO	86	5 4
254	2 TO	5	85 TO	88	5 4
255	2 TO	5	88 TO	91	5 4
256	2 TO	5	101 TO	104	5 4
257	2 TO	5	108 TO	111	5 4
258	2 TO	5	113 TO	116	5 4
259	2 TO	5	120 TO	123	5 4
260	2 TO	5	123 TO	126	5 4
261	2 TO	5	145 TO	148	5 4
262	2 TO	5	154 TO	157	5 4
263	2 TO	5	159 TO	162	5 4
264	2 TO	5	161 TO	164	5 4
265	2 TO	5	163 TO	166	5 4
266	2 TO	5	166 TO	169	5 4
267	2 TO	5	168 TO	171	5 4
268	2 TO	5	172 TO	175	5 4
269	2 TO	5	174 TO	177	5 4
270	2 TO	5	177 TO	180	5 4
271	2 TO	5	183 TO	186	5 4
272	2 TO	5	187 TO	190	5 4
273	2 TO	5	190 TO	193	5 4
274	2 TO	5	196 TO	199	5 4

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
275	2 TO	5	205 TO	208	5 4
276	2 TO	5	210 TO	213	5 4
277	2 TO	5	215 TO	218	5 4
278	2 TO	5	224 TO	227	5 4
279	2 TO	5	227 TO	230	5 4
280	2 TO	5	230 TO	233	5 4
281	2 TO	5	233 TO	236	5 4
282	2 TO	5	237 TO	240	5 4
283	2 TO	5	247 TO	250	5 4
284	2 TO	5	253 TO	256	5 4
**** FOR	3 TO	6.	SEE 1 TO	4 ABOVE	****
**** FOR	4 TO	7.	SEE 2 TO	5 ABOVE	****
**** FOR	5 TO	8.	SEE 1 TO	4 ABOVE	****
285	6 TO	9	9 TO	12	5 4
286	6 TO	9	21 TO	24	5 4
287	6 TO	9	27 TO	30	5 4
288	6 TO	9	38 TO	41	5 4
289	6 TO	9	42 TO	45	5 4
290	6 TO	9	46 TO	49	5 4
291	6 TO	9	49 TO	52	5 4
292	6 TO	9	57 TO	60	5 4
293	6 TO	9	60 TO	63	5 4
294	6 TO	9	69 TO	72	5 4
295	6 TO	9	91 TO	94	5 4
296	6 TO	9	95 TO	98	5 4
297	6 TO	9	106 TO	109	5 4
298	6 TO	9	111 TO	114	5 4
299	6 TO	9	116 TO	119	5 4
300	6 TO	9	130 TO	133	5 4
301	6 TO	9	134 TO	137	5 4
302	6 TO	9	139 TO	142	5 4
303	6 TO	9	142 TO	145	5 4
304	6 TO	9	148 TO	151	5 4
305	6 TO	9	151 TO	154	5 4
306	6 TO	9	157 TO	160	5 4
307	6 TO	9	193 TO	196	5 4
308	6 TO	9	203 TO	206	5 4
309	6 TO	9	241 TO	244	5 4
310	6 TO	9	244 TO	247	5 4
311	6 TO	9	250 TO	253	5 4
312	7 TO	10	19 TO	22	5 4
313	7 TO	10	25 TO	28	5 4
314	7 TO	10	37 TO	40	5 4
315	7 TO	10	41 TO	44	5 4
316	7 TO	10	44 TO	47	5 4
317	7 TO	10	48 TO	51	5 4
318	7 TO	10	56 TO	59	5 4
319	7 TO	10	59 TO	62	5 4
320	7 TO	10	68 TO	71	5 4
321	7 TO	10	90 TO	93	5 4
322	7 TO	10	93 TO	96	5 4

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
323	7 TO	10	110 TO 113	5	4
324	7 TO	10	115 TO 118	5	4
325	7 TO	10	129 TO 132	5	4
326	7 TO	10	132 TO 135	5	4
327	7 TO	10	136 TO 139	5	4
328	7 TO	10	141 TO 144	5	4
329	7 TO	10	147 TO 150	5	4
330	7 TO	10	150 TO 153	5	4
331	7 TO	10	156 TO 159	5	4
332	7 TO	10	192 TO 195	5	4
333	7 TO	10	198 TO 201	5	4
334	7 TO	10	239 TO 242	5	4
335	7 TO	10	243 TO 246	5	4
336	7 TO	10	249 TO 252	5	4
337	7 TO	10	255 TO 258	5	4
338	8 TO	11	16 TO 19	5	4
339	8 TO	11	40 TO 43	5	4
340	8 TO	11	51 TO 54	5	4
341	8 TO	11	62 TO 65	5	4
342	8 TO	11	87 TO 90	5	4
343	8 TO	11	100 TO 103	5	4
344	8 TO	11	119 TO 122	5	4
345	8 TO	11	122 TO 125	5	4
346	8 TO	11	144 TO 147	5	4
347	8 TO	11	153 TO 156	5	4
348	8 TO	11	165 TO 168	5	4
349	8 TO	11	176 TO 179	5	4
350	8 TO	11	186 TO 189	5	4
351	8 TO	11	189 TO 192	5	4
352	8 TO	11	195 TO 198	5	4
353	8 TO	11	226 TO 229	5	4
354	8 TO	11	229 TO 232	5	4
355	8 TO	11	232 TO 235	5	4
356	8 TO	11	236 TO 239	5	4
357	8 TO	11	246 TO 249	5	4
358	8 TO	11	252 TO 255	5	4
359	9 TO	12	14 TO 17	5	4
360	9 TO	12	39 TO 42	5	4
361	9 TO	12	50 TO 53	5	4
362	9 TO	12	61 TO 64	5	4
363	9 TO	12	86 TO 89	5	4
364	9 TO	12	117 TO 120	5	4
365	9 TO	12	121 TO 124	5	4
366	9 TO	12	124 TO 127	5	4
367	9 TO	12	143 TO 146	5	4
368	9 TO	12	152 TO 155	5	4
369	9 TO	12	164 TO 167	5	4
370	9 TO	12	175 TO 178	5	4
371	9 TO	12	184 TO 187	5	4
372	9 TO	12	188 TO 191	5	4
373	9 TO	12	194 TO 197	5	4

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
374	9 TO 12		225 TO 228	5	4
375	9 TO 12		228 TO 231	5	4
376	9 TO 12		231 TO 234	5	4
377	9 TO 12		234 TO 237	5	4
378	9 TO 12		245 TO 248	5	4
379	9 TO 12		251 TO 254	5	4
**** FCR	10 TO 13.	SEE	2 TO 5 ABOVE	****	
**** FOR	11 TO 14.	SEE	1 TO 4 ABOVE	****	
**** FCR	12 TO 15.	SEE	2 TO 5 ABOVE	****	
**** FOR	13 TO 16.	SEE	1 TO 4 ABOVE	****	
**** FCR	14 TO 17.	SEE	6 TO 9 ABOVE	****	
**** FCR	16 TO 19.	SEE	7 TO 10 ABOVE	****	
**** FCR	17 TO 20.	SEE	1 TO 4 ABOVE	****	
**** FOR	18 TO 21.	SEE	2 TO 5 ABOVE	****	
**** FOR	19 TO 22.	SEE	8 TO 11 ABOVE	****	
**** FOR	21 TO 24.	SEE	9 TO 12 ABOVE	****	
**** FOR	22 TO 25.	SEE	2 TO 5 ABOVE	****	
**** FOR	23 TO 26.	SEE	1 TO 4 ABOVE	****	
**** FOR	24 TO 27.	SEE	2 TO 5 ABOVE	****	
**** FCR	25 TO 28.	SEE	8 TO 11 ABOVE	****	
**** FOR	27 TO 30.	SEE	9 TO 12 ABOVE	****	
**** FOR	28 TO 31.	SEE	2 TO 5 ABOVE	****	
**** FCR	29 TO 32.	SEE	1 TO 4 ABOVE	****	
**** FCR	30 TO 33.	SEE	2 TO 5 ABOVE	****	
**** FOR	31 TO 34.	SEE	1 TO 4 ABOVE	****	
**** FCR	32 TO 35.	SEE	2 TO 5 ABOVE	****	
**** FOR	33 TO 36.	SEE	1 TO 4 ABOVE	****	
**** FCR	34 TO 37.	SEE	2 TO 5 ABOVE	****	
**** FOR	35 TO 38.	SEE	1 TO 4 ABOVE	****	
**** FOR	36 TO 39.	SEE	2 TO 5 ABOVE	****	
**** FCR	37 TO 40.	SEE	8 TO 11 ABOVE	****	
**** FOR	38 TO 41.	SEE	9 TO 12 ABOVE	****	
**** FOR	39 TO 42.	SEE	6 TO 9 ABOVE	****	
**** FOR	40 TO 43.	SEE	7 TO 10 ABOVE	****	
**** FOR	41 TO 44.	SEE	8 TO 11 ABOVE	****	
**** FOR	42 TO 45.	SEE	9 TO 12 ABOVE	****	
**** FCR	43 TO 46.	SEE	2 TO 5 ABOVE	****	
**** FCR	44 TO 47.	SEE	8 TO 11 ABOVE	****	
**** FOR	46 TO 49.	SEE	9 TO 12 ABOVE	****	
**** FCR	47 TO 50.	SEE	2 TO 5 ABOVE	****	
**** FOR	48 TO 51.	SEE	8 TO 11 ABOVE	****	
**** FCR	49 TO 52.	SEE	9 TO 12 ABOVE	****	
**** FOR	50 TO 53.	SEE	6 TO 9 ABOVE	****	
**** FOR	51 TO 54.	SEE	7 TO 10 ABOVE	****	
**** FOR	52 TO 55.	SEE	1 TO 4 ABOVE	****	
**** FCR	53 TO 56.	SEE	2 TO 5 ABOVE	****	
**** FOR	54 TO 57.	SEE	1 TO 4 ABOVE	****	
**** FOR	55 TO 58.	SEE	2 TO 5 ABOVE	****	
**** FCR	56 TO 59.	SEE	8 TO 11 ABOVE	****	
**** FCR	57 TO 60.	SEE	9 TO 12 ABOVE	****	
**** FOR	58 TO 61.	SEE	2 TO 5 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	59 TO 62.	SEE	8 TO 11 ABOVE	****	
**** FOR	60 TO 63.	SEE	9 TO 12 ABOVE	****	
**** FOR	61 TO 64.	SEE	6 TO 9 ABOVE	****	
**** FOR	62 TO 65.	SEE	7 TO 10 ABOVE	****	
380	63 TO 66		128 TO 131	5	4
381	63 TO 66		171 TO 174	5	4
382	63 TO 66		209 TO 212	5	4
383	64 TO 67		208 TO 211	5	4
384	64 TO 67		218 TO 221	5	4
385	65 TO 68		179 TO 182	5	4
386	65 TO 68		207 TO 210	5	4
387	65 TO 68		217 TO 220	5	4
**** FOR	66 TO 69.	SEE	1 TO 4 ABOVE	****	
**** FOR	67 TO 70.	SEE	2 TO 5 ABOVE	****	
**** FOR	68 TO 71.	SEE	8 TO 11 ABOVE	****	
**** FOR	69 TO 72.	SEE	9 TO 12 ABOVE	****	
**** FOR	70 TO 73.	SEE	2 TO 5 ABOVE	****	
**** FOR	71 TO 74.	SEE	1 TO 4 ABOVE	****	
**** FOR	72 TO 75.	SEE	2 TO 5 ABOVE	****	
**** FOR	73 TO 76.	SEE	1 TO 4 ABOVE	****	
**** FOR	74 TO 77.	SEE	2 TO 5 ABOVE	****	
**** FOR	75 TO 78.	SEE	1 TO 4 ABOVE	****	
**** FOR	76 TO 79.	SEE	2 TO 5 ABOVE	****	
**** FOR	77 TO 80.	SEE	1 TO 4 ABOVE	****	
**** FOR	78 TO 81.	SEE	2 TO 5 ABOVE	****	
**** FOR	79 TO 82.	SEE	1 TO 4 ABOVE	****	
**** FOR	80 TO 83.	SEE	2 TO 5 ABOVE	****	
**** FOR	81 TO 84.	SEE	1 TO 4 ABOVE	****	
**** FOR	82 TO 85.	SEE	2 TO 5 ABOVE	****	
**** FOR	83 TO 86.	SEE	1 TO 4 ABOVE	****	
**** FOR	84 TO 87.	SEE	2 TO 5 ABOVE	****	
**** FOR	85 TO 88.	SEE	1 TO 4 ABOVE	****	
**** FOR	86 TO 89.	SEE	6 TO 9 ABOVE	****	
**** FOR	87 TO 90.	SEE	7 TO 10 ABOVE	****	
**** FOR	88 TO 91.	SEE	1 TO 4 ABOVE	****	
**** FOR	89 TO 92.	SEE	2 TO 5 ABOVE	****	
**** FOR	90 TO 93.	SEE	8 TO 11 ABOVE	****	
**** FOR	91 TO 94.	SEE	9 TO 12 ABOVE	****	
**** FOR	92 TO 95.	SEE	2 TO 5 ABOVE	****	
**** FOR	93 TO 96.	SEE	8 TO 11 ABOVE	****	
**** FOR	95 TO 98.	SEE	9 TO 12 ABOVE	****	
388	96 TO 99		181 TO 184	5	4
389	96 TO 99		213 TO 216	5	4
390	96 TO 99		222 TO 225	5	4
391	97 TO 100		104 TO 107	5	4
392	97 TO 100		221 TO 224	5	4
**** FOR	100 TO 103.	SEE	7 TO 10 ABOVE	****	
**** FOR	101 TO 104.	SEE	1 TO 4 ABOVE	****	
**** FOR	102 TO 105.	SEE	96 TO 99 ABOVE	****	
**** FOR	103 TO 106.	SEE	97 TO 100 ABOVE	****	
393	104 TO 107		220 TO 223	5	4

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
394	105 TO 108		126 TO 129	5	4
**** FOR	106 TO 109.	SEE	9 TO 12 ABOVE	****	
**** FOR	107 TO 110.	SEE	2 TO 5 ABOVE	****	
**** FOR	108 TO 111.	SEE	1 TO 4 ABOVE	****	
**** FCR	109 TO 112.	SEE	2 TO 5 ABOVE	****	
**** FCR	110 TO 113.	SEE	8 TO 11 ABOVE	****	
**** FOR	111 TO 114.	SEE	9 TO 12 ABOVE	****	
**** FOR	112 TO 115.	SEE	2 TO 5 ABOVE	****	
**** FCR	113 TO 116.	SEE	1 TO 4 ABOVE	****	
**** FOR	114 TO 117.	SEE	2 TO 5 ABOVE	****	
**** FOR	115 TO 118.	SEE	8 TO 11 ABOVE	****	
**** FOR	116 TO 119.	SFE	9 TO 12 ABOVE	****	
**** FCR	117 TO 120.	SEE	6 TO 9 ABOVE	****	
**** FOR	119 TO 122.	SEE	7 TO 10 ABOVE	****	
**** FOR	120 TO 123.	SEE	1 TO 4 ABOVE	****	
**** FOR	121 TO 124.	SEE	6 TO 9 ABOVE	****	
**** FOR	122 TO 125.	SEE	7 TO 10 ABOVE	****	
**** FCR	123 TO 126.	SEE	1 TO 4 ABOVE	****	
**** FOR	124 TO 127.	SEE	6 TO 9 ABOVE	****	
395	127 TO 130		180 TO 183	5	4
**** FOR	128 TO 131.	SEE	65 TO 68 ABOVE	****	
**** FOR	129 TO 132.	SEE	8 TO 11 ABOVE	****	
**** FCR	130 TO 133.	SEE	9 TO 12 ABOVE	****	
**** FCR	131 TO 134.	SEE	2 TO 5 ABOVE	****	
**** FOR	132 TO 135.	SEE	8 TO 11 ABOVE	****	
**** FOR	134 TO 137.	SEE	9 TO 12 ABOVE	****	
**** FCR	135 TO 138.	SEE	2 TO 5 ABOVE	****	
**** FOR	136 TO 139.	SEE	8 TO 11 ABOVE	****	
**** FCR	139 TO 142.	SEE	9 TO 12 ABOVE	****	
**** FCR	140 TO 143.	SEE	2 TO 5 ABOVE	****	
**** FOR	141 TO 144.	SEE	8 TO 11 ABOVE	****	
**** FCR	142 TO 145.	SEE	9 TO 12 ABOVE	****	
**** FOR	143 TO 146.	SEE	6 TO 9 ABOVE	****	
**** FCR	144 TO 147.	SEE	7 TO 10 ABOVE	****	
**** FOR	145 TO 148.	SEE	1 TO 4 ABOVE	****	
**** FOR	146 TO 149.	SEE	2 TO 5 ABOVE	****	
**** FCR	147 TO 150.	SEE	8 TO 11 ABOVE	****	
**** FOR	148 TO 151.	SEE	9 TO 12 ABOVE	****	
**** FOR	149 TO 152.	SEE	2 TO 5 ABOVE	****	
**** FCR	150 TO 153.	SEE	8 TO 11 ABOVE	****	
**** FOR	151 TO 154.	SEE	9 TO 12 ABOVE	****	
**** FOR	152 TO 155.	SEE	6 TO 9 ABOVE	****	
**** FOR	153 TO 156.	SEE	7 TO 10 ABOVE	****	
**** FCR	154 TO 157.	SEE	1 TO 4 ABOVE	****	
**** FOR	155 TO 158.	SEE	2 TO 5 ABOVE	****	
**** FCR	156 TO 159.	SFE	8 TO 11 ABOVE	****	
**** FOR	157 TO 160.	SEE	9 TO 12 ABOVE	****	
**** FCR	158 TO 161.	SEE	2 TO 5 ABOVE	****	
**** FOR	159 TO 162.	SEE	1 TO 4 ABOVE	****	
**** FCR	160 TO 163.	SEE	2 TO 5 ABOVE	****	
**** FOR	161 TO 164.	SEE	1 TO 4 ABOVE	****	

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 162 TO 165.	SEE	2 TO	5 ABOVE	****	
**** FOR 163 TO 166.	SEE	1 TO	4 ABOVE	****	
**** FCP 164 TO 167.	SEE	6 TO	9 ABOVE	****	
**** FOR 165 TO 168.	SEE	7 TO	10 ABOVE	****	
**** FOR 166 TO 169.	SEE	1 TO	4 ABOVE	****	
**** FOR 167 TO 170.	SEE	2 TO	5 ABOVE	****	
**** FOR 168 TO 171.	SEE	1 TO	4 ABOVE	****	
**** FOR 169 TO 172.	SEE	96 TO	99 ABOVE	****	
**** FOR 170 TO 173.	SEE	127 TO	130 ABOVE	****	
**** FOR 171 TO 174.	SEE	65 TO	68 ABOVE	****	
**** FOR 172 TO 175.	SEE	1 TO	4 ABOVE	****	
**** FOR 173 TO 176.	SEE	2 TO	5 ABOVE	****	
**** FOR 174 TO 177.	SEE	1 TO	4 ABOVE	****	
**** FOR 175 TO 178.	SEE	6 TO	9 ABOVE	****	
**** FOR 176 TO 179.	SEE	7 TO	10 ABOVE	****	
**** FOR 177 TO 180.	SEE	1 TO	4 ABOVE	****	
**** FCR 178 TO 181.	SEE	2 TO	5 ABOVE	****	
**** FOR 179 TO 182.	SEE	63 TO	66 ABOVE	****	
396	181 TO 184.	211 TO	214	5	4
**** FOR 182 TO 185.	SEE	2 TO	5 ABOVE	****	
**** FOR 183 TO 186.	SEE	1 TO	4 ABOVE	****	
**** FOR 184 TO 187.	SEE	6 TO	9 ABOVE	****	
**** FOR 186 TO 189.	SEE	7 TO	10 ABOVE	****	
**** FOR 187 TO 190.	SEE	1 TO	4 ABOVE	****	
**** FOR 188 TO 191.	SEE	6 TO	9 ABOVE	****	
**** FOR 189 TO 192.	SEE	7 TO	10 ABOVE	****	
**** FOR 190 TO 193.	SEE	1 TO	4 ABOVE	****	
**** FCR 191 TO 194.	SEE	2 TO	5 ABOVE	****	
**** FCR 192 TO 195.	SEE	8 TO	11 ABOVE	****	
**** FCP 193 TO 196.	SEE	9 TO	12 ABOVE	****	
**** FOR 194 TO 197.	SEE	6 TO	9 ABOVE	****	
**** FOR 195 TO 198.	SEE	7 TO	10 ABOVE	****	
**** FCR 196 TO 199.	SEE	1 TO	4 ABOVE	****	
**** FOR 197 TO 200.	SEE	2 TO	5 ABOVE	****	
**** FOR 198 TO 201.	SEE	8 TO	11 ABOVE	****	
**** FOR 203 TO 206.	SEE	9 TO	12 ABOVE	****	
**** FOR 204 TO 207.	SEE	2 TO	5 ABOVE	****	
**** FOR 205 TO 208.	SEE	1 TO	4 ABOVE	****	
**** FOR 206 TO 209.	SEE	2 TO	5 ABOVE	****	
**** FOR 207 TO 210.	SEE	63 TO	66 ABOVE	****	
**** FOR 208 TO 211.	SEE	64 TO	67 ABOVE	****	
**** FOR 209 TO 212.	SEE	65 TO	68 ABOVE	****	
**** FOR 210 TO 213.	SEE	1 TO	4 ABOVE	****	
**** FOR 211 TO 214.	SEE	96 TO	99 ABOVE	****	
**** FOR 213 TO 216.	SEE	181 TO	184 ABOVE	****	
**** FCR 214 TO 217.	SEE	2 TO	5 ABOVE	****	
**** FOR 215 TO 218.	SEE	1 TO	4 ABOVE	****	
**** FOR 216 TO 219.	SEE	2 TO	5 ABOVE	****	
**** FOR 217 TO 220.	SEE	63 TO	66 ABOVE	****	
**** FCR 218 TO 221.	SEE	64 TO	67 ABOVE	****	
**** FOR 220 TO 223.	SEE	97 TO	100 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 221 TO 224.	SEE 104 TO 107 ABOVE ****				
**** FOR 222 TO 225.	SEE 181 TO 184 ABOVE ****				
**** FOR 223 TO 226.	SEE 2 TO 5 ABOVE ****				
**** FCR 224 TO 227.	SEE 1 TO 4 ABOVE ****				
**** FOR 225 TO 228.	SEE 6 TO 9 ABOVE ****				
**** FCR 226 TO 229.	SEE 7 TO 10 ABOVE ****				
**** FOR 227 TO 230.	SEE 1 TO 4 ABOVE ****				
**** FOR 228 TO 231.	SEE 6 TO 9 ABOVE ****				
**** FCR 229 TO 232.	SEE 7 TO 10 ABOVE ****				
**** FOR 230 TO 233.	SEE 1 TO 4 ABOVE ****				
**** FCR 231 TO 234.	SEE 6 TO 9 ABOVE ****				
**** FOR 232 TO 235.	SEE 7 TO 10 ABOVE ****				
**** FOR 233 TO 236.	SEE 1 TO 4 ABOVE ****				
**** FOR 234 TO 237.	SEE 6 TO 9 ABOVE ****				
**** FOR 236 TO 239.	SEE 7 TO 10 ABOVE ****				
**** FOR 237 TO 240.	SEE 1 TO 4 ABOVE ****				
**** FCR 238 TO 241.	SEE 2 TO 5 ABOVE ****				
**** FOR 239 TO 242.	SEE 8 TO 11 ABOVE ****				
**** FOR 241 TO 244.	SEE 9 TO 12 ABOVE ****				
**** FCR 242 TO 245.	SEE 2 TO 5 ABOVE ****				
**** FCR 243 TO 246.	SEE 8 TO 11 ABOVE ****				
**** FOR 244 TO 247.	SEE 9 TO 12 ABOVE ****				
**** FCR 245 TO 248.	SEE 6 TO 9 ABOVE ****				
**** FOR 246 TO 249.	SEE 7 TO 10 ABOVE ****				
**** FOR 247 TO 250.	SEE 1 TO 4 ABOVE ****				
**** FOR 248 TO 251.	SEE 2 TO 5 ABOVE ****				
**** FCR 249 TO 252.	SEE 8 TO 11 ABOVE ****				
**** FCR 250 TO 253.	SEE 9 TO 12 ABOVE ****				
**** FCR 251 TO 254.	SEE 6 TO 9 ABOVE ****				
**** FCR 252 TO 255.	SEE 7 TO 10 ABOVE ****				
**** FOR 253 TO 256.	SEE 1 TO 4 ABOVE ****				
**** FOR 254 TO 257.	SEE 2 TO 5 ABOVE ****				
**** FOR 255 TO 258.	SEE 8 TO 11 ABOVE ****				

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 5 NOTES IN LENGTH --
 TONAL RETROGRADE
 WAS BEGUN AT 326 SECCNDS INTO EXECUTION.

PAT TERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
397	1 TO	5	11 TO	15	5
398	1 TO	5	17 TO	21	5
399	1 TO	5	23 TO	27	5
400	1 TO	5	29 TO	33	5
401	1 TO	5	31 TO	35	5
402	1 TO	5	33 TO	37	5
403	1 TO	5	35 TO	39	5
404	1 TO	5	52 TO	56	5
405	1 TO	5	54 TO	58	5
406	1 TO	5	66 TO	70	5
407	1 TO	5	71 TO	75	5
408	1 TO	5	73 TO	77	5
409	1 TO	5	75 TO	79	5
410	1 TO	5	77 TO	81	5
411	1 TO	5	79 TO	83	5
412	1 TO	5	81 TO	85	5
413	1 TO	5	83 TO	87	5
414	1 TO	5	88 TO	92	5
415	1 TO	5	108 TO	112	5
416	1 TO	5	113 TO	117	5
417	1 TO	5	145 TO	149	5
418	1 TO	5	154 TO	158	5
419	1 TO	5	159 TO	163	5
420	1 TO	5	161 TO	165	5
421	1 TO	5	166 TO	170	5
422	1 TO	5	172 TO	176	5
423	1 TO	5	177 TO	181	5
424	1 TO	5	190 TO	194	5
425	1 TO	5	196 TO	200	5
426	1 TO	5	205 TO	209	5
427	1 TO	5	215 TO	219	5
428	1 TO	5	237 TO	241	5
429	1 TO	5	247 TO	251	5
430	1 TO	5	253 TO	257	5
431	2 TO	6	10 TO	14	5
432	2 TO	6	12 TO	16	5
433	2 TO	6	22 TO	26	5
434	2 TO	6	28 TO	32	5
435	2 TO	6	30 TO	34	5
436	2 TO	6	32 TO	36	5
437	2 TO	6	34 TO	38	5
438	2 TO	6	53 TO	57	5
439	2 TO	6	70 TO	74	5
440	2 TO	6	72 TO	76	5

PA	TERN	NOTES	RELATED TC	NOTES	TEST	LENGTH
441		2 TO	6	74 TO	78	5 5
442		2 TO	6	76 TO	80	5 5
443		2 TO	6	78 TO	82	5 5
444		2 TO	6	80 TO	84	5 5
445		2 TO	6	82 TO	86	5 5
446		2 TO	6	84 TO	88	5 5
447		2 TO	6	107 TO	111	5 5
448		2 TO	6	112 TO	116	5 5
449		2 TO	6	158 TO	162	5 5
450		2 TO	6	160 TO	164	5 5
451		2 TO	6	162 TO	166	5 5
452		2 TO	6	167 TO	171	5 5
453		2 TO	6	173 TO	177	5 5
454		2 TO	6	182 TO	186	5 5
455		2 TO	6	204 TO	208	5 5
456		2 TO	6	214 TO	218	5 5
457		2 TO	6	223 TO	227	5 5
***	FCR	3 TO	7,	SEE	1 TO	5 ABOVE ****
***	FOR	4 TO	8,	SEE	2 TO	6 ABOVE ****
458		5 TO	9	9 TO	13	5 5
459		5 TO	9	21 TO	25	5 5
460		5 TO	9	27 TO	31	5 5
461		5 TO	9	42 TO	46	5 5
462		5 TO	9	46 TO	50	5 5
463		5 TO	9	57 TO	61	5 5
464		5 TO	9	69 TO	73	5 5
465		5 TO	9	91 TO	95	5 5
466		5 TO	9	106 TO	110	5 5
467		5 TO	9	111 TO	115	5 5
468		5 TO	9	130 TO	134	5 5
469		5 TO	9	134 TO	138	5 5
470		5 TO	9	139 TO	143	5 5
471		5 TO	9	148 TO	152	5 5
472		5 TO	9	157 TO	161	5 5
473		5 TO	9	203 TO	207	5 5
474		5 TO	9	241 TO	245	5 5
475		6 TO	10	37 TO	41	5 5
476		6 TO	10	41 TO	45	5 5
477		6 TO	10	48 TO	52	5 5
478		6 TO	10	56 TO	60	5 5
479		6 TO	10	59 TO	63	5 5
480		6 TO	10	68 TO	72	5 5
481		6 TO	10	90 TO	94	5 5
482		6 TO	10	110 TO	114	5 5
483		6 TO	10	115 TO	119	5 5
484		6 TO	10	129 TO	133	5 5
485		6 TO	10	141 TO	145	5 5
486		6 TO	10	147 TO	151	5 5
487		6 TO	10	150 TO	154	5 5
488		6 TO	10	156 TO	160	5 5
489		6 TO	10	192 TO	196	5 5

PATTERN	NCES	RELATED TC	NOTES	TEST	LENGTH
490	6 TO	10	243 TO	247	5
491	6 TO	10	249 TO	253	5
**** FOR	6 TO	10.	SEE 6 TO	10 ABOVE	****
492	7 TO	11	40 TO	44	5
493	8 TO	12	39 TO	43	5
494	8 TO	12	50 TO	54	5
495	8 TO	12	61 TO	65	5
496	8 TO	12	86 TO	90	5
497	8 TO	12	121 TO	125	5
498	8 TO	12	143 TO	147	5
499	8 TO	12	152 TO	156	5
500	8 TO	12	164 TO	168	5
501	8 TO	12	175 TO	179	5
502	8 TO	12	188 TO	192	5
503	8 TO	12	194 TO	198	5
504	8 TO	12	225 TO	229	5
505	8 TO	12	228 TO	232	5
506	8 TO	12	231 TO	235	5
507	8 TO	12	245 TO	249	5
508	8 TO	12	251 TO	255	5
**** FOR	8 TO	12.	SFF 8 TO	12 ABOVE	****
509	9 TO	13	13 TO	17	5
510	9 TO	13	85 TO	89	5
511	9 TO	13	120 TO	124	5
512	9 TO	13	123 TO	127	5
513	9 TO	13	163 TO	167	5
514	9 TO	13	174 TO	178	5
515	9 TO	13	183 TO	187	5
516	9 TO	13	187 TO	191	5
517	9 TO	13	224 TO	228	5
518	9 TO	13	227 TO	231	5
519	9 TO	13	230 TO	234	5
520	9 TO	13	233 TO	237	5
**** FOR	10 TO	14.	SEE 2 TO	6 ABOVE	****
**** FOR	11 TO	15.	SEE 1 TO	5 ABOVE	****
**** FOR	12 TO	16.	SEE 2 TO	6 ABOVE	****
**** FOR	13 TO	17.	SEE 5 TO	9 ABOVE	****
521	14 TO	18	20 TO	24	5
522	14 TO	18	26 TO	30	5
523	14 TO	18	45 TO	49	5
524	14 TO	18	94 TO	98	5
525	14 TO	18	133 TO	137	5
526	14 TO	18	138 TO	142	5
527	14 TO	18	202 TO	206	5
528	14 TO	18	240 TO	244	5
529	15 TO	19	19 TO	23	5
530	15 TO	19	25 TO	29	5
531	15 TO	19	44 TO	48	5
532	15 TO	19	93 TO	97	5
533	15 TO	19	132 TO	136	5
534	15 TO	19	136 TO	140	5



PATTFRN	NCOTES	RELATED TO	NCOTES	TEST	LENGTH
535	15 TO	19	198 TO	202	5 5
536	15 TO	19	239 TO	243	5 5
537	15 TO	19	255 TO	259	5 5
**** FOR	15 TO	19.	SEE 15 TO	19 ABOVE ****	
538	16 TO	20	24 TO	28	5 5
539	16 TO	20	36 TO	40	5 5
540	16 TO	20	43 TO	47	5 5
541	16 TO	20	47 TO	51	5 5
542	16 TO	20	55 TO	59	5 5
543	16 TO	20	58 TO	62	5 5
544	16 TO	20	67 TO	71	5 5
545	16 TO	20	89 TO	93	5 5
546	16 TO	20	92 TO	96	5 5
547	16 TO	20	109 TO	113	5 5
548	16 TO	20	114 TO	118	5 5
549	16 TO	20	131 TO	135	5 5
550	16 TO	20	135 TO	139	5 5
551	16 TO	20	140 TO	144	5 5
552	16 TO	20	146 TO	150	5 5
553	16 TO	20	149 TO	153	5 5
554	16 TO	20	155 TO	159	5 5
555	16 TO	20	191 TO	195	5 5
556	16 TO	20	197 TO	201	5 5
557	16 TO	20	238 TO	242	5 5
558	16 TO	20	242 TO	246	5 5
559	16 TO	20	248 TO	252	5 5
560	16 TO	20	254 TO	258	5 5
**** FOR	17 TO	21.	SEE 1 TO	5 ABOVE ****	
561	18 TO	22	51 TO	55	5 5
562	18 TO	22	87 TO	91	5 5
563	18 TO	22	100 TO	104	5 5
564	18 TO	22	119 TO	123	5 5
565	18 TO	22	122 TO	126	5 5
566	18 TO	22	144 TO	148	5 5
567	18 TO	22	153 TO	157	5 5
568	18 TO	22	165 TO	169	5 5
569	18 TO	22	176 TO	180	5 5
570	18 TO	22	186 TO	190	5 5
571	18 TO	22	189 TO	193	5 5
572	18 TO	22	195 TO	199	5 5
573	18 TO	22	226 TO	230	5 5
574	18 TO	22	229 TO	233	5 5
575	18 TO	22	232 TO	236	5 5
576	18 TO	22	236 TO	240	5 5
577	18 TO	22	246 TO	250	5 5
578	18 TO	22	252 TO	256	5 5
579	19 TO	23	118 TO	122	5 5
580	19 TO	23	185 TO	189	5 5
581	19 TO	23	235 TO	239	5 5
582	20 TO	24	117 TO	121	5 5
583	20 TO	24	124 TO	128	5 5

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
584	20 TO	24	184 TO	188	5
585	20 TO	24	234 TO	238	5
**** FOR	20 TO	24.	SEE 20 TO	24 ABOVE	****
**** FOR	21 TO	25.	SEE 9 TO	13 ABOVE	****
**** FOR	22 TO	26.	SEE 2 TO	6 ABOVE	****
**** FOR	24 TO	28.	SEE 18 TO	22 ABOVE	****
**** FOR	25 TO	29.	SEE 19 TO	23 ABOVE	****
**** FOR	26 TO	30.	SEE 20 TO	24 ABOVE	****
**** FOR	27 TO	31.	SEE 9 TO	13 ABOVE	****
**** FOR	35 TO	39.	SEE 1 TO	5 ABOVE	****
**** FOR	36 TO	40.	SEE 18 TO	22 ABOVE	****
**** FOR	37 TO	41.	SEE 8 TO	12 ABOVE	****
586	38 TO	42	49 TO	53	5
587	38 TO	42	60 TO	64	5
588	38 TO	42	116 TO	120	5
589	38 TO	42	142 TO	146	5
590	38 TO	42	151 TO	155	5
591	38 TO	42	193 TO	197	5
592	38 TO	42	244 TO	248	5
593	38 TO	42	250 TO	254	5
**** FOR	39 TO	43.	SEE 6 TO	10 ABOVE	****
**** FOR	40 TO	44.	SEE 7 TO	11 ABOVE	****
**** FOR	41 TO	45.	SEE 8 TO	12 ABOVE	****
**** FOR	42 TO	46.	SEE 9 TO	13 ABOVE	****
**** FOR	43 TO	47.	SEE 18 TO	22 ABOVE	****
**** FOR	44 TO	48.	SEE 19 TO	23 ABOVE	****
**** FOR	45 TO	49.	SEE 20 TO	24 ABOVE	****
**** FOR	46 TO	50.	SEE 9 TO	13 ABOVE	****
**** FOR	47 TO	51.	SEE 18 TO	22 ABOVE	****
**** FOR	48 TO	52.	SEE 8 TO	12 ABOVE	****
**** FOR	49 TO	53.	SEE 38 TO	42 ABOVE	****
**** FOR	50 TO	54.	SEE 6 TO	10 ABOVE	****
**** FOR	51 TO	55.	SEE 16 TO	20 ABOVE	****
**** FOR	52 TO	56.	SEE 1 TO	5 ABOVE	****
**** FOR	54 TO	58.	SEE 1 TO	5 ABOVE	****
**** FOR	55 TO	59.	SEE 18 TO	22 ABOVE	****
**** FOR	56 TO	60.	SEE 8 TO	12 ABOVE	****
**** FOR	57 TO	61.	SEE 9 TO	13 ABOVE	****
**** FOR	58 TO	62.	SEE 18 TO	22 ABOVE	****
**** FOR	59 TO	63.	SEE 8 TO	12 ABOVE	****
**** FOR	60 TO	64.	SEE 38 TO	42 ABOVE	****
**** FOR	61 TO	65.	SEE 6 TO	10 ABOVE	****
594	62 TO	66	128 TO	132	5
595	63 TO	67	208 TO	212	5
**** FOR	63 TO	67.	SEE 63 TO	67 ABOVE	****
596	64 TO	68	207 TO	211	5
597	64 TO	68	217 TO	221	5
598	65 TO	69	178 TO	182	5
599	65 TO	69	206 TO	210	5
600	65 TO	69	216 TO	220	5
**** FOR	66 TO	70.	SEE 1 TO	5 ABOVE	****

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	67 TO	71.	SEE	18 TO	22 ABOVE ****
**** FOR	68 TO	72.	SEE	8 TO	12 ABOVE ****
**** FOR	69 TO	73.	SEE	9 TO	13 ABOVE ****
**** FOR	70 TO	74.	SEE	2 TO	6 ABOVE ****
**** FOR	83 TO	87.	SEE	1 TO	5 ABOVE ****
**** FCR	84 TO	88.	SEE	2 TO	6 ABOVE ****
**** FCR	85 TO	89.	SEE	5 TO	9 ABOVE ****
**** FOR	86 TO	90.	SEE	6 TO	10 ABOVE ****
**** FCR	87 TO	91.	SEE	16 TO	20 ABOVE ****
**** FOR	88 TO	92.	SEE	1 TO	5 ABOVE ****
**** FCR	89 TO	93.	SEE	18 TO	22 ABOVE ****
**** FOR	90 TO	94.	SEE	8 TO	12 ABOVE ****
**** FCR	91 TO	95.	SEE	9 TO	13 ABOVE ****
**** FOR	92 TO	96.	SEE	18 TO	22 ABOVE ****
**** FCR	93 TO	97.	SEE	19 TO	23 ABOVE ****
**** FOR	94 TO	98.	SEE	20 TO	24 ABOVE ****
6C1	96 TO	100		221 TO	225 5 5
**** FOR	96 TO	100.	SEE	96 TO	100 ABOVE ****
**** FOR	100 TO	104.	SEE	16 TO	20 ABOVE ****
6C2	101 TO	105		181 TO	185 5 5
6C3	101 TO	105		213 TO	217 5 5
6C4	101 TO	105		222 TO	226 5 5
**** FOR	102 TO	106.	SEE	96 TO	100 ABOVE ****
6C5	103 TO	107		220 TO	224 5 5
**** FOR	106 TO	110.	SEE	9 TO	13 ABOVE ****
**** FOR	107 TO	111.	SEE	2 TO	6 ABOVE ****
**** FOR	108 TO	112.	SEE	1 TO	5 ABOVE ****
**** FCR	109 TO	113.	SEE	18 TO	22 ABOVE ****
**** FOR	110 TO	114.	SEE	8 TO	12 ABOVE ****
**** FCR	111 TO	115.	SEE	9 TO	13 ABOVE ****
**** FOR	112 TO	116.	SEE	2 TO	6 ABOVE ****
**** FOR	113 TO	117.	SEE	1 TO	5 ABOVE ****
**** FOR	114 TO	118.	SEE	18 TO	22 ABOVE ****
**** FOR	115 TO	119.	SEE	8 TO	12 ABOVE ****
**** FOR	116 TO	120.	SEE	38 TO	42 ABOVE ****
**** FOR	117 TO	121.	SEE	14 TO	18 ABOVE ****
**** FCR	118 TO	122.	SEE	15 TO	19 ABOVE ****
**** FCR	119 TO	123.	SEE	16 TO	20 ABOVE ****
**** FOR	120 TO	124.	SEE	5 TO	9 ABOVE ****
**** FCR	121 TO	125.	SEE	6 TO	10 ABOVE ****
**** FOR	122 TO	126.	SEE	16 TO	20 ABOVE ****
**** FOR	123 TO	127.	SEE	5 TO	9 ABOVE ****
**** FOR	124 TO	128.	SEE	14 TO	18 ABOVE ****
606	127 TO	131		179 TO	183 5 5
**** FOR	127 TO	131.	SEE	127 TO	131 ABOVE ****
**** FCR	129 TO	133.	SEE	8 TO	12 ABOVE ****
**** FOR	130 TO	134.	SEE	9 TO	13 ABOVE ****
**** FOR	131 TO	135.	SEE	18 TO	22 ABOVE ****
**** FOR	132 TO	136.	SEE	19 TO	23 ABOVE ****
**** FCR	133 TO	137.	SEE	20 TO	24 ABOVE ****
**** FCR	134 TO	138.	SEE	9 TO	13 ABOVE ****

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 135 TO 139.	SEE	18 TO	22 ABOVE	****	
**** FOR 136 TO 140.	SEE	19 TO	23 ABOVE	****	
**** FOR 138 TO 142.	SEE	20 TO	24 ABOVE	****	
**** FOR 139 TO 143.	SEE	9 TO	13 ABOVE	****	
**** FCR 140 TO 144.	SEE	18 TO	22 ABOVE	****	
**** FCR 141 TO 145.	SEE	8 TO	12 ABOVE	****	
**** FCR 142 TO 146.	SEE	38 TO	42 ABOVE	****	
**** FOR 143 TO 147.	SEE	6 TO	10 ABOVE	****	
**** FOR 144 TO 148.	SEE	16 TO	20 ABOVE	****	
**** FCR 145 TO 149.	SEE	1 TO	5 ABOVE	****	
**** FCR 146 TO 150.	SEE	18 TO	22 ABOVE	****	
**** FOR 147 TO 151.	SEE	8 TO	12 ABOVE	****	
**** FOR 148 TO 152.	SEE	9 TO	13 ABOVE	****	
**** FOR 149 TO 153.	SEE	18 TO	22 ABOVE	****	
**** FOR 150 TO 154.	SEE	8 TO	12 ABOVE	****	
**** FOR 151 TO 155.	SEE	38 TO	42 ABOVE	****	
**** FCR 152 TO 156.	SEE	6 TO	10 ABOVE	****	
**** FOR 153 TO 157.	SEE	16 TO	20 ABOVE	****	
**** FOR 154 TO 158.	SEE	1 TO	5 ABOVE	****	
**** FOR 155 TO 159.	SEE	18 TO	22 ABOVE	****	
**** FOR 156 TO 160.	SEE	8 TO	12 ABOVE	****	
**** FOR 157 TO 161.	SEE	9 TO	13 ABOVE	****	
**** FCR 163 TO 167.	SEE	5 TO	9 ABOVE	****	
**** FCR 164 TO 168.	SEE	6 TO	10 ABOVE	****	
**** FOR 165 TO 169.	SEE	16 TO	20 ABOVE	****	
**** FOR 166 TO 170.	SEE	1 TO	5 ABOVE	****	
**** FCR 167 TO 171.	SEE	2 TO	6 ABOVE	****	
**** FOR 168 TO 172.	SEE	101 TO	105 ABOVE	****	
607 169 TO 173		180 TO	184	5	5
**** FOR 170 TO 174.	SEE	127 TO	131 ABOVE	****	
**** FOR 171 TO 175.	SEE	65 TO	69 ABOVE	****	
**** FOR 172 TO 176.	SEE	1 TO	5 ABOVE	****	
**** FOR 173 TO 177.	SEE	2 TO	6 ABOVE	****	
**** FCR 174 TO 178.	SEE	5 TO	9 ABOVE	****	
**** FOR 175 TO 179.	SEE	6 TO	10 ABOVE	****	
**** FOR 176 TO 180.	SEE	16 TO	20 ABOVE	****	
**** FCR 177 TO 181.	SEE	1 TO	5 ABOVE	****	
608 178 TO 182		209 TO	213	5	5
609 181 TO 185		210 TO	214	5	5
**** FOR 181 TO 185.	SEE	181 TO	185 ABOVE	****	
**** FOR 182 TO 186.	SEE	2 TO	6 ABOVE	****	
**** FOR 183 TO 187.	SEE	5 TO	9 ABOVE	****	
**** FCR 184 TO 188.	SEE	14 TO	18 ABOVE	****	
**** FOR 185 TO 189.	SEE	15 TO	19 ABOVE	****	
**** FOR 186 TO 190.	SEE	16 TO	20 ABOVE	****	
**** FOR 187 TO 191.	SEE	5 TO	9 ABOVE	****	
**** FCR 188 TO 192.	SEE	6 TO	10 ABOVE	****	
**** FOR 189 TO 193.	SEE	16 TO	20 ABOVE	****	
**** FOR 190 TO 194.	SEE	1 TO	5 ABOVE	****	
**** FOR 191 TO 195.	SEE	18 TO	22 ABOVE	****	
**** FCR 192 TO 196.	SEE	8 TO	12 ABOVE	****	

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 193 TO 197.	SEE	38 TO	42 ABOVE	****	
**** FOR 194 TO 198.	SEE	6 TO	10 ABOVE	****	
**** FOR 195 TO 199.	SEE	16 TO	20 ABOVE	****	
**** FOR 196 TO 200.	SEE	1 TO	5 ABOVE	****	
**** FOR 197 TO 201.	SEE	18 TO	22 ABOVE	****	
**** FOR 198 TO 202.	SEE	19 TO	23 ABOVE	****	
**** FCR 202 TO 206.	SEE	20 TO	24 ABOVE	****	
**** FOR 203 TO 207.	SEE	9 TO	13 ABOVE	****	
**** FOR 204 TO 208.	SEE	2 TO	6 ABOVE	****	
**** FOR 205 TO 209.	SEE	1 TO	5 ABOVE	****	
**** FOR 206 TO 210.	SEE	178 TO	182 ABOVE	****	
**** FOR 207 TO 211.	SEE	63 TO	67 ABOVE	****	
**** FOR 208 TO 212.	SEE	64 TO	68 ABOVE	****	
**** FOR 209 TO 213.	SEE	65 TO	69 ABOVE	****	
**** FOR 210 TO 214.	SEE	101 TO	105 ABOVE	****	
**** FOR 213 TO 217.	SEE	181 TO	185 ABOVE	****	
**** FOR 216 TO 220.	SEE	178 TO	182 ABOVE	****	
**** FOR 217 TO 221.	SEE	63 TO	67 ABOVE	****	
**** FOR 220 TO 224.	SEE	103 TO	107 ABOVE	****	
**** FOR 222 TO 226.	SEE	181 TO	185 ABOVE	****	
**** FOR 223 TO 227.	SEE	2 TO	6 ABOVE	****	
**** FOR 224 TO 228.	SEE	5 TO	9 ABOVE	****	
**** FCR 225 TO 229.	SEE	6 TO	10 ABOVE	****	
**** FOR 226 TO 230.	SEE	16 TO	20 ABOVE	****	
**** FOR 227 TO 231.	SEE	5 TO	9 ABOVE	****	
**** FOR 228 TO 232.	SEE	6 TO	10 ABOVE	****	
**** FOR 229 TO 233.	SEE	16 TO	20 ABOVE	****	
**** FOR 230 TO 234.	SEE	5 TO	9 ABOVE	****	
**** FCR 231 TO 235.	SEE	6 TO	10 ABOVE	****	
**** FOR 232 TO 236.	SEE	16 TO	20 ABOVE	****	
**** FOR 233 TO 237.	SEE	5 TO	9 ABOVE	****	
**** FOR 234 TO 238.	SEE	14 TO	18 ABOVE	****	
**** FOR 235 TO 239.	SEE	15 TO	19 ABOVE	****	
**** FCR 236 TO 240.	SEE	16 TO	20 ABOVE	****	
**** FOR 237 TO 241.	SEE	1 TO	5 ABOVE	****	
**** FOR 238 TO 242.	SEE	18 TO	22 ABOVE	****	
**** FOR 239 TO 243.	SEE	19 TO	23 ABOVE	****	
**** FOR 240 TO 244.	SEE	20 TO	24 ABOVE	****	
**** FOR 241 TO 245.	SEE	9 TO	13 ABOVE	****	
**** FCR 242 TO 246.	SEE	18 TO	22 ABOVE	****	
**** FOR 243 TO 247.	SEE	8 TO	12 ABOVE	****	
**** FOR 244 TO 248.	SEE	38 TO	42 ABOVE	****	
**** FOR 245 TO 249.	SEE	6 TO	10 ABOVE	****	
**** FOR 246 TO 250.	SEE	16 TO	20 ABOVE	****	
**** FOR 247 TO 251.	SEE	1 TO	5 ABOVE	****	
**** FOR 248 TO 252.	SEE	18 TO	22 ABOVE	****	
**** FOR 249 TO 253.	SEE	8 TO	12 ABOVE	****	
**** FOR 250 TO 254.	SEE	38 TO	42 ABOVE	****	
**** FOR 251 TO 255.	SEE	6 TO	10 ABOVE	****	
**** FOR 252 TO 256.	SEE	16 TO	20 ABOVE	****	
**** FCR 253 TO 257.	SEE	1 TO	5 ABOVE	****	

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
**** FCR	254 TO	258.	SEE	18 TO	22 ABOVE ****
**** FOR	255 TO	259.	SEE	19 TO	23 ABOVE ****

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 6 NOTES IN LENGTH --
 TONAL RETROGRADE
 WAS BEGUN AT 518 SECONDS INTO EXECUTION.

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
610	1 TO	6	10 TO 15	5	6
611	1 TO	6	22 TO 27	5	6
612	1 TO	6	28 TO 33	5	6
613	1 TO	6	30 TO 35	5	6
614	1 TO	6	32 TO 37	5	6
615	1 TO	6	34 TO 39	5	6
616	1 TO	6	53 TO 58	5	6
617	1 TO	6	70 TO 75	5	6
618	1 TO	6	72 TO 77	5	6
619	1 TO	6	74 TO 79	5	6
620	1 TO	6	76 TO 81	5	6
621	1 TO	6	78 TO 83	5	6
622	1 TO	6	80 TO 85	5	6
623	1 TO	6	82 TO 87	5	6
624	1 TO	6	107 TO 112	5	6
625	1 TO	6	112 TO 117	5	6
626	1 TO	6	158 TO 163	5	6
627	1 TO	6	160 TO 165	5	6
628	1 TO	6	204 TO 209	5	6
629	1 TO	6	214 TO 219	5	6
630	2 TO	7	11 TO 16	5	6
631	2 TO	7	29 TO 34	5	6
632	2 TO	7	31 TO 36	5	6
633	2 TO	7	33 TO 38	5	6
634	2 TO	7	52 TO 57	5	6
635	2 TO	7	71 TO 76	5	6
636	2 TO	7	73 TO 78	5	6
637	2 TO	7	75 TO 80	5	6
638	2 TO	7	77 TO 82	5	6
639	2 TO	7	79 TO 84	5	6
640	2 TO	7	81 TO 86	5	6
641	2 TO	7	83 TO 88	5	6
642	2 TO	7	159 TO 164	5	6
643	2 TO	7	161 TO 166	5	6
644	2 TO	7	166 TO 171	5	6
645	2 TO	7	172 TO 177	5	6
**** FCR	3 TO	8,	SEE 1 TO 6 ABOVE ****		
646	4 TO	9	9 TO 14	5	6
647	4 TO	9	21 TO 26	5	6
648	4 TO	9	27 TO 32	5	6
649	4 TO	9	69 TO 74	5	6
650	4 TO	9	106 TO 111	5	6
651	4 TO	9	111 TO 116	5	6
652	4 TO	9	157 TO 162	5	6

PATTERN	NOTES	RELATED TC	NOTES	TEST	LENGTH
653	4 TO 9		203 TO 208	5	6
654	5 TO 10		41 TO 46	5	6
655	5 TO 10		56 TO 61	5	6
656	5 TO 10		68 TO 73	5	6
657	5 TO 10		90 TO 95	5	6
658	5 TO 10		110 TO 115	5	6
659	5 TO 10		129 TO 134	5	6
660	5 TO 10		147 TO 152	5	6
661	5 TO 10		156 TO 161	5	6
**** FOR	5 TO 10,	SEE	5 TO 10 ABOVE	****	
662	6 TO 11		40 TO 45	5	6
663	7 TO 12		39 TO 44	5	6
664	8 TO 13		85 TO 90	5	6
665	8 TO 13		120 TO 125	5	6
666	8 TO 13		163 TO 168	5	6
667	8 TO 13		174 TO 179	5	6
668	8 TO 13		187 TO 192	5	6
669	8 TO 13		224 TO 229	5	6
670	8 TO 13		227 TO 232	5	6
671	8 TO 13		230 TO 235	5	6
672	9 TO 14		84 TO 89	5	6
673	9 TO 14		162 TO 167	5	6
674	9 TO 14		173 TO 178	5	6
675	9 TO 14		182 TO 187	5	6
676	9 TO 14		223 TO 228	5	6
**** FOR	10 TO 15,	SEE	2 TO 7 ABOVE	****	
**** FOR	11 TO 16,	SEE	1 TO 6 ABOVE	****	
**** FOR	12 TO 17,	SEE	4 TO 9 ABOVE	****	
677	13 TO 18		20 TO 25	5	6
678	13 TO 18		26 TO 31	5	6
679	13 TO 18		45 TO 50	5	6
680	13 TO 18		133 TO 138	5	6
681	13 TO 18		138 TO 143	5	6
682	13 TO 18		202 TO 207	5	6
683	13 TO 18		240 TO 245	5	6
684	14 TO 19		19 TO 24	5	6
685	14 TO 19		25 TO 30	5	6
686	14 TO 19		44 TO 49	5	6
687	14 TO 19		93 TO 98	5	6
688	14 TO 19		132 TO 137	5	6
689	14 TO 19		239 TO 244	5	6
**** FOR	14 TO 19,	SEE	14 TO 19 ABOVE	****	
690	15 TO 20		24 TO 29	5	6
691	15 TO 20		43 TO 48	5	6
692	15 TO 20		92 TO 97	5	6
693	15 TO 20		131 TO 136	5	6
694	15 TO 20		135 TO 140	5	6
695	15 TO 20		197 TO 202	5	6
696	15 TO 20		238 TO 243	5	6
697	15 TO 20		254 TO 259	5	6
698	16 TO 21		23 TO 28	5	6

PATTERN	NCES	RELATED TC	NOTES	TEST	LENGTH
699	16 TO	21	35 TO 40	5	6
700	16 TO	21	54 TO 59	5	6
701	16 TO	21	66 TO 71	5	6
702	16 TO	21	88 TO 93	5	6
703	16 TO	21	108 TO 113	5	6
704	16 TO	21	113 TO 118	5	6
705	16 TO	21	145 TO 150	5	6
706	16 TO	21	154 TO 159	5	6
707	16 TO	21	190 TO 195	5	6
708	16 TO	21	196 TO 201	5	6
709	16 TO	21	237 TO 242	5	6
710	16 TO	21	247 TO 252	5	6
711	16 TO	21	253 TO 258	5	6
**** FOR	16 TO	21,	SEE 16 TO 21 ABOVE ****		
712	17 TO	22	51 TO 56	5	6
713	17 TO	22	87 TO 92	5	6
714	17 TO	22	144 TO 149	5	6
715	17 TO	22	153 TO 158	5	6
716	17 TO	22	165 TO 170	5	6
717	17 TO	22	176 TO 181	5	6
718	17 TO	22	189 TO 194	5	6
719	17 TO	22	195 TO 200	5	6
720	17 TO	22	236 TO 241	5	6
721	17 TO	22	246 TO 251	5	6
722	17 TO	22	252 TO 257	5	6
723	18 TO	23	118 TO 123	5	6
724	18 TO	23	185 TO 190	5	6
725	18 TO	23	235 TO 240	5	6
**** FOR	18 TO	23,	SEE 18 TO 23 ABOVE ****		
726	19 TO	24	117 TO 122	5	6
727	19 TO	24	184 TO 189	5	6
728	19 TO	24	234 TO 239	5	6
**** FOR	19 TO	24,	SEE 19 TO 24 ABOVE ****		
729	20 TO	25	123 TO 128	5	6
730	20 TO	25	183 TO 188	5	6
731	20 TO	25	233 TO 238	5	6
**** FOR	21 TO	26,	SEE 9 TO 14 ABOVE ****		
**** FOR	22 TO	27,	SEE 2 TO 7 ABOVE ****		
**** FOR	23 TO	28,	SEE 17 TO 22 ABOVE ****		
**** FOR	24 TO	29,	SEE 18 TO 23 ABOVE ****		
**** FOR	25 TO	30,	SEE 19 TO 24 ABOVE ****		
**** FOR	26 TO	31,	SEE 20 TO 25 ABOVE ****		
**** FOR	27 TO	32,	SEE 9 TO 14 ABOVE ****		
**** FOR	34 TO	39,	SEE 2 TO 7 ABOVE ****		
**** FOR	35 TO	40,	SEE 17 TO 22 ABOVE ****		
732	36 TO	41	50 TO 55	5	6
733	36 TO	41	86 TO 91	5	6
734	36 TO	41	121 TO 126	5	6
735	36 TO	41	143 TO 148	5	6
736	36 TO	41	152 TO 157	5	6
737	36 TO	41	164 TO 169	5	6

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
738	36 TO	41	175 TO 180	5	6
739	36 TO	41	188 TO 193	5	6
740	36 TO	41	194 TO 199	5	6
741	36 TO	41	225 TO 230	5	6
742	36 TO	41	228 TO 233	5	6
743	36 TO	41	231 TO 236	5	6
744	36 TO	41	245 TO 250	5	6
745	36 TO	41	251 TO 256	5	6
746	37 TO	42	49 TO 54	5	6
747	37 TO	42	60 TO 65	5	6
748	37 TO	42	142 TO 147	5	6
749	37 TO	42	151 TO 156	5	6
750	37 TO	42	193 TO 198	5	6
751	37 TO	42	244 TO 249	5	6
752	37 TO	42	250 TO 255	5	6
753	38 TO	43	48 TO 53	5	6
754	38 TO	43	59 TO 64	5	6
755	38 TO	43	115 TO 120	5	6
756	38 TO	43	141 TO 146	5	6
757	38 TO	43	150 TO 155	5	6
758	38 TO	43	192 TO 197	5	6
759	38 TO	43	243 TO 248	5	6
760	38 TO	43	249 TO 254	5	6
**** FOR	38 TO	43.	SEE 38 TO 43 ABOVE	****	
**** FOR	39 TO	44.	SEE 6 TO 11 ABOVE	****	
**** FOR	40 TO	45.	SEE 7 TO 12 ABOVE	****	
**** FOR	41 TO	46.	SEE 8 TO 13 ABOVE	****	
761	42 TO	47	119 TO 124	5	6
762	42 TO	47	122 TO 127	5	6
763	42 TO	47	186 TO 191	5	6
764	42 TO	47	226 TO 231	5	6
765	42 TO	47	229 TO 234	5	6
766	42 TO	47	232 TO 237	5	6
**** FOR	43 TO	48.	SEE 18 TO 23 ABOVE	****	
**** FOR	44 TO	49.	SEE 19 TO 24 ABOVE	****	
**** FOR	45 TO	50.	SEE 20 TO 25 ABOVE	****	
**** FOR	46 TO	51.	SEE 42 TO 47 ABOVE	****	
**** FOR	47 TO	52.	SEE 36 TO 41 ABOVE	****	
**** FOR	48 TO	53.	SEE 37 TO 42 ABOVE	****	
**** FOR	49 TO	54.	SEE 38 TO 43 ABOVE	****	
767	50 TO	55	55 TO 60	5	6
768	50 TO	55	58 TO 63	5	6
769	50 TO	55	67 TO 72	5	6
770	50 TO	55	89 TO 94	5	6
771	50 TO	55	109 TO 114	5	6
772	50 TO	55	114 TO 119	5	6
773	50 TO	55	140 TO 145	5	6
774	50 TO	55	146 TO 151	5	6
775	50 TO	55	149 TO 154	5	6
776	50 TO	55	155 TO 160	5	6
777	50 TO	55	191 TO 196	5	6

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
778	50 TO	55	242 TO	247	5 6
779	50 TO	55	248 TO	253	5 6
**** FOR	51 TO	56.	SEE 16 TO	21 ABOVE	****
**** FOR	52 TO	57.	SEE 1 TO	6 ABOVE	****
**** FOR	53 TO	58.	SEE 2 TO	7 ABOVE	****
**** FCR	54 TO	59.	SEE 17 TO	22 ABOVE	****
**** FCR	55 TO	60.	SEE 36 TO	41 ABOVE	****
**** FOR	56 TO	61.	SEE 8 TO	13 ABOVE	****
**** FOR	57 TO	62.	SEE 42 TO	47 ABOVE	****
**** FOR	58 TO	63.	SEE 36 TO	41 ABOVE	****
**** FCR	59 TO	64.	SEE 37 TO	42 ABOVE	****
**** FOR	60 TO	65.	SEE 38 TO	43 ABOVE	****
780	61 TO	66	128 TO	133	5 6
781	63 TO	68	207 TO	212	5 6
782	64 TO	69	206 TO	211	5 6
783	64 TO	69	216 TO	221	5 6
784	65 TO	70	177 TO	182	5 6
785	65 TO	70	205 TO	210	5 6
786	65 TO	70	215 TO	220	5 6
**** FCR	66 TO	71.	SEE 17 TO	22 ABOVE	****
**** FCR	67 TO	72.	SEE 36 TO	41 ABOVE	****
**** FOR	68 TO	73.	SEE 8 TO	13 ABOVE	****
**** FOR	69 TO	74.	SEE 9 TO	14 ABOVE	****
**** FCR	70 TO	75.	SEE 2 TO	7 ABOVE	****
**** FOR	82 TO	87.	SEE 2 TO	7 ABOVE	****
**** FOR	83 TO	88.	SEE 1 TO	6 ABOVE	****
**** FOR	84 TO	89.	SEE 4 TO	9 ABOVE	****
**** FOR	85 TO	90.	SEE 5 TO	10 ABOVE	****
**** FOR	86 TO	91.	SEE 50 TO	55 ABOVE	****
**** FOR	87 TO	92.	SEE 16 TO	21 ABOVE	****
**** FCR	88 TO	93.	SEE 17 TO	22 ABOVE	****
**** FOR	89 TO	94.	SEE 36 TO	41 ABOVE	****
**** FOR	90 TO	95.	SEE 8 TO	13 ABOVE	****
**** FOR	91 TO	96.	SEE 42 TO	47 ABOVE	****
**** FCR	92 TO	97.	SEE 18 TO	23 ABOVE	****
**** FOR	93 TO	98.	SEE 19 TO	24 ABOVE	****
787	101 TO	106	221 TO	226	5 6
**** FOR	101 TO	106.	SEE 101 TO	106 ABOVE	****
788	102 TO	107	220 TO	225	5 6
**** FCR	106 TO	111.	SEE 9 TO	14 ABOVE	****
**** FCR	107 TO	112.	SEE 2 TO	7 ABOVE	****
**** FOR	108 TO	113.	SEE 17 TO	22 ABOVE	****
**** FOR	109 TO	114.	SEE 36 TO	41 ABOVE	****
**** FCR	110 TO	115.	SEE 8 TO	13 ABOVE	****
**** FOR	111 TO	116.	SEE 9 TO	14 ABOVE	****
**** FOR	112 TO	117.	SEE 2 TO	7 ABOVE	****
**** FCR	113 TO	118.	SEE 17 TO	22 ABOVE	****
**** FCR	114 TO	119.	SEE 36 TO	41 ABOVE	****
**** FOR	115 TO	120.	SEE 37 TO	42 ABOVE	****
**** FOR	117 TO	122.	SEE 14 TO	19 ABOVE	****
**** FCR	118 TO	123.	SEE 15 TO	20 ABOVE	****

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
789	119 TO 124		130 TO 135	5	6
790	119 TO 124		134 TO 139	5	6
791	119 TO 124		139 TO 144	5	6
792	119 TO 124		148 TO 153	5	6
793	119 TO 124		241 TO 246	5	6
**** FOR	120 TO 125,	SEE	5 TO 10 ABOVE	****	
**** FOR	121 TO 126,	SEE	50 TO 55 ABOVE	****	
**** FOR	122 TO 127,	SEE	119 TO 124 ABOVE	****	
**** FOR	123 TO 128,	SEE	13 TO 18 ABOVE	****	
**** FOR	129 TO 134,	SEE	8 TO 13 ABOVE	****	
**** FOR	130 TO 135,	SEE	42 TO 47 ABOVE	****	
**** FOR	131 TO 136,	SEE	18 TO 23 ABOVE	****	
**** FOR	132 TO 137,	SEE	19 TO 24 ABOVE	****	
**** FOR	133 TO 138,	SEE	20 TO 25 ABOVE	****	
**** FOR	134 TO 139,	SEE	42 TO 47 ABOVE	****	
**** FOR	135 TO 140,	SEE	18 TO 23 ABOVE	****	
**** FOR	138 TO 143,	SEE	20 TO 25 ABOVE	****	
**** FOR	139 TO 144,	SEE	42 TO 47 ABOVE	****	
**** FOR	140 TO 145,	SEE	36 TO 41 ABOVE	****	
**** FOR	141 TO 146,	SEE	37 TO 42 ABOVE	****	
**** FOR	142 TO 147,	SEE	38 TO 43 ABOVE	****	
**** FOR	143 TO 148,	SEE	50 TO 55 ABOVE	****	
**** FOR	144 TO 149,	SEE	16 TO 21 ABOVE	****	
**** FOR	145 TO 150,	SEE	17 TO 22 ABOVE	****	
**** FOR	146 TO 151,	SEE	36 TO 41 ABOVE	****	
**** FOR	147 TO 152,	SEE	8 TO 13 ABOVE	****	
**** FOR	148 TO 153,	SEE	42 TO 47 ABOVE	****	
**** FOR	149 TO 154,	SEE	36 TO 41 ABOVE	****	
**** FOR	150 TO 155,	SEE	37 TO 42 ABOVE	****	
**** FOR	151 TO 156,	SEE	38 TO 43 ABOVE	****	
**** FOR	152 TO 157,	SEE	50 TO 55 ABOVE	****	
**** FOR	153 TO 158,	SEE	16 TO 21 ABOVE	****	
**** FOR	154 TO 159,	SEE	17 TO 22 ABOVE	****	
**** FOR	155 TO 160,	SEE	36 TO 41 ABOVE	****	
**** FOR	156 TO 161,	SEE	8 TO 13 ABOVE	****	
**** FOR	157 TO 162,	SEE	9 TO 14 ABOVE	****	
**** FOR	162 TO 167,	SEE	4 TO 9 ABOVE	****	
**** FOR	163 TO 168,	SEE	5 TO 10 ABOVE	****	
**** FOR	164 TO 169,	SEE	50 TO 55 ABOVE	****	
**** FOR	165 TO 170,	SEE	16 TO 21 ABOVE	****	
**** FOR	166 TO 171,	SEE	1 TO 6 ABOVE	****	
794	167 TO 172		181 TO 186	5	6
795	167 TO 172		213 TO 218	5	6
796	167 TO 172		222 TO 227	5	6
797	168 TO 173		180 TO 185	5	6
798	169 TO 174		179 TO 184	5	6
**** FOR	169 TO 174,	SEE	169 TO 174 ABOVE	****	
799	170 TO 175		178 TO 183	5	6
**** FOR	171 TO 176,	SEE	65 TO 70 ABOVE	****	
**** FOR	172 TO 177,	SEE	1 TO 6 ABOVE	****	
**** FOR	173 TO 178,	SEE	4 TO 9 ABOVE	****	

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
**** FCR	174 TO 179,	SEE	5 TO 10 ABOVE	****	
**** FOR	175 TO 180,	SEE	50 TO 55 ABOVE	****	
**** FOR	176 TO 181,	SEE	16 TO 21 ABOVE	****	
**** FGR	182 TO 187,	SEE	4 TO 9 ABOVE	****	
**** FOR	183 TO 188,	SEE	13 TO 18 ABOVE	****	
**** FOR	184 TO 189,	SEE	14 TO 19 ABOVE	****	
**** FOR	185 TO 190,	SEE	15 TO 20 ABOVE	****	
**** FOR	186 TO 191,	SEE	119 TO 124 ABOVE	****	
**** FOR	187 TO 192,	SEE	5 TO 10 ABOVE	****	
**** FOR	188 TO 193,	SEE	50 TO 55 ABOVE	****	
**** FOR	189 TO 194,	SEE	16 TO 21 ABOVE	****	
**** FCR	190 TO 195,	SEE	17 TO 22 ABOVE	****	
**** FOR	191 TO 196,	SEE	36 TO 41 ABOVE	****	
**** FOR	192 TO 197,	SEE	37 TO 42 ABOVE	****	
**** FCR	193 TO 198,	SEE	38 TO 43 ABOVE	****	
**** FOR	194 TO 199,	SEE	50 TO 55 ABOVE	****	
**** FOR	195 TO 200,	SEE	16 TO 21 ABOVE	****	
**** FCR	196 TO 201,	SEE	17 TO 22 ABOVE	****	
**** FOR	197 TO 202,	SEE	18 TO 23 ABOVE	****	
**** FOR	202 TO 207,	SEE	20 TO 25 ABOVE	****	
**** FGR	203 TO 208,	SEE	9 TO 14 ABOVE	****	
**** FGR	204 TO 209,	SEE	2 TO 7 ABOVE	****	
**** FOR	207 TO 212,	SEE	63 TO 68 ABOVE	****	
**** FCR	208 TO 213,	SEE	64 TO 69 ABOVE	****	
**** FOR	223 TO 228,	SEE	4 TO 9 ABOVE	****	
**** FOR	224 TO 229,	SEE	5 TO 10 ABOVE	****	
**** FOR	225 TO 230,	SEE	50 TO 55 ABOVE	****	
**** FOR	226 TO 231,	SEE	119 TO 124 ABOVE	****	
**** FOR	227 TO 232,	SEE	5 TO 10 ABOVE	****	
**** FOR	228 TO 233,	SEE	50 TO 55 ABOVE	****	
**** FOR	229 TO 234,	SEE	119 TO 124 ABOVE	****	
**** FOR	230 TO 235,	SEE	5 TO 10 ABOVE	****	
**** FOR	231 TO 236,	SEE	50 TO 55 ABOVE	****	
**** FOR	232 TO 237,	SEE	119 TO 124 ABOVE	****	
**** FOR	233 TO 238,	SEE	13 TO 18 ABOVE	****	
**** FOR	234 TO 239,	SEE	14 TO 19 ABOVE	****	
**** FOR	235 TO 240,	SEE	15 TO 20 ABOVE	****	
**** FOR	236 TO 241,	SEE	16 TO 21 ABOVE	****	
**** FOR	237 TO 242,	SEE	17 TO 22 ABOVE	****	
**** FGR	238 TO 243,	SEE	18 TO 23 ABOVE	****	
**** FOR	239 TO 244,	SEE	19 TO 24 ABOVE	****	
**** FOR	240 TO 245,	SEE	20 TO 25 ABOVE	****	
**** FOR	241 TO 246,	SEE	42 TO 47 ABOVE	****	
**** FCR	242 TO 247,	SEE	36 TO 41 ABOVE	****	
**** FOR	243 TO 248,	SEE	37 TO 42 ABOVE	****	
**** FGR	244 TO 249,	SEE	38 TO 43 ABOVE	****	
**** FOR	245 TO 250,	SEE	50 TO 55 ABOVE	****	
**** FOR	246 TO 251,	SEE	16 TO 21 ABOVE	****	
**** FOR	247 TO 252,	SEE	17 TO 22 ABOVE	****	
**** FOR	248 TO 253,	SEE	36 TO 41 ABOVE	****	
**** FOR	249 TO 254,	SEE	37 TO 42 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FCR	250 TO 255.	SEE	38 TO 43	ABOVE	****
**** FCR	251 TO 256.	SEE	50 TO 55	ABOVE	****
**** FOR	252 TO 257.	SEE	16 TO 21	ABOVE	****
**** FOR	253 TO 258.	SEE	17 TO 22	ABOVE	****
**** FOR	254 TO 259.	SEE	18 TO 23	ABOVE	****

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 7 NOTES IN LENGTH --
 TONAL RETROGRADE
 WAS BEGUN AT 728 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
800	1 TO	7	29 TO	35	5 7
801	1 TO	7	31 TO	37	5 7
802	1 TO	7	33 TO	39	5 7
803	1 TO	7	52 TO	58	5 7
804	1 TO	7	71 TO	77	5 7
805	1 TO	7	73 TO	79	5 7
806	1 TO	7	75 TO	81	5 7
807	1 TO	7	77 TO	83	5 7
808	1 TO	7	79 TO	85	5 7
809	1 TO	7	81 TO	87	5 7
810	1 TO	7	159 TO	165	5 7
811	2 TO	8	10 TO	16	5 7
812	2 TO	8	28 TO	34	5 7
813	2 TO	8	30 TO	36	5 7
814	2 TO	8	32 TO	38	5 7
815	2 TO	8	70 TO	76	5 7
816	2 TO	8	72 TO	78	5 7
817	2 TO	8	74 TO	80	5 7
818	2 TO	8	76 TO	82	5 7
819	2 TO	8	78 TO	84	5 7
820	2 TO	8	80 TO	86	5 7
821	2 TO	8	82 TO	88	5 7
822	2 TO	8	158 TO	164	5 7
823	2 TO	8	160 TO	166	5 7
824	4 TO	10	68 TO	74	5 7
825	4 TO	10	110 TO	116	5 7
826	4 TO	10	156 TO	162	5 7
827	5 TO	11	40 TO	46	5 7
828	6 TO	12	39 TO	45	5 7
829	8 TO	14	84 TO	90	5 7
830	8 TO	14	162 TO	168	5 7
831	8 TO	14	173 TO	179	5 7
832	8 TO	14	223 TO	229	5 7
833	9 TO	15	83 TO	89	5 7
834	9 TO	15	161 TO	167	5 7
835	9 TO	15	172 TO	178	5 7
836	13 TO	19	19 TO	25	5 7
837	13 TO	19	25 TO	31	5 7
838	13 TO	19	44 TO	50	5 7
839	13 TO	19	132 TO	138	5 7
840	13 TO	19	239 TO	245	5 7
841	14 TO	20	24 TO	30	5 7
842	14 TO	20	43 TO	49	5 7
843	14 TO	20	92 TO	98	5 7

PATTERN	NCOTES	RELATED TO	NOTES	TEST	LENGTH
844	14 TO	20	131 TO 137	5	7
845	14 TO	20	238 TO 244	5	7
846	15 TO	21	23 TO 29	5	7
847	15 TO	21	196 TO 202	5	7
848	15 TO	21	237 TO 243	5	7
849	15 TO	21	253 TO 259	5	7
850	16 TO	22	87 TO 93	5	7
851	16 TO	22	144 TO 150	5	7
852	16 TO	22	153 TO 159	5	7
853	16 TO	22	189 TO 195	5	7
854	16 TO	22	195 TO 201	5	7
855	16 TO	22	236 TO 242	5	7
856	16 TO	22	246 TO 252	5	7
857	16 TO	22	252 TO 258	5	7
858	17 TO	23	235 TO 241	5	7
859	18 TO	24	117 TO 123	5	7
860	18 TO	24	184 TO 190	5	7
861	18 TO	24	234 TO 240	5	7
862	19 TO	25	183 TO 189	5	7
863	19 TO	25	233 TO 239	5	7
864	20 TO	26	182 TO 188	5	7
865	36 TO	42	49 TO 55	5	7
866	36 TO	42	142 TO 148	5	7
867	36 TO	42	151 TO 157	5	7
868	36 TO	42	193 TO 199	5	7
869	36 TO	42	244 TO 250	5	7
870	36 TO	42	250 TO 256	5	7
871	37 TO	43	48 TO 54	5	7
872	37 TO	43	59 TO 65	5	7
873	37 TO	43	141 TO 147	5	7
874	37 TO	43	150 TO 156	5	7
875	37 TO	43	192 TO 198	5	7
876	37 TO	43	243 TO 249	5	7
877	37 TO	43	249 TO 255	5	7
878	42 TO	48	118 TO 124	5	7
879	42 TO	48	185 TO 191	5	7
880	50 TO	56	66 TO 72	5	7
881	50 TO	56	88 TO 94	5	7
882	50 TO	56	108 TO 114	5	7
883	50 TO	56	113 TO 119	5	7
884	50 TO	56	145 TO 151	5	7
885	50 TO	56	154 TO 160	5	7
886	50 TO	56	190 TO 196	5	7
887	50 TO	56	247 TO 253	5	7
888	63 TO	69	206 TO 212	5	7
889	64 TO	70	205 TO 211	5	7
890	64 TO	70	215 TO 221	5	7
891	65 TO	71	176 TO 182	5	7
892	101 TO	107	220 TO 226	5	7
893	119 TO	125	129 TO 135	5	7
894	119 TO	125	147 TO 153	5	7

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
895	167 TO 173		180 TO 186	5	7
896	168 TO 174		179 TO 185	5	7
897	169 TO 175		178 TO 184	5	7
898	170 TO 176		177 TO 183	5	7

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 8 NOTES IN LENGTH --
 TONAL RETROGRADE
 WAS BEGUN AT 754 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
899	1 TO	8	28 TO	35	5 8
900	1 TO	8	30 TO	37	5 8
901	1 TO	8	32 TO	39	5 8
902	1 TO	8	70 TO	77	5 8
903	1 TO	8	72 TO	79	5 8
904	1 TO	8	74 TO	81	5 8
905	1 TO	8	76 TO	83	5 8
906	1 TO	8	78 TO	85	5 8
907	1 TO	8	80 TO	87	5 8
908	1 TO	8	158 TO	165	5 8
909	2 TO	9	9 TO	16	5 8
910	2 TO	9	27 TO	34	5 8
911	2 TO	9	69 TO	76	5 8
912	2 TO	9	157 TO	164	5 8
913	5 TO	12	39 TO	46	5 8
914	8 TO	15	83 TO	90	5 8
915	8 TO	15	161 TO	168	5 8
916	8 TO	15	172 TO	179	5 8
917	9 TO	16	82 TO	89	5 8
918	9 TO	16	160 TO	167	5 8
919	13 TO	20	24 TO	31	5 8
920	13 TO	20	43 TO	50	5 8
921	13 TO	20	131 TO	138	5 8
922	13 TO	20	238 TO	245	5 8
923	14 TO	21	23 TO	30	5 8
924	14 TO	21	237 TO	244	5 8
925	15 TO	22	195 TO	202	5 8
926	15 TO	22	236 TO	243	5 8
927	15 TO	22	252 TO	259	5 8
928	16 TO	23	235 TO	242	5 8
929	17 TO	24	234 TO	241	5 8
930	18 TO	25	183 TO	190	5 8
931	18 TO	25	233 TO	240	5 8
932	19 TO	26	182 TO	189	5 8
933	36 TO	43	48 TO	55	5 8
934	36 TO	43	141 TO	148	5 8
935	36 TO	43	150 TO	157	5 8
936	36 TO	43	192 TO	199	5 8
937	36 TO	43	243 TO	250	5 8
938	36 TO	43	249 TO	256	5 8
939	42 TO	49	117 TO	124	5 8
940	42 TO	49	184 TO	191	5 8
941	50 TO	57	107 TO	114	5 8
942	50 TO	57	112 TO	119	5 8

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
943	63 TO 70		205 TO 212	5	8
944	65 TO 72		175 TO 182	5	8
945	119 TO 126		146 TO 153	5	8
946	167 TO 174		179 TO 186	5	8
947	168 TO 175		178 TO 185	5	8
948	169 TO 176		177 TO 184	5	8

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 9 NOTES IN LENGTH --
 TONAL RETROGRADE
 WAS BEGUN AT 775 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
949	1 TO 9		27 TO 35	5	9
950	1 TO 9		69 TO 77	5	9
951	1 TO 9		157 TO 165	5	9
952	2 TO 10		68 TO 76	5	9
953	2 TO 10		156 TO 164	5	9
954	8 TO 16		82 TO 90	5	9
955	8 TO 16		160 TO 168	5	9
956	13 TO 21		23 TO 31	5	9
957	13 TO 21		237 TO 245	5	9
958	14 TO 22		236 TO 244	5	9
959	15 TO 23		235 TO 243	5	9
960	16 TO 24		234 TO 242	5	9
961	17 TO 25		233 TO 241	5	9
962	18 TO 26		182 TO 190	5	9
963	42 TO 50		183 TO 191	5	9
964	65 TO 73		174 TO 182	5	9
965	167 TO 175		178 TO 186	5	9
966	168 TO 176		177 TO 185	5	9

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 10 NOTES IN LENGTH --
 TONAL RETROGRADE
 WAS BEGUN AT 793 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
967	1 TO 10		68 TO 77	5	10
968	1 TO 10		156 TO 165	5	10
969	13 TO 22		236 TO 245	5	10
970	14 TO 23		235 TO 244	5	10
971	15 TO 24		234 TO 243	5	10
972	16 TO 25		233 TO 242	5	10
973	65 TO 74		173 TO 182	5	10
974	167 TO 176		177 TO 186	5	10

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 11 NOTES IN LENGTH --
TGNAL RETROGRADE
WAS BEGUN AT 810 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
975	13 TO	23	235 TO 245	5	11
976	14 TO	24	234 TO 244	5	11
977	15 TO	25	233 TO 243	5	11
978	65 TO	75	172 TO 182	5	11

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 12 NOTES IN LENGTH --
TCNAL RETROGRADE
WAS BEGUN AT 827 SECCNDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
579	13 TO 24		234 TO 245	5	12
580	14 TO 25		233 TO 244	5	12

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 13 NOTES IN LENGTH --
TONAL RETROGRADE
WAS BEGUN AT 843 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
981	13 TO 25		233 TO 245	5	13

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 14 NOTES IN LENGTH --
TONAL RETROGRADE
WAS BEGUN AT 860 SECONDS INTO EXECUTION.

PATTFRN	NOTES	RELATED TO	NOTES	TEST	LENGTH
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END OF TYPE I LISTING. TOTAL OF 981 PATTERNS LOCATED.

*** TYPE II LISTING ***

EDGARD VARESE
TONAL RETROGRADE

DENSITY 21.5 FOR SOLO FLUTE

	LOCATION OF FIRST OCCURRENCE		TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	13 TO	25	2	13
SUBPATTERN	15 TO	22	4	8
SUBPATTERN	13 TO	20	5	8
SUBPATTERN	18 TO	24	4	7
SUBPATTERN	16 TO	22	9	7
SUBPATTERN	15 TO	21	5	7
SUBPATTERN	14 TO	20	6	7
SUBPATTERN	13 TO	19	6	7
SUBPATTERN	20 TO	25	4	6
SUBPATTERN	19 TO	24	4	6
SUBPATTERN	18 TO	23	4	6
SUBPATTERN	17 TO	22	12	6
SUBPATTERN	16 TO	21	15	6
SUBPATTERN	15 TO	20	9	6
SUBPATTERN	14 TO	19	7	6
SUBPATTERN	13 TO	18	8	6
SUBPATTERN	20 TO	24	5	5
SUBPATTERN	19 TO	23	4	5
SUBPATTERN	18 TO	22	19	5
SUBPATTERN	16 TO	20	24	5
SUBPATTERN	15 TO	19	10	5
SUBPATTERN	14 TO	18	9	5

*** TEST 5 COMPLETED AT 1047 SECONDS INTO EXECUTION ***

***** MUSIC MELODIC PATTERN ANALYSIS *****

EDGAR VARESE DENSITY 21.5 FOR SOLO FLUTE

TFST REQUESTED 6
UNITS OF DATA PER CARD 15

CCMPLTER REFERENCE NUMBER ASSIGNMENT

NOTES	1	THROUGH	15												
55	54	56	51	56	51	57	55	54	56	57	51	57	56	57	
NOTES	16	THROUGH	30												
56	54	51	57	51	57	59	60	57	60	57	60	62	63	62	
NOTES	31	THROUGH	45												
63	62	63	62	63	62	63	62	64	70	64	58	64	70	53	
NOTES	46	THROUGH	60												
59	65	71	59	72	78	66	65	67	65	67	65	66	68	55	
NOTES	61	THROUGH	75												
56	81	61	60	61	61	59	61	58	61	75	74	75	74	75	
NOTES	76	THROUGH	90												
74	75	74	75	74	75	74	75	74	75	74	76	61	60	61	
NOTES	91	THROUGH	105												
59	60	61	59	60	74	75	74	74	74	54	51	54	51	51	
NOTES	106	THROUGH	120												
51	54	64	51	64	51	52	58	54	58	52	65	81	80	68	
NOTES	121	THROUGH	135												
67	81	80	68	81	80	68	67	67	57	68	69	56	57	58	
NOTES	136	THROUGH	150												
59	54	60	70	73	83	73	80	83	80	73	83	73	80	83	
NOTES	151	THROUGH	165												
73	80	83	80	73	83	73	80	83	80	83	80	83	80	83	
NOTES	166	THROUGH	180												
80	73	74	65	74	65	65	64	65	63	65	64	63	65	63	
NOTES	181	THROUGH	195												
64	64	65	63	65	61	56	55	57	56	55	57	55	56	57	

NCTES 196 THROUGH 210

56 55 57 52 58 59 66 72 75 90 85 88 85 88 88

NCTES 211 THROUGH 225

85 88 85 85 88 85 88 85 88 88 58 58 58 59 57

NCTES 226 THROUGH 240

74 68 67 74 68 67 74 68 67 74 54 52 51 54 51

NCTES 241 THROUGH 255

54 56 57 54 57 71 60 54 60 50 54 64 54 50 64

NCTES 256 THROUGH 265

50 54 60 64 68 75 77 79 85 -99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

*** TYPE I LISTING ***

EDGAR VARESE

DENSITY 21.5 FOR SOLO FLUTE

SEARCH FOR PATTERNS OF 3 NOTES IN LENGTH --
 EXACT RETROGRADE
 WAS BEGUN AT 27 SECONDS INTO EXECUTION.

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO 3		56 TO 58	6	3
2	1 TO 3		90 TO 92	6	3
3	1 TO 3		93 TO 95	6	3
4	1 TO 3		179 TO 181	6	3
5	1 TO 3		192 TO 194	6	3
6	7 TO 9		57 TO 59	6	3
**** FOR	8 TO 10,	SEE	1 TO 3	ABOVE ****	
7	9 TO 11		15 TO 17	6	3
8	10 TO 12		12 TO 14	6	3
9	11 TO 13		19 TO 21	6	3
10	11 TO 13		41 TO 43	6	3
11	11 TO 13		247 TO 249	6	3
12	13 TO 15		29 TO 31	6	3
13	13 TO 15		31 TO 33	6	3
14	13 TO 15		33 TO 35	6	3
15	13 TO 15		35 TO 37	6	3
16	13 TO 15		63 TO 65	6	3
17	13 TO 15		71 TO 73	6	3
18	13 TO 15		73 TO 75	6	3
19	13 TO 15		75 TO 77	6	3
20	13 TO 15		77 TO 79	6	3
21	13 TO 15		79 TO 81	6	3
22	13 TO 15		81 TO 83	6	3
23	13 TO 15		83 TO 85	6	3
24	13 TO 15		88 TO 90	6	3
25	13 TO 15		172 TO 174	6	3
26	14 TO 16		28 TO 30	6	3
27	14 TO 16		30 TO 32	6	3
28	14 TO 16		32 TO 34	6	3
29	14 TO 16		34 TO 36	6	3
30	14 TO 16		36 TO 38	6	3
31	14 TO 16		72 TO 74	6	3
32	14 TO 16		74 TO 76	6	3
33	14 TO 16		76 TO 78	6	3
34	14 TO 16		78 TO 80	6	3
35	14 TO 16		80 TO 82	6	3
36	14 TO 16		82 TO 84	6	3
37	14 TO 16		84 TO 86	6	3
38	14 TO 16		96 TO 98	6	3
39	14 TO 16		194 TO 196	6	3
40	15 TO 17		21 TO 23	6	3
41	15 TO 17		27 TO 29	6	3

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
42	15 TO	17	241 TO 243	6	3
43	16 TO	18	26 TO 28	6	3
44	16 TO	18	240 TO 242	6	3
45	18 TO	20	39 TO 41	6	3
**** FOR	19 TO	21.	SEE 11 TO 13 ABOVE	****	
**** FOR	21 TO	23.	SEE 9 TO 11 ABOVE	****	
46	23 TO	25	25 TO 27	6	3
47	23 TO	25	68 TO 70	6	3
48	23 TO	25	101 TO 103	6	3
49	23 TO	25	159 TO 161	6	3
50	23 TO	25	161 TO 163	6	3
51	23 TO	25	163 TO 165	6	3
52	23 TO	25	207 TO 209	6	3
53	23 TO	25	210 TO 212	6	3
54	23 TO	25	215 TO 217	6	3
55	23 TO	25	217 TO 219	6	3
56	23 TO	25	239 TO 241	6	3
57	23 TO	25	243 TO 245	6	3
58	24 TO	26	102 TO 104	6	3
59	24 TO	26	143 TO 145	6	3
60	24 TO	26	152 TO 154	6	3
61	24 TO	26	158 TO 160	6	3
62	24 TO	26	160 TO 162	6	3
63	24 TO	26	162 TO 164	6	3
64	24 TO	26	164 TO 166	6	3
65	24 TO	26	206 TO 208	6	3
66	24 TO	26	211 TO 213	6	3
67	24 TO	26	214 TO 216	6	3
68	24 TO	26	216 TO 218	6	3
69	24 TO	26	238 TO 240	6	3
**** FOR	25 TO	27.	SEE 23 TO 25 ABOVE	****	
**** FOR	27 TO	29.	SEE 9 TO 11 ABOVE	****	
**** FOR	28 TO	30.	SEE 14 TO 16 ABOVE	****	
**** FOR	29 TO	31.	SEE 13 TO 15 ABOVE	****	
**** FOR	30 TO	32.	SEE 14 TO 16 ABOVE	****	
**** FOR	31 TO	33.	SEE 13 TO 15 ABOVE	****	
**** FOR	32 TO	34.	SEE 14 TO 16 ABOVE	****	
**** FOR	33 TO	35.	SEE 13 TO 15 ABOVE	****	
**** FOR	34 TO	36.	SEE 14 TO 16 ABOVE	****	
**** FOR	35 TO	37.	SEE 13 TO 15 ABOVE	****	
**** FOR	36 TO	38.	SEE 14 TO 16 ABOVE	****	
**** FOR	37 TO	39.	SEE 1 TO 3 ABOVE	****	
**** FOR	39 TO	41.	SEE 18 TO 20 ABOVE	****	
70	40 TO	42	42 TO 44	6	3
71	40 TO	42	45 TO 47	6	3
72	40 TO	42	46 TO 48	6	3
**** FOR	41 TO	43.	SEE 11 TO 13 ABOVE	****	
73	43 TO	45	225 TO 227	6	3
**** FOR	52 TO	54.	SEE 1 TO 3 ABOVE	****	
74	53 TO	55	55 TO 57	6	3
75	53 TO	55	178 TO 180	6	3

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
76	53 TO	55	191 TO	193	6 3
77	54 TO	56	66 TO	68	6 3
78	54 TO	56	174 TO	176	6 3
79	54 TO	56	183 TO	185	6 3
**** FOR	55 TO	57.	SEE 53 TO	55 ABOVE	****
80	56 TO	58	85 TO	87	6 3
81	56 TO	58	177 TO	179	6 3
82	56 TO	58	187 TO	189	6 3
83	56 TO	58	190 TO	192	6 3
84	56 TO	58	196 TO	198	6 3
85	57 TO	59	236 TO	238	6 3
**** FOR	63 TO	65.	SEE 13 TO	15 ABOVE	****
86	64 TO	66	171 TO	173	6 3
**** FOR	66 TO	68.	SEE 54 TO	56 ABOVE	****
**** FOR	68 TO	70.	SEE 23 TO	25 ABOVE	****
**** FOR	71 TO	73.	SEE 13 TO	15 ABOVE	****
**** FOR	72 TO	74.	SEE 14 TO	16 ABOVE	****
**** FOR	73 TO	75.	SEE 13 TO	15 ABOVE	****
**** FOR	74 TO	76.	SEE 14 TO	16 ABOVE	****
**** FOR	75 TO	77.	SEE 13 TO	15 ABOVE	****
**** FOR	76 TO	78.	SEE 14 TO	16 ABOVE	****
**** FOR	77 TO	79.	SEE 13 TO	15 ABOVE	****
**** FOR	78 TO	80.	SEE 14 TO	16 ABOVE	****
**** FOR	79 TO	81.	SEE 13 TO	15 ABOVE	****
**** FOR	80 TO	82.	SEE 14 TO	16 ABOVE	****
**** FOR	81 TO	83.	SEE 13 TO	15 ABOVE	****
**** FOR	82 TO	84.	SEE 14 TO	16 ABOVE	****
**** FOR	83 TO	85.	SEE 13 TO	15 ABOVE	****
**** FOR	84 TO	86.	SEE 14 TO	16 ABOVE	****
**** FOR	85 TO	87.	SEE 1 TO	3 ABOVE	****
**** FOR	88 TO	90.	SEE 13 TO	15 ABOVE	****
87	89 TO	91	175 TO	177	6 3
88	89 TO	91	188 TO	190	6 3
**** FOR	90 TO	92.	SEE 56 TO	58 ABOVE	****
89	91 TO	93	176 TO	178	6 3
90	91 TO	93	189 TO	191	6 3
91	91 TO	93	195 TO	197	6 3
**** FOR	92 TO	94.	SEE 89 TO	91 ABOVE	****
**** FOR	93 TO	95.	SEE 56 TO	58 ABOVE	****
**** FOR	96 TO	98.	SEE 14 TO	16 ABOVE	****
92	97 TO	99	181 TO	183	6 3
93	97 TO	99	222 TO	224	6 3
94	98 TO	100	104 TO	106	6 3
95	98 TO	100	221 TO	223	6 3
**** FOR	101 TO	103.	SEE 23 TO	25 ABOVE	****
**** FOR	102 TO	104.	SEE 24 TO	26 ABOVE	****
96	103 TO	105	105 TO	107	6 3
97	103 TO	105	213 TO	215	6 3
**** FOR	104 TO	106.	SEE 98 TO	100 ABOVE	****
98	105 TO	107	212 TO	214	6 3
99	111 TO	113	226 TO	228	6 3

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
100	111 TO	113	229 TO	231	6 3
101	111 TO	113	232 TO	234	6 3
102	112 TO	114	114 TO	116	6 3
103	124 TO	126	131 TO	133	6 3
**** FOR	127 TO	129.	SEE 97 TO	99 ABOVE	****
**** FOR	133 TO	135.	SEE 91 TO	93 ABOVE	****
**** FCR	134 TO	136.	SEE 91 TO	93 ABOVE	****
104	140 TO	142	146 TO	148	6 3
105	140 TO	142	155 TO	157	6 3
106	140 TO	142	251 TO	253	6 3
107	141 TO	143	145 TO	147	6 3
108	141 TO	143	154 TO	156	6 3
109	142 TO	144	144 TO	146	6 3
110	142 TO	144	153 TO	155	6 3
111	142 TO	144	165 TO	167	6 3
**** FOR	143 TO	145.	SEE 24 TO	26 ABOVE	****
112	144 TO	146	148 TO	150	6 3
113	144 TO	146	151 TO	153	6 3
114	144 TO	146	157 TO	159	6 3
115	145 TO	147	147 TO	149	6 3
116	145 TO	147	150 TO	152	6 3
117	145 TO	147	156 TO	158	6 3
**** FOR	146 TO	148.	SEE 140 TO	142 ABOVE	****
**** FOR	147 TO	149.	SEE 141 TO	143 ABOVE	****
**** FCR	148 TO	150.	SEE 142 TO	144 ABOVE	****
**** FOR	150 TO	152.	SEE 141 TO	143 ABOVE	****
**** FOR	151 TO	153.	SEE 142 TO	144 ABOVE	****
**** FOR	152 TO	154.	SEE 24 TO	26 ABOVE	****
**** FCR	153 TO	155.	SEE 144 TO	146 ABOVE	****
**** FCR	154 TO	156.	SEE 145 TO	147 ABOVE	****
**** FOR	155 TO	157.	SEE 140 TO	142 ABOVE	****
**** FCR	156 TO	158.	SEE 141 TO	143 ABOVE	****
**** FOR	157 TO	159.	SEE 142 TO	144 ABOVE	****
**** FOR	158 TO	160.	SEE 24 TO	26 ABOVE	****
**** FCR	159 TO	161.	SEE 23 TO	25 ABOVE	****
**** FOR	160 TO	162.	SEE 24 TO	26 ABOVE	****
**** FOR	161 TO	163.	SEE 23 TO	25 ABOVE	****
**** FOR	162 TO	164.	SEE 24 TO	26 ABOVE	****
**** FCR	163 TO	165.	SEE 23 TO	25 ABOVE	****
**** FOR	164 TO	166.	SEE 24 TO	26 ABOVE	****
**** FCR	165 TO	167.	SEE 144 TO	146 ABOVE	****
118	166 TO	168	227 TO	229	6 3
119	166 TO	168	230 TO	232	6 3
120	166 TO	168	233 TO	235	6 3
121	171 TO	173	180 TO	182	6 3
**** FOR	172 TO	174.	SEE 13 TO	15 ABOVE	****
**** FCR	173 TO	175.	SEE 89 TO	91 ABOVE	****
**** FOR	174 TO	176.	SEE 54 TO	56 ABOVE	****
122	175 TO	177	182 TO	184	6 3
123	175 TO	177	223 TO	225	6 3
124	176 TO	178	193 TO	195	6 3

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	177 TO	179.	SEE 1 TO	3 ABOVE	****
**** FOR	178 TO	180.	SEE 53 TO	55 ABOVE	****
**** FOR	179 TO	181.	SEE 56 TO	58 ABOVE	****
**** FCR	180 TO	182.	SEE 64 TO	66 ABOVE	****
**** FOR	182 TO	184.	SEE 89 TO	91 ABOVE	****
**** FOR	183 TO	185.	SEE 54 TO	56 ABOVE	****
**** FCR	187 TO	189.	SEE 1 TO	3 ABOVE	****
**** FOR	188 TO	190.	SEE 175 TO	177 ABOVE	****
**** FOR	189 TO	191.	SEE 176 TO	178 ABOVE	****
**** FOR	190 TO	192.	SEE 1 TO	3 ABOVE	****
**** FCR	191 TO	193.	SEE 53 TO	55 ABOVE	****
**** FOR	192 TO	194.	SEE 56 TO	58 ABOVE	****
**** FOR	193 TO	195.	SEE 91 TO	93 ABOVE	****
**** FOR	194 TO	196.	SEE 14 TO	16 ABOVE	****
**** FOR	195 TO	197.	SEE 176 TO	178 ABOVE	****
**** FOR	196 TO	198.	SEE 1 TO	3 ABOVE	****
**** FOR	206 TO	208.	SEE 24 TO	26 ABOVE	****
**** FOR	207 TO	209.	SEE 23 TO	25 ABOVE	****
125	209 TO	211	218 TO	220	6 3
**** FOR	210 TO	212.	SEE 23 TO	25 ABOVE	****
**** FOR	211 TO	213.	SEE 24 TO	26 ABOVE	****
**** FOR	212 TO	214.	SEE 103 TO	105 ABOVE	****
**** FCR	213 TO	215.	SEE 105 TO	107 ABOVE	****
**** FCR	214 TO	216.	SEE 24 TO	26 ABOVE	****
**** FOR	215 TO	217.	SEE 23 TO	25 ABOVE	****
**** FOR	216 TO	218.	SEE 24 TO	26 ABOVE	****
**** FCR	217 TO	219.	SEE 23 TO	25 ABOVE	****
**** FOR	221 TO	223.	SEE 98 TO	100 ABOVE	****
**** FOR	223 TO	225.	SEE 89 TO	91 ABOVE	****
**** FOR	236 TO	238.	SEE 7 TO	9 ABOVE	****
**** FOR	238 TO	240.	SEE 24 TO	26 ABOVE	****
**** FOR	239 TO	241.	SEE 23 TO	25 ABOVE	****
**** FOR	241 TO	243.	SEE 9 TO	11 ABOVE	****
**** FOR	243 TO	245.	SEE 23 TO	25 ABOVE	****
**** FCR	247 TO	249.	SEE 11 TO	13 ABOVE	****
126	250 TO	252	252 TO	254	6 3
**** FOR	251 TO	253.	SEE 140 TO	142 ABOVE	****
127	253 TO	255	255 TO	257	6 3

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 4 NOTES IN LENGTH --
 EXACT RETROGRADE
 WAS BEGUN AT 207 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
128	7 TO 10		56 TO 59	6	4
129	13 TO 16		28 TO 31	6	4
130	13 TO 16		30 TO 33	6	4
131	13 TO 16		32 TO 35	6	4
132	13 TO 16		34 TO 37	6	4
133	13 TO 16		72 TO 75	6	4
134	13 TO 16		74 TO 77	6	4
135	13 TO 16		76 TO 79	6	4
136	13 TO 16		78 TO 81	6	4
137	13 TO 16		80 TO 83	6	4
138	13 TO 16		82 TO 85	6	4
139	14 TO 17		27 TO 30	6	4
140	15 TO 18		26 TO 29	6	4
141	15 TO 18		240 TO 243	6	4
142	23 TO 26		158 TO 161	6	4
143	23 TO 26		160 TO 163	6	4
144	23 TO 26		162 TO 165	6	4
145	23 TO 26		206 TO 209	6	4
146	23 TO 26		214 TO 217	6	4
147	23 TO 26		216 TO 219	6	4
148	23 TO 26		238 TO 241	6	4
149	24 TO 27		101 TO 104	6	4
150	24 TO 27		159 TO 162	6	4
151	24 TO 27		161 TO 164	6	4
152	24 TO 27		163 TO 166	6	4
153	24 TO 27		210 TO 213	6	4
154	24 TO 27		215 TO 218	6	4
155	28 TO 31		31 TO 34	6	4
156	28 TO 31		33 TO 36	6	4
157	28 TO 31		35 TO 38	6	4
158	28 TO 31		71 TO 74	6	4
159	28 TO 31		73 TO 76	6	4
160	28 TO 31		75 TO 78	6	4
161	28 TO 31		77 TO 80	6	4
162	28 TO 31		79 TO 82	6	4
163	28 TO 31		81 TO 84	6	4
164	28 TO 31		83 TO 86	6	4
**** FOR	29 TO 32,	SEE	13 TO 16 ABOVE	****	
**** FOR	30 TO 33,	SEE	28 TO 31 ABOVE	****	
**** FOR	31 TO 34,	SEE	13 TO 16 ABOVE	****	
**** FOR	32 TO 35,	SEE	28 TO 31 ABOVE	****	
**** FOR	33 TO 36,	SEE	13 TO 16 ABOVE	****	
**** FOR	34 TO 37,	SEE	28 TO 31 ABOVE	****	
**** FOR	35 TO 38,	SEE	13 TO 16 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
165	52 TO 55		55 TO 58	6	4
166	52 TO 55		178 TO 181	6	4
167	52 TO 55		191 TO 194	6	4
168	55 TO 58		177 TO 180	6	4
169	55 TO 58		190 TO 193	6	4
170	63 TO 66		171 TO 174	6	4
**** FCR	71 TO 74.	SEE	13 TO 16 ABOVE	****	
**** FCR	72 TO 75.	SEE	28 TO 31 ABOVE	****	
**** FCR	73 TO 76.	SEE	13 TO 16 ABOVE	****	
**** FOR	74 TO 77.	SEE	28 TO 31 ABOVE	****	
**** FOR	75 TO 78.	SEE	13 TO 16 ABOVE	****	
**** FOR	76 TO 79.	SEE	28 TO 31 ABOVE	****	
**** FCR	77 TO 80.	SEE	13 TO 16 ABOVE	****	
**** FCR	78 TO 81.	SEE	28 TO 31 ABOVE	****	
**** FCR	79 TO 82.	SEE	13 TO 16 ABOVE	****	
**** FOR	80 TO 83.	SEE	28 TO 31 ABOVE	****	
**** FOR	81 TO 84.	SEE	13 TO 16 ABOVE	****	
**** FCR	82 TO 85.	SEE	28 TO 31 ABOVE	****	
**** FCR	83 TO 86.	SEE	13 TO 16 ABOVE	****	
171	89 TO 92		187 TO 190	6	4
172	90 TO 93		176 TO 179	6	4
173	90 TO 93		189 TO 192	6	4
174	90 TO 93		195 TO 198	6	4
175	91 TO 94		175 TO 178	6	4
176	91 TO 94		188 TO 191	6	4
**** FOR	92 TO 95.	SEE	89 TO 92 ABOVE	****	
177	97 TO 100		221 TO 224	6	4
**** FOR	101 TO 104.	SEE	23 TO 26 ABOVE	****	
178	102 TO 105		213 TO 216	6	4
179	140 TO 143		145 TO 148	6	4
180	140 TO 143		154 TO 157	6	4
181	141 TO 144		144 TO 147	6	4
182	141 TO 144		153 TO 156	6	4
183	142 TO 145		152 TO 155	6	4
184	142 TO 145		164 TO 167	6	4
185	143 TO 146		151 TO 154	6	4
186	143 TO 146		157 TO 160	6	4
187	144 TO 147		147 TO 150	6	4
188	144 TO 147		150 TO 153	6	4
189	144 TO 147		156 TO 159	6	4
190	145 TO 148		155 TO 158	6	4
**** FCR	146 TO 149.	SEE	140 TO 143 ABOVE	****	
**** FOR	147 TO 150.	SEE	141 TO 144 ABOVE	****	
**** FCR	150 TO 153.	SEE	141 TO 144 ABOVE	****	
**** FOR	151 TO 154.	SEE	142 TO 145 ABOVE	****	
**** FOR	152 TO 155.	SEE	143 TO 146 ABOVE	****	
**** FOR	153 TO 156.	SEE	144 TO 147 ABOVE	****	
**** FCR	154 TO 157.	SEE	145 TO 148 ABOVE	****	
**** FOR	155 TO 158.	SEE	140 TO 143 ABOVE	****	
**** FOR	156 TO 159.	SEE	141 TO 144 ABOVE	****	
**** FOR	157 TO 160.	SEE	142 TO 145 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FCR	158 TO 161.	SEE	24 TO 27 ABOVE	****	
**** FCR	159 TO 162.	SEE	23 TO 26 ABOVE	****	
**** FCR	160 TO 163.	SEE	24 TO 27 ABOVE	****	
**** FOR	161 TO 164.	SEE	23 TO 26 ABOVE	****	
**** FOR	162 TO 165.	SEE	24 TO 27 ABOVE	****	
**** FOR	163 TO 166.	SEE	23 TO 26 ABOVE	****	
**** FOR	164 TO 167.	SEE	143 TO 146 ABOVE	****	
191	174 TO 177		182 TO 185	6	4
192	176 TO 179		192 TO 195	6	4
**** FOR	177 TO 180.	SEE	52 TO 55 ABOVE	****	
**** FOR	178 TO 181.	SEE	55 TO 58 ABOVE	****	
**** FCR	189 TO 192.	SEE	176 TO 179 ABOVE	****	
**** FCR	190 TO 193.	SEE	52 TO 55 ABOVE	****	
**** FCR	191 TO 194.	SEE	55 TO 58 ABOVE	****	
**** FOR	192 TO 195.	SEE	90 TO 93 ABOVE	****	
**** FOR	195 TO 198.	SEE	176 TO 179 ABOVE	****	
**** FCR	206 TO 209.	SEE	24 TO 27 ABOVE	****	
193	209 TO 212		217 TO 220	6	4
**** FCR	210 TO 213.	SEE	23 TO 26 ABOVE	****	
**** FOR	211 TO 214.	SEE	102 TO 105 ABOVE	****	
**** FOR	214 TO 217.	SEE	24 TO 27 ABOVE	****	
**** FOR	215 TO 218.	SEE	23 TO 26 ABOVE	****	
**** FCR	216 TO 219.	SEE	24 TO 27 ABOVE	****	
**** FOR	238 TO 241.	SEE	24 TO 27 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 5 NOTES IN LENGTH --
 EXACT RETROGRADE
 WAS BEGUN AT 273 SECONDS INTO EXECUTION.

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
194	13 TO 17		27 TO 31	6	5
195	14 TO 18		26 TO 30	6	5
196	90 TO 94		175 TO 179	6	5
197	50 TO 94		188 TO 192	6	5
**** FOR	90 TO 94,	SEE	90 TO 94 ABOVE	****	
198	91 TO 95		187 TO 191	6	5
199	101 TO 105		213 TO 217	6	5
200	140 TO 144		144 TO 148	6	5
201	140 TO 144		153 TO 157	6	5
202	141 TO 145		152 TO 156	6	5
203	142 TO 146		151 TO 155	6	5
204	143 TO 147		150 TO 154	6	5
205	143 TO 147		156 TO 160	6	5
**** FOR	143 TO 147,	SEE	143 TO 147 ABOVE	****	
206	144 TO 148		155 TO 159	6	5
207	145 TO 149		154 TO 158	6	5
**** FOR	146 TO 150,	SEE	140 TO 144 ABOVE	****	
**** FOR	150 TO 154,	SEE	141 TO 145 ABOVE	****	
**** FOR	151 TO 155,	SEE	142 TO 146 ABOVE	****	
**** FOR	152 TO 156,	SEE	143 TO 147 ABOVE	****	
**** FOR	153 TO 157,	SEE	144 TO 148 ABOVE	****	
**** FOR	154 TO 158,	SEE	145 TO 149 ABOVE	****	
**** FOR	155 TO 159,	SEE	140 TO 144 ABOVE	****	
**** FOR	156 TO 160,	SEE	141 TO 145 ABOVE	****	
208	157 TO 161		163 TO 167	6	5
209	176 TO 180		191 TO 195	6	5
210	177 TO 181		190 TO 194	6	5
**** FOR	189 TO 193,	SEE	176 TO 180 ABOVE	****	
**** FOR	190 TO 194,	SEE	177 TO 181 ABOVE	****	
211	209 TO 213		216 TO 220	6	5
**** FOR	210 TO 214,	SEE	101 TO 105 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 6 NOTES IN LENGTH --
 EXACT RETROGRADE
 WAS BEGUN AT 335 SECONDS INTO EXECUTION.

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
212	13 TO	18	26 TO 31	6	6
213	90 TO	95	187 TO 192	6	6
214	140 TO	145	152 TO 157	6	6
215	141 TO	146	151 TO 156	6	6
216	142 TO	147	150 TO 155	6	6
217	143 TO	148	155 TO 160	6	6
218	144 TO	149	154 TO 159	6	6
219	145 TO	150	153 TO 158	6	6
**** FOR	150 TO	155.	SEE 141 TO 146 ABOVE	****	
**** FOR	151 TO	156.	SEE 142 TO 147 ABOVE	****	
**** FOR	152 TO	157.	SEE 143 TO 148 ABOVE	****	
**** FOR	153 TO	158.	SEE 144 TO 149 ABOVE	****	
**** FOR	154 TO	159.	SEE 145 TO 150 ABOVE	****	
**** FOR	155 TO	160.	SEE 140 TO 145 ABOVE	****	
220	157 TO	162	162 TO 167	6	6
**** FOR	157 TO	162.	SEE 157 TO 162 ABOVE	****	
221	176 TO	181	190 TO 195	6	6
**** FOR	189 TO	194.	SEE 176 TO 181 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 7 NOTES IN LENGTH --
 EXACT RETROGRADE
 WAS BEGUN AT 395 SECONDS INTO EXECUTION.

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
222	140 TO 146		151 TO 157	6	7
223	141 TO 147		150 TO 156	6	7
224	143 TO 149		154 TO 160	6	7
225	144 TO 150		153 TO 159	6	7

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 8 NOTES IN LENGTH --
EXACT RETROGRADE
WAS BEGUN AT 412 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
226	140 TO 147		150 TO 157	6	8
227	143 TO 150		153 TO 160	6	8

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 9 NOTES IN LENGTH --
EXACT RETROGRADE
WAS BEGUN AT 429 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
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END OF TYPE I LISTING. TOTAL OF 227 PATTERNS LOCATED.

*** TYPE II LISTING ***

EDGAR VARESE
EXACT RETRCGRACE

DENSITY 21.5 FOR SOLO FLUTE

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	143 TO 150	2	8
SUBPATTERN	144 TO 147	4	4
SUBPATTERN	145 TO 147	4	3
SUBPATTERN	144 TO 146	4	3
ORIGINAL PATTERN	140 TO 147	2	8
SUBPATTERN	144 TO 147	4	4
SUBPATTERN	145 TO 147	4	3
SUBPATTERN	144 TO 146	4	3
SUBPATTERN	142 TO 144	4	3
SUBPATTERN	140 TO 142	4	3

**** TEST 6 COMPLETED AT 535 SECCNDS INTO EXECUTION ****

***** MUSIC MELODIC PATTERN ANALYSIS *****

EDGARD VARESE DENSITY 21.5 FOR SOLO FLUTE

TEST REQUESTED 7
UNITS OF DATA PER CARD 15

CCMPUTER REFERENCE NUMBER ASSIGNMENT

NCTES	1	THROUGH	15												
55	54	56	51	56	51	57	55	54	56	57	51	57	56	57	
NCTES	16	THROUGH	30												
56	54	51	57	51	57	59	60	57	60	57	60	62	63	62	
NCTES	31	THROUGH	45												
63	62	63	62	63	62	63	62	64	70	64	58	64	70	53	
NCTES	46	THROUGH	60												
59	65	71	59	72	78	66	65	67	65	67	65	66	68	55	
NCTES	61	THROUGH	75												
56	81	61	60	61	61	59	61	58	61	75	74	75	74	75	
NCTES	76	THROUGH	90												
74	75	74	75	74	75	74	75	74	75	74	76	61	60	61	
NCTES	91	THROUGH	105												
59	60	61	59	60	74	75	74	74	74	54	51	54	51	51	
NCTES	106	THROUGH	120												
51	54	64	51	64	51	52	58	54	58	52	65	81	80	68	
NCTES	121	THROUGH	135												
67	81	80	68	81	80	68	67	67	57	68	69	56	57	58	
NCTES	136	THROUGH	150												
59	54	60	70	73	83	73	80	83	80	73	83	73	80	83	
NCTES	151	THROUGH	165												
73	80	83	80	73	83	73	80	83	80	83	80	83	80	83	
NCTES	166	THROUGH	180												
80	73	74	65	74	65	65	64	65	63	65	64	63	65	63	
NCTES	181	THROUGH	195												
64	64	65	63	65	61	56	55	57	56	55	57	55	56	57	

NOTES 196 THROUGH 210

56 55 57 52 58 59 66 72 75 90 85 88 85 88 88

NOTES 211 THROUGH 225

85 88 85 85 88 85 88 85 88 88 58 58 58 59 57

NOTES 226 THROUGH 240

74 68 67 74 68 67 74 68 67 74 54 52 51 54 51

NOTES 241 THROUGH 255

54 56 57 54 57 71 60 54 60 50 54 64 54 50 64

NOTES 256 THROUGH 265

50 54 60 64 68 75 77 79 85 -99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

PATTERNS WHICH LACK CHANGE-OF-DIRECTION

*** TYPE I LISTING ***

EDDARD VARESE

DENSITY 21.5 FOR SOLO FLUTE

SEARCH FOR PATTERNS OF 3 NOTES IN LENGTH --
 TONAL RET. INVERSION
 WAS BEGUN AT 29 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH	
1	1 TO	3	4 TO	6	7	3
2	1 TO	3	6 TO	8	7	3
3	1 TO	3	10 TO	12	7	3
4	1 TO	3	12 TO	14	7	3
5	1 TO	3	14 TO	16	7	3
6	1 TO	3	18 TO	20	7	3
7	1 TO	3	22 TO	24	7	3
8	1 TO	3	24 TO	26	7	3
9	1 TO	3	28 TO	30	7	3
10	1 TO	3	30 TO	32	7	3
11	1 TO	3	32 TO	34	7	3
12	1 TO	3	34 TO	36	7	3
13	1 TO	3	36 TO	38	7	3
14	1 TO	3	39 TO	41	7	3
15	1 TO	3	43 TO	45	7	3
16	1 TO	3	47 TO	49	7	3
17	1 TO	3	50 TO	52	7	3
18	1 TO	3	53 TO	55	7	3
19	1 TO	3	55 TO	57	7	3
20	1 TO	3	58 TO	60	7	3
21	1 TO	3	61 TO	63	7	3
22	1 TO	3	67 TO	69	7	3
23	1 TO	3	70 TO	72	7	3
24	1 TO	3	72 TO	74	7	3
25	1 TO	3	74 TO	76	7	3
26	1 TO	3	76 TO	78	7	3
27	1 TO	3	78 TO	80	7	3
28	1 TO	3	80 TO	82	7	3
29	1 TO	3	82 TO	84	7	3
30	1 TO	3	84 TO	86	7	3
31	1 TO	3	86 TO	88	7	3
32	1 TO	3	89 TO	91	7	3
33	1 TO	3	92 TO	94	7	3
34	1 TO	3	96 TO	98	7	3
35	1 TO	3	102 TO	104	7	3
36	1 TO	3	107 TO	109	7	3
37	1 TO	3	109 TO	111	7	3
38	1 TO	3	112 TO	114	7	3
39	1 TO	3	114 TO	116	7	3
40	1 TO	3	117 TO	119	7	3
41	1 TO	3	121 TO	123	7	3
42	1 TO	3	124 TO	126	7	3

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
43	1 TO	3	131 TO 133	7	3
44	1 TO	3	135 TO 137	7	3
45	1 TO	3	140 TO 142	7	3
46	1 TO	3	143 TO 145	7	3
47	1 TO	3	146 TO 148	7	3
48	1 TO	3	149 TO 151	7	3
49	1 TO	3	152 TO 154	7	3
50	1 TO	3	155 TO 157	7	3
51	1 TO	3	158 TO 160	7	3
52	1 TO	3	160 TO 162	7	3
53	1 TO	3	162 TO 164	7	3
54	1 TO	3	164 TO 166	7	3
55	1 TO	3	167 TO 169	7	3
56	1 TO	3	169 TO 171	7	3
57	1 TO	3	173 TO 175	7	3
58	1 TO	3	175 TO 177	7	3
59	1 TO	3	178 TO 180	7	3
60	1 TO	3	182 TO 184	7	3
61	1 TO	3	184 TO 186	7	3
62	1 TO	3	188 TO 190	7	3
63	1 TO	3	191 TO 193	7	3
64	1 TO	3	194 TO 196	7	3
65	1 TO	3	197 TO 199	7	3
66	1 TO	3	204 TO 206	7	3
67	1 TO	3	206 TO 208	7	3
68	1 TO	3	211 TO 213	7	3
69	1 TO	3	214 TO 216	7	3
70	1 TO	3	216 TO 218	7	3
71	1 TO	3	223 TO 225	7	3
72	1 TO	3	225 TO 227	7	3
73	1 TO	3	228 TO 230	7	3
74	1 TO	3	231 TO 233	7	3
75	1 TO	3	234 TO 236	7	3
76	1 TO	3	238 TO 240	7	3
77	1 TO	3	242 TO 244	7	3
78	1 TO	3	245 TO 247	7	3
79	1 TO	3	248 TO 250	7	3
80	1 TO	3	251 TO 253	7	3
81	1 TO	3	254 TO 256	7	3
82	2 TO	4	5 TO 7	7	3
83	2 TO	4	8 TO 10	7	3
84	2 TO	4	11 TO 13	7	3
85	2 TO	4	13 TO 15	7	3
86	2 TO	4	17 TO 19	7	3
87	2 TO	4	19 TO 21	7	3
88	2 TO	4	23 TO 25	7	3
89	2 TO	4	25 TO 27	7	3
90	2 TO	4	29 TO 31	7	3
91	2 TO	4	31 TO 33	7	3
92	2 TO	4	33 TO 35	7	3
93	2 TO	4	35 TO 37	7	3

PATTERN	NCES	RELATED TC	NOTES	TEST	LENGTH
94	2 TO	4	37 TO 39	7	3
95	2 TO	4	41 TO 43	7	3
96	2 TO	4	44 TO 46	7	3
97	2 TO	4	48 TO 50	7	3
98	2 TO	4	52 TO 54	7	3
99	2 TO	4	54 TO 56	7	3
100	2 TO	4	56 TO 58	7	3
101	2 TO	4	59 TO 61	7	3
102	2 TO	4	63 TO 65	7	3
103	2 TO	4	66 TO 68	7	3
104	2 TO	4	68 TO 70	7	3
105	2 TO	4	71 TO 73	7	3
106	2 TO	4	73 TO 75	7	3
107	2 TO	4	75 TO 77	7	3
108	2 TO	4	77 TO 79	7	3
109	2 TO	4	79 TO 81	7	3
110	2 TO	4	81 TO 83	7	3
111	2 TO	4	83 TO 85	7	3
112	2 TO	4	85 TO 87	7	3
113	2 TO	4	88 TO 90	7	3
114	2 TO	4	90 TO 92	7	3
115	2 TO	4	93 TO 95	7	3
116	2 TO	4	101 TO 103	7	3
117	2 TO	4	108 TO 110	7	3
118	2 TO	4	110 TO 112	7	3
119	2 TO	4	113 TO 115	7	3
120	2 TO	4	115 TO 117	7	3
121	2 TO	4	120 TO 122	7	3
122	2 TO	4	123 TO 125	7	3
123	2 TO	4	129 TO 131	7	3
124	2 TO	4	132 TO 134	7	3
125	2 TO	4	136 TO 138	7	3
126	2 TO	4	141 TO 143	7	3
127	2 TO	4	145 TO 147	7	3
128	2 TO	4	147 TO 149	7	3
129	2 TO	4	150 TO 152	7	3
130	2 TO	4	154 TO 156	7	3
131	2 TO	4	156 TO 158	7	3
132	2 TO	4	159 TO 161	7	3
133	2 TO	4	161 TO 163	7	3
134	2 TO	4	163 TO 165	7	3
135	2 TO	4	166 TO 168	7	3
136	2 TO	4	168 TO 170	7	3
137	2 TO	4	172 TO 174	7	3
138	2 TO	4	174 TO 176	7	3
139	2 TO	4	177 TO 179	7	3
140	2 TO	4	179 TO 181	7	3
141	2 TO	4	183 TO 185	7	3
142	2 TO	4	187 TO 189	7	3
143	2 TO	4	190 TO 192	7	3
144	2 TO	4	192 TO 194	7	3

PATTERN	NCTES	RELATED TC	NOTES	TEST	LENGTH
145	2 TO	4	196 TO	198	7 3
146	2 TO	4	198 TO	200	7 3
147	2 TO	4	205 TO	207	7 3
148	2 TO	4	207 TO	209	7 3
149	2 TO	4	210 TO	212	7 3
150	2 TO	4	215 TO	217	7 3
151	2 TO	4	217 TO	219	7 3
152	2 TO	4	224 TO	226	7 3
153	2 TO	4	227 TO	229	7 3
154	2 TO	4	230 TO	232	7 3
155	2 TO	4	233 TO	235	7 3
156	2 TO	4	237 TO	239	7 3
157	2 TO	4	239 TO	241	7 3
158	2 TO	4	243 TO	245	7 3
159	2 TO	4	247 TO	249	7 3
160	2 TO	4	249 TO	251	7 3
161	2 TO	4	253 TO	255	7 3
162	2 TO	4	255 TO	257	7 3
**** FOR	3 TO	5.	SEE 1 TO	3 ABOVE	****
**** FOR	4 TO	6.	SEE 2 TO	4 ABOVE	****
**** FCR	5 TO	7.	SEE 1 TO	3 ABOVE	****
**** FCR	6 TO	8.	SEE 2 TO	4 ABOVE	****
**** FCR	8 TO	10.	SEE 1 TO	3 ABOVE	****
**** FOR	10 TO	12.	SEE 2 TO	4 ABOVE	****
**** FOR	11 TO	13.	SEE 1 TO	3 ABOVE	****
**** FOR	12 TO	14.	SEE 2 TO	4 ABOVE	****
**** FOR	13 TO	15.	SEE 1 TO	3 ABOVE	****
**** FCR	14 TO	16.	SEE 2 TO	4 ABOVE	****
**** FOR	17 TO	19.	SEE 1 TO	3 ABOVE	****
**** FOR	18 TO	20.	SEE 2 TO	4 ABOVE	****
**** FOR	19 TO	21.	SEE 1 TO	3 ABOVE	****
**** FOR	22 TO	24.	SEE 2 TO	4 ABOVE	****
**** FCR	23 TO	25.	SEE 1 TO	3 ABOVE	****
**** FCR	24 TO	26.	SEE 2 TO	4 ABOVE	****
**** FOR	25 TO	27.	SEE 1 TO	3 ABOVE	****
**** FOR	28 TO	30.	SEE 2 TO	4 ABOVE	****
**** FOR	29 TO	31.	SEE 1 TO	3 ABOVE	****
**** FOR	30 TO	32.	SEE 2 TO	4 ABOVE	****
**** FCR	31 TO	33.	SEE 1 TO	3 ABOVE	****
**** FOR	32 TO	34.	SEE 2 TO	4 ABOVE	****
**** FOR	33 TO	35.	SEE 1 TO	3 ABOVE	****
**** FOR	34 TO	36.	SEE 2 TO	4 ABOVE	****
**** FOR	35 TO	37.	SEE 1 TO	3 ABOVE	****
**** FCR	36 TO	38.	SEE 2 TO	4 ABOVE	****
**** FCR	37 TO	39.	SEE 1 TO	3 ABOVE	****
**** FCR	39 TO	41.	SEE 2 TO	4 ABOVE	****
**** FOR	41 TO	43.	SEE 1 TO	3 ABOVE	****
**** FCR	43 TO	45.	SEE 2 TO	4 ABOVE	****
**** FCR	44 TO	46.	SEE 1 TO	3 ABOVE	****
**** FCR	47 TO	49.	SEE 2 TO	4 ABOVE	****
**** FCR	48 TO	50.	SEE 1 TO	3 ABOVE	****

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	50 TO	52.	SEE	2 TO	4 ABOVE ****
**** FOR	52 TO	54.	SEE	1 TO	3 ABOVE ****
**** FOR	53 TO	55.	SEE	2 TO	4 ABOVE ****
**** FOR	54 TO	56.	SEE	1 TO	3 ABOVE ****
**** FOR	55 TO	57.	SEE	2 TO	4 ABOVE ****
**** FOR	56 TO	58.	SEE	1 TO	3 ABOVE ****
**** FOR	58 TO	60.	SEE	2 TO	4 ABOVE ****
**** FOR	59 TO	61.	SEE	1 TO	3 ABOVE ****
**** FOR	61 TO	63.	SEE	2 TO	4 ABOVE ****
**** FOR	63 TO	65.	SEE	1 TO	3 ABOVE ****
163	64 TO	66		105 TO 107	7 3
164	64 TO	66		181 TO 183	7 3
165	64 TO	66		213 TO 215	7 3
166	64 TO	66		222 TO 224	7 3
167	65 TO	67		97 TO 99	7 3
168	65 TO	67		103 TO 105	7 3
169	65 TO	67		127 TO 129	7 3
170	65 TO	67		170 TO 172	7 3
171	65 TO	67		212 TO 214	7 3
172	65 TO	67		220 TO 222	7 3
**** FOR	66 TO	68.	SEE	1 TO	3 ABOVE ****
**** FOR	67 TO	69.	SEE	2 TO	4 ABOVE ****
**** FOR	68 TO	70.	SEE	1 TO	3 ABOVE ****
**** FOR	70 TO	72.	SEE	2 TO	4 ABOVE ****
**** FOR	71 TO	73.	SEE	1 TO	3 ABOVE ****
**** FOR	72 TO	74.	SEE	2 TO	4 ABOVE ****
**** FOR	73 TO	75.	SEE	1 TO	3 ABOVE ****
**** FOR	74 TO	76.	SEE	2 TO	4 ABOVE ****
**** FOR	75 TO	77.	SEE	1 TO	3 ABOVE ****
**** FOR	76 TO	78.	SEE	2 TO	4 ABOVE ****
**** FOR	77 TO	79.	SEE	1 TO	3 ABOVE ****
**** FOR	78 TO	80.	SEE	2 TO	4 ABOVE ****
**** FOR	79 TO	81.	SEE	1 TO	3 ABOVE ****
**** FOR	80 TO	82.	SEE	2 TO	4 ABOVE ****
**** FOR	81 TO	83.	SEE	1 TO	3 ABOVE ****
**** FOR	82 TO	84.	SEE	2 TO	4 ABOVE ****
**** FOR	83 TO	85.	SEE	1 TO	3 ABOVE ****
**** FOR	84 TO	86.	SEE	2 TO	4 ABOVE ****
**** FOR	85 TO	87.	SEE	1 TO	3 ABOVE ****
**** FOR	86 TO	88.	SEE	2 TO	4 ABOVE ****
**** FOR	88 TO	90.	SEE	1 TO	3 ABOVE ****
**** FOR	89 TO	91.	SEE	2 TO	4 ABOVE ****
**** FOR	90 TO	92.	SEE	1 TO	3 ABOVE ****
**** FOR	92 TO	94.	SEE	2 TO	4 ABOVE ****
**** FOR	93 TO	95.	SEE	1 TO	3 ABOVE ****
**** FOR	96 TO	98.	SEE	2 TO	4 ABOVE ****
173	97 TO	99		99 TO 101	7 3
174	97 TO	99		128 TO 130	7 3
175	97 TO	99		171 TO 173	7 3
176	97 TO	99		209 TO 211	7 3
177	97 TO	99		219 TO 221	7 3

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	99 TO	101.	SEE 65 TO	67 ABOVE	****
**** FOR	101 TO	103.	SEE 1 TO	3 ABOVE	****
**** FOR	102 TO	104.	SEE 2 TO	4 ABOVE	****
**** FOR	103 TO	105.	SEE 97 TO	99 ABOVE	****
178	105 TO	107	180 TO	182	7 3
179	105 TO	107	208 TO	210	7 3
180	105 TO	107	218 TO	220	7 3
**** FOR	107 TO	109.	SEE 2 TO	4 ABOVE	****
**** FOR	108 TO	110.	SEE 1 TO	3 ABOVE	****
**** FOR	109 TO	111.	SEE 2 TO	4 ABOVE	****
**** FOR	110 TO	112.	SEE 1 TO	3 ABOVE	****
**** FOR	112 TO	114.	SEE 2 TO	4 ABOVE	****
**** FOR	113 TO	115.	SEE 1 TO	3 ABOVE	****
**** FOR	114 TO	116.	SEE 2 TO	4 ABOVE	****
**** FOR	115 TO	117.	SEE 1 TO	3 ABOVE	****
**** FOR	117 TO	119.	SEE 2 TO	4 ABOVE	****
**** FOR	120 TO	122.	SEE 1 TO	3 ABOVE	****
**** FOR	121 TO	123.	SEE 2 TO	4 ABOVE	****
**** FOR	123 TO	125.	SEE 1 TO	3 ABOVE	****
**** FOR	124 TO	126.	SEE 2 TO	4 ABOVE	****
**** FOR	127 TO	129.	SEE 97 TO	99 ABOVE	****
**** FOR	128 TO	130.	SEE 65 TO	67 ABOVE	****
**** FOR	129 TO	131.	SEE 1 TO	3 ABOVE	****
**** FOR	131 TO	133.	SEE 2 TO	4 ABOVE	****
**** FOR	132 TO	134.	SEE 1 TO	3 ABOVE	****
**** FOR	135 TO	137.	SEE 2 TO	4 ABOVE	****
**** FOR	136 TO	138.	SEE 1 TO	3 ABOVE	****
**** FOR	140 TO	142.	SEE 2 TO	4 ABOVE	****
**** FOR	141 TO	143.	SEE 1 TO	3 ABOVE	****
**** FOR	143 TO	145.	SEE 2 TO	4 ABOVE	****
**** FOR	145 TO	147.	SEE 1 TO	3 ABOVE	****
**** FOR	146 TO	148.	SEE 2 TO	4 ABOVE	****
**** FOR	147 TO	149.	SEE 1 TO	3 ABOVE	****
**** FOR	149 TO	151.	SEE 2 TO	4 ABOVE	****
**** FOR	150 TO	152.	SEE 1 TO	3 ABOVE	****
**** FOR	152 TO	154.	SEE 2 TO	4 ABOVE	****
**** FOR	154 TO	156.	SEE 1 TO	3 ABOVE	****
**** FOR	155 TO	157.	SEE 2 TO	4 ABOVE	****
**** FOR	156 TO	158.	SEE 1 TO	3 ABOVE	****
**** FOR	158 TO	160.	SEE 2 TO	4 ABOVE	****
**** FOR	159 TO	161.	SEE 1 TO	3 ABOVE	****
**** FOR	160 TO	162.	SEE 2 TO	4 ABOVE	****
**** FOR	161 TO	163.	SEE 1 TO	3 ABOVE	****
**** FOR	162 TO	164.	SEE 2 TO	4 ABOVE	****
**** FOR	163 TO	165.	SEE 1 TO	3 ABOVE	****
**** FOR	164 TO	166.	SEE 2 TO	4 ABOVE	****
**** FOR	166 TO	168.	SEE 1 TO	3 ABOVE	****
**** FOR	167 TO	169.	SEE 2 TO	4 ABOVE	****
**** FOR	168 TO	170.	SEE 1 TO	3 ABOVE	****
**** FOR	169 TO	171.	SEE 2 TO	4 ABOVE	****
**** FOR	170 TO	172.	SEE 97 TO	99 ABOVE	****

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	171 TO 173.	SEE	65 TO 67	ABOVE	****
**** FCR	172 TO 174.	SEE	1 TO 3	ABOVE	****
**** FOR	173 TO 175.	SEE	2 TO 4	ABOVE	****
**** FOR	174 TO 176.	SEE	1 TO 3	ABOVE	****
**** FCR	175 TO 177.	SEE	2 TO 4	ABOVE	****
**** FOR	177 TO 179.	SEE	1 TO 3	ABOVE	****
**** FOR	178 TO 180.	SEE	2 TO 4	ABOVE	****
**** FOR	179 TO 181.	SEE	1 TO 3	ABOVE	****
**** FCR	180 TO 182.	SEE	64 TO 66	ABOVE	****
**** FCR	181 TO 183.	SEE	105 TO 107	ABOVE	****
**** FOR	182 TO 184.	SEE	2 TO 4	ABOVE	****
**** FCR	183 TO 185.	SEE	1 TO 3	ABOVE	****
**** FOR	184 TO 186.	SEE	2 TO 4	ABOVE	****
**** FOR	187 TO 189.	SEE	1 TO 3	ABOVE	****
**** FCR	188 TO 190.	SEE	2 TO 4	ABOVE	****
**** FCR	190 TO 192.	SEE	1 TO 3	ABOVE	****
**** FCR	191 TO 193.	SEE	2 TO 4	ABOVE	****
**** FOR	192 TO 194.	SEE	1 TO 3	ABOVE	****
**** FCR	194 TO 196.	SEE	2 TO 4	ABOVE	****
**** FOR	196 TO 198.	SEE	1 TO 3	ABOVE	****
**** FCR	197 TO 199.	SEE	2 TO 4	ABOVE	****
**** FCR	198 TO 200.	SEE	1 TO 3	ABOVE	****
**** FCR	204 TO 206.	SEE	2 TO 4	ABOVE	****
**** FOR	205 TO 207.	SEE	1 TO 3	ABOVE	****
**** FOR	206 TO 208.	SEE	2 TO 4	ABOVE	****
**** FCR	207 TO 209.	SEE	1 TO 3	ABOVE	****
**** FCR	208 TO 210.	SEE	64 TO 66	ABOVE	****
**** FCR	209 TO 211.	SEE	65 TO 67	ABOVE	****
**** FCR	210 TO 212.	SEE	1 TO 3	ABOVE	****
**** FOR	211 TO 213.	SEE	2 TO 4	ABOVE	****
**** FOR	212 TO 214.	SEE	97 TO 99	ABOVE	****
**** FCR	213 TO 215.	SEE	105 TO 107	ABOVE	****
**** FCR	214 TO 216.	SEE	2 TO 4	ABOVE	****
**** FCR	215 TO 217.	SEE	1 TO 3	ABOVE	****
**** FOR	216 TO 218.	SEE	2 TO 4	ABOVE	****
**** FOR	217 TO 219.	SEE	1 TO 3	ABOVE	****
**** FOR	218 TO 220.	SEE	64 TO 66	ABOVE	****
**** FOR	219 TO 221.	SEE	65 TO 67	ABOVE	****
**** FCR	220 TO 222.	SEE	97 TO 99	ABOVE	****
**** FOR	222 TO 224.	SEE	105 TO 107	ABOVE	****
**** FOR	223 TO 225.	SEE	2 TO 4	ABOVE	****
**** FOR	224 TO 226.	SEE	1 TO 3	ABOVE	****
**** FOR	225 TO 227.	SEE	2 TO 4	ABOVE	****
**** FCR	227 TO 229.	SEE	1 TO 3	ABOVE	****
**** FCR	228 TO 230.	SEE	2 TO 4	ABOVE	****
**** FCR	230 TO 232.	SEE	1 TO 3	ABOVE	****
**** FCR	231 TO 233.	SEE	2 TO 4	ABOVE	****
**** FCR	233 TO 235.	SEE	1 TO 3	ABOVE	****
**** FCR	234 TO 236.	SEE	2 TO 4	ABOVE	****
**** FCR	237 TO 239.	SEE	1 TO 3	ABOVE	****
**** FOR	238 TO 240.	SEE	2 TO 4	ABOVE	****

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 239 TO 241.	SEE	1 TO	3 ABOVE	****	
**** FCR 242 TO 244.	SEF	2 TO	4 ABOVE	****	
**** FOR 243 TO 245.	SEF	1 TO	3 ABOVE	****	
**** FOR 245 TO 247.	SEF	2 TO	4 ABOVE	****	
**** FCR 247 TO 249.	SEE	1 TO	3 ABOVE	****	
**** FOR 248 TO 250.	SEE	2 TO	4 ABOVE	****	
**** FOR 249 TO 251.	SEE	1 TO	3 ABOVE	****	
**** FOR 251 TO 253.	SEE	2 TO	4 ABOVE	****	
**** FCR 253 TO 255.	SEE	1 TO	3 ABOVE	****	
**** FCR 254 TO 256.	SEF	2 TO	4 ABOVE	****	
**** FOR 255 TO 257.	SEE	1 TO	3 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 4 NOTES IN LENGTH --
 TONAL RET. INVERSION
 WAS BEGUN AT 148 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TC	NOTES	TEST	LENGTH	
181	1 TO	4	5 TO	8	7	4
182	1 TO	4	11 TO	14	7	4
183	1 TO	4	13 TO	16	7	4
184	1 TO	4	17 TO	20	7	4
185	1 TO	4	23 TO	26	7	4
186	1 TO	4	29 TO	32	7	4
187	1 TO	4	31 TO	34	7	4
188	1 TO	4	33 TO	36	7	4
189	1 TO	4	35 TO	38	7	4
190	1 TO	4	52 TO	55	7	4
191	1 TO	4	54 TO	57	7	4
192	1 TO	4	66 TO	69	7	4
193	1 TO	4	71 TO	74	7	4
194	1 TO	4	73 TO	76	7	4
195	1 TO	4	75 TO	78	7	4
196	1 TO	4	77 TO	80	7	4
197	1 TO	4	79 TO	82	7	4
198	1 TO	4	81 TO	84	7	4
199	1 TO	4	83 TO	86	7	4
200	1 TO	4	85 TO	88	7	4
201	1 TC	4	88 TO	91	7	4
202	1 TO	4	101 TO	104	7	4
203	1 TO	4	108 TO	111	7	4
204	1 TO	4	113 TO	116	7	4
205	1 TO	4	120 TO	123	7	4
206	1 TO	4	123 TO	126	7	4
207	1 TO	4	145 TO	148	7	4
208	1 TO	4	154 TO	157	7	4
209	1 TO	4	159 TO	162	7	4
210	1 TO	4	161 TO	164	7	4
211	1 TO	4	163 TO	166	7	4
212	1 TO	4	166 TO	169	7	4
213	1 TO	4	168 TO	171	7	4
214	1 TC	4	172 TO	175	7	4
215	1 TO	4	174 TO	177	7	4
216	1 TO	4	177 TO	180	7	4
217	1 TO	4	183 TO	186	7	4
218	1 TO	4	187 TO	190	7	4
219	1 TO	4	190 TO	193	7	4
220	1 TO	4	196 TO	199	7	4
221	1 TO	4	205 TO	208	7	4
222	1 TO	4	210 TO	213	7	4
223	1 TO	4	215 TO	218	7	4
224	1 TO	4	224 TO	227	7	4

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
225	1 TO	4	227 TO 230	7	4
226	1 TO	4	230 TO 233	7	4
227	1 TO	4	233 TO 236	7	4
228	1 TO	4	237 TO 240	7	4
229	1 TO	4	247 TO 250	7	4
230	1 TO	4	253 TO 256	7	4
231	2 TO	5	10 TO 13	7	4
232	2 TO	5	12 TO 15	7	4
233	2 TO	5	18 TO 21	7	4
234	2 TO	5	22 TO 25	7	4
235	2 TO	5	24 TO 27	7	4
236	2 TO	5	28 TO 31	7	4
237	2 TO	5	30 TO 33	7	4
238	2 TO	5	32 TO 35	7	4
239	2 TO	5	34 TO 37	7	4
240	2 TO	5	36 TO 39	7	4
241	2 TO	5	43 TO 46	7	4
242	2 TO	5	47 TO 50	7	4
243	2 TO	5	53 TO 56	7	4
244	2 TO	5	55 TO 58	7	4
245	2 TO	5	58 TO 61	7	4
246	2 TO	5	67 TO 70	7	4
247	2 TO	5	70 TO 73	7	4
248	2 TO	5	72 TO 75	7	4
249	2 TO	5	74 TO 77	7	4
250	2 TO	5	76 TO 79	7	4
251	2 TO	5	78 TO 81	7	4
252	2 TO	5	80 TO 83	7	4
253	2 TO	5	82 TO 85	7	4
254	2 TO	5	84 TO 87	7	4
255	2 TO	5	89 TO 92	7	4
256	2 TO	5	92 TO 95	7	4
257	2 TO	5	107 TO 110	7	4
258	2 TO	5	109 TO 112	7	4
259	2 TO	5	112 TO 115	7	4
260	2 TO	5	114 TO 117	7	4
261	2 TO	5	131 TO 134	7	4
262	2 TO	5	135 TO 138	7	4
263	2 TO	5	140 TO 143	7	4
264	2 TO	5	146 TO 149	7	4
265	2 TO	5	149 TO 152	7	4
266	2 TO	5	155 TO 158	7	4
267	2 TO	5	158 TO 161	7	4
268	2 TO	5	160 TO 163	7	4
269	2 TO	5	162 TO 165	7	4
270	2 TO	5	167 TO 170	7	4
271	2 TO	5	173 TO 176	7	4
272	2 TO	5	178 TO 181	7	4
273	2 TO	5	182 TO 185	7	4
274	2 TO	5	191 TO 194	7	4
275	2 TO	5	197 TO 200	7	4

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
276	2 TO	5	204 TO	207	7 4
277	2 TO	5	206 TO	209	7 4
278	2 TO	5	214 TO	217	7 4
279	2 TO	5	216 TO	219	7 4
280	2 TO	5	223 TO	226	7 4
281	2 TO	5	238 TO	241	7 4
282	2 TO	5	242 TO	245	7 4
283	2 TO	5	248 TO	251	7 4
284	2 TO	5	254 TO	257	7 4
**** FCR	3 TO	6.	SEE 1 TO	4 ABOVE ****	
**** FCR	4 TO	7.	SEE 2 TO	5 ABOVE ****	
**** FCR	5 TO	8.	SEE 1 TO	4 ABOVE ****	
285	6 TO	9	16 TO	19	7 4
286	6 TO	9	40 TO	43	7 4
287	6 TO	9	51 TO	54	7 4
288	6 TO	9	62 TO	65	7 4
289	6 TO	9	87 TO	90	7 4
290	6 TO	9	100 TO	103	7 4
291	6 TO	9	119 TO	122	7 4
292	6 TO	9	122 TO	125	7 4
293	6 TO	9	144 TO	147	7 4
294	6 TO	9	153 TO	156	7 4
295	6 TO	9	165 TO	168	7 4
296	6 TO	9	176 TO	179	7 4
297	6 TO	9	186 TO	189	7 4
298	6 TO	9	189 TO	192	7 4
299	6 TO	9	195 TO	198	7 4
300	6 TO	9	226 TO	229	7 4
301	6 TO	9	229 TO	232	7 4
302	6 TO	9	232 TO	235	7 4
303	6 TO	9	236 TO	239	7 4
304	6 TO	9	246 TO	249	7 4
305	6 TO	9	252 TO	255	7 4
306	7 TO	10	14 TO	17	7 4
307	7 TO	10	39 TO	42	7 4
308	7 TO	10	50 TO	53	7 4
309	7 TO	10	61 TO	64	7 4
310	7 TO	10	86 TO	89	7 4
311	7 TO	10	117 TO	120	7 4
312	7 TO	10	121 TO	124	7 4
313	7 TO	10	124 TO	127	7 4
314	7 TO	10	143 TO	146	7 4
315	7 TO	10	152 TO	155	7 4
316	7 TO	10	164 TO	167	7 4
317	7 TO	10	175 TO	178	7 4
318	7 TO	10	184 TO	187	7 4
319	7 TO	10	188 TO	191	7 4
320	7 TO	10	194 TO	197	7 4
321	7 TO	10	225 TO	228	7 4
322	7 TO	10	228 TO	231	7 4
323	7 TO	10	231 TO	234	7 4

PATTERN	NOTES	RELATED TC	NOTES	TEST	LENGTH
324	7 TO 10		234 TO 237	7	4
325	7 TO 10		245 TO 248	7	4
326	7 TO 10		251 TO 254	7	4
327	8 TO 11		21 TO 24	7	4
328	8 TO 11		27 TO 30	7	4
329	8 TO 11		38 TO 41	7	4
330	8 TO 11		42 TO 45	7	4
331	8 TO 11		46 TO 49	7	4
332	8 TO 11		49 TO 52	7	4
333	8 TO 11		57 TO 60	7	4
334	8 TO 11		60 TO 63	7	4
335	8 TO 11		69 TO 72	7	4
336	8 TO 11		91 TO 94	7	4
337	8 TO 11		95 TO 98	7	4
338	8 TO 11		106 TO 109	7	4
339	8 TO 11		111 TO 114	7	4
340	8 TO 11		116 TO 119	7	4
341	8 TO 11		130 TO 133	7	4
342	8 TO 11		134 TO 137	7	4
343	8 TO 11		139 TO 142	7	4
344	8 TO 11		142 TO 145	7	4
345	8 TO 11		148 TO 151	7	4
346	8 TO 11		151 TO 154	7	4
347	8 TO 11		157 TO 160	7	4
348	8 TO 11		193 TO 196	7	4
349	8 TO 11		203 TO 206	7	4
350	8 TO 11		241 TO 244	7	4
351	8 TO 11		244 TO 247	7	4
352	8 TO 11		250 TO 253	7	4
353	9 TO 12		19 TO 22	7	4
354	9 TO 12		25 TO 28	7	4
355	9 TO 12		37 TO 40	7	4
356	9 TO 12		41 TO 44	7	4
357	9 TO 12		44 TO 47	7	4
358	9 TO 12		48 TO 51	7	4
359	9 TO 12		56 TO 59	7	4
360	9 TO 12		59 TO 62	7	4
361	9 TO 12		68 TO 71	7	4
362	9 TO 12		90 TO 93	7	4
363	9 TO 12		93 TO 96	7	4
364	9 TO 12		110 TO 113	7	4
365	9 TO 12		115 TO 118	7	4
366	9 TO 12		129 TO 132	7	4
367	9 TO 12		132 TO 135	7	4
368	9 TO 12		136 TO 139	7	4
369	9 TO 12		141 TO 144	7	4
370	9 TO 12		147 TO 150	7	4
371	9 TO 12		150 TO 153	7	4
372	9 TO 12		156 TO 159	7	4
373	9 TO 12		192 TO 195	7	4
374	9 TO 12		198 TO 201	7	4

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
375	9 TO	12	239 TO	242	7 4
376	9 TO	12	243 TO	246	7 4
377	9 TO	12	249 TO	252	7 4
378	9 TO	12	255 TO	258	7 4
**** FOR	10 TO	13,	SEE 2 TO	5 ABOVE	****
**** FCR	11 TO	14,	SEE 1 TO	4 ABOVE	****
**** FOR	12 TO	15,	SEE 2 TO	5 ABOVE	****
**** FCR	13 TO	16,	SEE 1 TO	4 ABOVE	****
**** FCR	14 TO	17,	SEE 6 TO	9 ABOVE	****
**** FCR	16 TO	19,	SEE 7 TO	10 ABOVE	****
**** FOR	17 TO	20,	SEE 1 TO	4 ABOVE	****
**** FOR	18 TO	21,	SEE 2 TO	5 ABOVE	****
**** FCR	19 TO	22,	SEE 8 TO	11 ABOVE	****
**** FCR	21 TO	24,	SEE 9 TO	12 ABOVE	****
**** FCR	22 TO	25,	SEE 2 TO	5 ABOVE	****
**** FOR	23 TO	26,	SEE 1 TO	4 ABOVE	****
**** FOR	24 TO	27,	SEE 2 TO	5 ABOVE	****
**** FOR	25 TO	28,	SEE 8 TO	11 ABOVE	****
**** FOR	27 TO	30,	SEE 9 TO	12 ABOVE	****
**** FOR	28 TO	31,	SEE 2 TO	5 ABOVE	****
**** FOR	29 TO	32,	SEE 1 TO	4 ABOVE	****
**** FOR	30 TO	33,	SEE 2 TO	5 ABOVE	****
**** FOR	31 TO	34,	SEE 1 TO	4 ABOVE	****
**** FOR	32 TO	35,	SEE 2 TO	5 ABOVE	****
**** FOR	33 TO	36,	SEE 1 TO	4 ABOVE	****
**** FOR	34 TO	37,	SEE 2 TO	5 ABOVE	****
**** FOR	35 TO	38,	SEE 1 TO	4 ABOVE	****
**** FOR	36 TO	39,	SEE 2 TO	5 ABOVE	****
**** FCR	37 TO	40,	SEE 8 TO	11 ABOVE	****
**** FCR	38 TO	41,	SEE 9 TO	12 ABOVE	****
**** FCR	39 TO	42,	SEE 6 TO	9 ABOVE	****
**** FCR	40 TO	43,	SEE 7 TO	10 ABOVE	****
**** FCR	41 TO	44,	SEE 8 TO	11 ABOVE	****
**** FOR	42 TO	45,	SEE 9 TO	12 ABOVE	****
**** FOR	43 TO	46,	SEE 2 TO	5 ABOVE	****
**** FOR	44 TO	47,	SEE 8 TO	11 ABOVE	****
**** FCR	46 TO	49,	SEE 9 TO	12 ABOVE	****
**** FOR	47 TO	50,	SEE 2 TO	5 ABOVE	****
**** FCR	48 TO	51,	SEE 8 TO	11 ABOVE	****
**** FOR	49 TO	52,	SEE 9 TO	12 ABOVE	****
**** FOR	50 TO	53,	SEE 6 TO	9 ABOVE	****
**** FCR	51 TO	54,	SEE 7 TO	10 ABOVE	****
**** FCR	52 TO	55,	SEE 1 TO	4 ABOVE	****
**** FCR	53 TO	56,	SEE 2 TO	5 ABOVE	****
**** FOR	54 TO	57,	SEE 1 TO	4 ABOVE	****
**** FOR	55 TO	58,	SEE 2 TO	5 ABOVE	****
**** FCR	56 TO	59,	SEE 8 TO	11 ABOVE	****
**** FCR	57 TO	60,	SEE 9 TO	12 ABOVE	****
**** FCR	58 TO	61,	SEE 2 TO	5 ABOVE	****
**** FOR	59 TO	62,	SEE 8 TO	11 ABOVE	****
**** FOR	60 TO	63,	SEE 9 TO	12 ABOVE	****

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FCR	61 TO	64.	SEE	6 TO	9 ABOVE ****
**** FOR	62 TO	65.	SEE	7 TO	10 ABOVE ****
379	63 TO	66		181 TO	184 7 4
380	63 TO	66		213 TO	216 7 4
381	63 TO	66		222 TO	225 7 4
382	64 TO	67		212 TO	215 7 4
383	65 TO	68		96 TO	99 7 4
384	65 TO	68		102 TO	105 7 4
385	65 TO	68		169 TO	172 7 4
386	65 TO	68		211 TO	214 7 4
**** FOR	66 TO	69.	SEE	1 TO	4 ABOVE ****
**** FCR	67 TO	70.	SEE	2 TO	5 ABOVE ****
**** FCR	68 TO	71.	SEE	8 TO	11 ABOVE ****
**** FCR	69 TO	72.	SEE	9 TO	12 ABOVE ****
**** FOR	70 TO	73.	SEE	2 TO	5 ABOVE ****
**** FCR	71 TO	74.	SEE	1 TO	4 ABOVE ****
**** FOR	72 TO	75.	SEE	2 TO	5 ABOVE ****
**** FOR	73 TO	76.	SEE	1 TO	4 ABOVE ****
**** FOR	74 TO	77.	SEE	2 TO	5 ABOVE ****
**** FCR	75 TO	78.	SEE	1 TO	4 ABOVE ****
**** FCR	76 TO	79.	SEE	2 TO	5 ABOVE ****
**** FOR	77 TO	80.	SEE	1 TO	4 ABOVE ****
**** FCR	78 TO	81.	SEE	2 TO	5 ABOVE ****
**** FOR	79 TO	82.	SEE	1 TO	4 ABOVE ****
**** FCR	80 TO	83.	SEE	2 TO	5 ABOVE ****
**** FOR	81 TO	84.	SEE	1 TO	4 ABOVE ****
**** FOR	82 TO	85.	SEE	2 TO	5 ABOVE ****
**** FOR	83 TO	86.	SEE	1 TO	4 ABOVE ****
**** FOR	84 TO	87.	SEE	2 TO	5 ABOVE ****
**** FOR	85 TO	88.	SEE	1 TO	4 ABOVE ****
**** FOR	86 TO	89.	SEE	6 TO	9 ABOVE ****
**** FCR	87 TO	90.	SEE	7 TO	10 ABOVE ****
**** FOR	88 TO	91.	SEE	1 TO	4 ABOVE ****
**** FOR	89 TO	92.	SEE	2 TO	5 ABOVE ****
**** FOR	90 TO	93.	SEE	8 TO	11 ABOVE ****
**** FOR	91 TO	94.	SEE	9 TO	12 ABOVE ****
**** FCR	92 TO	95.	SEE	2 TO	5 ABOVE ****
**** FOR	93 TO	96.	SEE	8 TO	11 ABOVE ****
**** FOR	95 TO	98.	SEE	9 TO	12 ABOVE ****
387	96 TO	99		128 TO	131 7 4
388	96 TO	99		171 TO	174 7 4
389	96 TO	99		209 TO	212 7 4
390	98 TO	101		103 TO	106 7 4
391	98 TO	101		220 TO	223 7 4
392	99 TO	102		126 TO	129 7 4
**** FOR	100 TO	103.	SEE	7 TO	10 ABOVE ****
**** FOR	101 TO	104.	SEE	1 TO	4 ABOVE ****
**** FCR	102 TO	105.	SEE	96 TO	99 ABOVE ****
**** FCR	106 TO	109.	SEE	9 TO	12 ABOVE ****
**** FOR	107 TO	110.	SEE	2 TO	5 ABOVE ****
**** FOR	108 TO	111.	SEE	1 TO	4 ABOVE ****

PAT	ERN	NCES	RELATED TO	NOTES	TEST	LENGTH
***	FOR	109 TO	112.	SEE	2 TO	5 ABOVE ****
***	FOR	110 TO	113.	SEE	8 TO	11 ABOVE ****
***	FCR	111 TO	114.	SEE	9 TO	12 ABOVE ****
***	FOR	112 TO	115.	SEE	2 TO	5 ABOVE ****
***	FOR	113 TO	116.	SEE	1 TO	4 ABOVE ****
***	FOR	114 TO	117.	SEE	2 TO	5 ABOVE ****
***	FOR	115 TO	118.	SEE	8 TO	11 ABOVE ****
***	FOR	116 TO	119.	SEE	9 TO	12 ABOVE ****
***	FCR	117 TO	120.	SEE	6 TO	9 ABOVE ****
***	FOR	119 TO	122.	SEE	7 TO	10 ABOVE ****
***	FOR	120 TO	123.	SEE	1 TO	4 ABOVE ****
***	FOR	121 TO	124.	SEE	6 TO	9 ABOVE ****
***	FOR	122 TO	125.	SEE	7 TO	10 ABOVE ****
***	FOR	123 TO	126.	SEE	1 TO	4 ABOVE ****
***	FOR	124 TO	127.	SEE	6 TO	9 ABOVE ****
39	3	127 TO	130	170 TO	173	7 4
***	FOR	128 TO	131.	SEE	65 TO	68 ABOVE ****
***	FOR	129 TO	132.	SEE	8 TO	11 ABOVE ****
***	FOR	130 TO	133.	SEE	9 TO	12 ABOVE ****
***	FOR	131 TO	134.	SEE	2 TO	5 ABOVE ****
***	FOR	132 TO	135.	SEE	8 TO	11 ABOVE ****
***	FOR	134 TO	137.	SEE	9 TO	12 ABOVE ****
***	FOR	135 TO	138.	SEE	2 TO	5 ABOVE ****
***	FCR	136 TO	139.	SEE	8 TO	11 ABOVE ****
***	FOR	139 TO	142.	SEE	9 TO	12 ABOVE ****
***	FCR	140 TO	143.	SEE	2 TO	5 ABOVE ****
***	FOR	141 TO	144.	SEE	8 TO	11 ABOVE ****
***	FOR	142 TO	145.	SEE	9 TO	12 ABOVE ****
***	FCR	143 TO	146.	SEE	6 TO	9 ABOVE ****
***	FOR	144 TO	147.	SEE	7 TO	10 ABOVE ****
***	FOR	145 TO	148.	SEE	1 TO	4 ABOVE ****
***	FOR	146 TO	149.	SEE	2 TO	5 ABOVE ****
***	FCR	147 TO	150.	SEE	8 TO	11 ABOVE ****
***	FOR	148 TO	151.	SEE	9 TO	12 ABOVE ****
***	FOR	149 TO	152.	SEE	2 TO	5 ABOVE ****
***	FOR	150 TO	153.	SEE	8 TO	11 ABOVE ****
***	FCR	151 TO	154.	SEE	9 TO	12 ABOVE ****
***	FOR	152 TO	155.	SEE	6 TO	9 ABOVE ****
***	FOR	153 TO	156.	SEE	7 TO	10 ABOVE ****
***	FOR	154 TO	157.	SEE	1 TO	4 ABOVE ****
***	FOR	155 TO	158.	SEE	2 TO	5 ABOVE ****
***	FOR	156 TO	159.	SEE	8 TO	11 ABOVE ****
***	FCR	157 TO	160.	SEE	9 TO	12 ABOVE ****
***	FOR	158 TO	161.	SEE	2 TO	5 ABOVE ****
***	FOR	159 TO	162.	SEE	1 TO	4 ABOVE ****
***	FOR	160 TO	163.	SEE	2 TO	5 ABOVE ****
***	FCR	161 TO	164.	SEE	1 TO	4 ABOVE ****
***	FCR	162 TO	165.	SEE	2 TO	5 ABOVE ****
***	FCR	163 TO	166.	SEE	1 TO	4 ABOVE ****
***	FOR	164 TO	167.	SEE	6 TO	9 ABOVE ****
***	FOR	165 TO	168.	SEE	7 TO	10 ABOVE ****

PAT	ERN	NOTES	RELATED TC	NOTES	TEST	LENGTH
***	FOR	166 TO 169.	SEE	1 TO 4 ABOVE	****	
***	FOR	167 TO 170.	SEE	2 TO 5 ABOVE	****	
***	FCR	168 TO 171.	SEE	1 TO 4 ABOVE	****	
***	FCR	169 TO 172.	SEE	96 TO 99 ABOVE	****	
***	FOR	170 TO 173.	SEE	127 TO 130 ABOVE	****	
***	FCR	171 TO 174.	SEE	65 TO 68 ABOVE	****	
***	FOR	172 TO 175.	SEE	1 TO 4 ABOVE	****	
***	FCR	173 TO 176.	SEE	2 TO 5 ABOVE	****	
***	FCR	174 TO 177.	SEE	1 TO 4 ABOVE	****	
***	FOR	175 TO 178.	SEE	6 TO 9 ABOVE	****	
***	FOR	176 TO 179.	SEE	7 TO 10 ABOVE	****	
***	FOR	177 TO 180.	SEE	1 TO 4 ABOVE	****	
***	FOR	178 TO 181.	SEE	2 TO 5 ABOVE	****	
***	FOR	179 TO 182.	SEE	63 TO 66 ABOVE	****	
30	4	181 TO 184		207 TO 210	7	4
30	5	181 TO 184		217 TO 220	7	4
***	FCR	182 TO 185.	SEE	2 TO 5 ABOVE	****	
***	FOR	183 TO 186.	SEE	1 TO 4 ABOVE	****	
***	FCR	184 TO 187.	SEE	6 TO 9 ABOVE	****	
***	FCR	186 TO 189.	SEE	7 TO 10 ABOVE	****	
***	FOR	187 TO 190.	SEE	1 TO 4 ABOVE	****	
***	FCR	188 TO 191.	SEE	6 TO 9 ABOVE	****	
***	FCR	189 TO 192.	SEE	7 TO 10 ABOVE	****	
***	FCR	190 TO 193.	SEE	1 TO 4 ABOVE	****	
***	FOR	191 TO 194.	SEE	2 TO 5 ABOVE	****	
***	FOR	192 TO 195.	SEE	8 TO 11 ABOVE	****	
***	FCR	193 TO 196.	SEE	9 TO 12 ABOVE	****	
***	FOR	194 TO 197.	SEE	6 TO 9 ABOVE	****	
***	FOR	195 TO 198.	SEE	7 TO 10 ABOVE	****	
***	FOR	196 TO 199.	SEE	1 TO 4 ABOVE	****	
***	FCR	197 TO 200.	SEE	2 TO 5 ABOVE	****	
***	FOR	198 TO 201.	SEE	8 TO 11 ABOVE	****	
***	FOR	203 TO 206.	SEE	9 TO 12 ABOVE	****	
***	FCR	204 TO 207.	SEE	2 TO 5 ABOVE	****	
***	FOR	205 TO 208.	SEE	1 TO 4 ABOVE	****	
***	FOR	206 TO 209.	SEE	2 TO 5 ABOVE	****	
***	FOR	207 TO 210.	SEE	63 TO 66 ABOVE	****	
***	FOR	208 TO 211.	SEE	64 TO 67 ABOVE	****	
***	FOR	209 TO 212.	SEE	65 TO 68 ABOVE	****	
***	FOR	210 TO 213.	SEE	1 TO 4 ABOVE	****	
***	FOR	211 TO 214.	SEE	96 TO 99 ABOVE	****	
10	6	212 TO 215		218 TO 221	7	4
***	FCR	213 TO 216.	SEE	181 TO 184 ABOVE	****	
***	FOR	214 TO 217.	SEE	2 TO 5 ABOVE	****	
***	FOR	215 TO 218.	SEE	1 TO 4 ABOVE	****	
***	FOR	216 TO 219.	SEE	2 TO 5 ABOVE	****	
***	FCR	217 TO 220.	SEE	63 TO 66 ABOVE	****	
***	FOR	218 TO 221.	SEE	64 TO 67 ABOVE	****	
***	FCR	222 TO 225.	SEE	181 TO 184 ABOVE	****	
***	FOR	223 TO 226.	SEE	2 TO 5 ABOVE	****	
***	FOR	224 TO 227.	SEE	1 TO 4 ABOVE	****	

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
**** FCR	225 TO 228.	SEE	6 TO 9 ABOVE	****	
**** FCR	226 TO 229.	SEE	7 TO 10 ABOVE	****	
**** FCR	227 TO 230.	SEE	1 TO 4 ABOVE	****	
**** FCR	228 TO 231.	SEE	6 TO 9 ABOVE	****	
**** FOR	229 TO 232.	SEE	7 TO 10 ABOVE	****	
**** FOR	230 TO 233.	SEE	1 TO 4 ABOVE	****	
**** FCR	231 TO 234.	SEE	6 TO 9 ABOVE	****	
**** FCR	232 TO 235.	SEE	7 TO 10 ABOVE	****	
**** FCR	233 TO 236.	SEE	1 TO 4 ABOVE	****	
**** FOR	234 TO 237.	SEE	6 TO 9 ABOVE	****	
**** FOR	236 TO 239.	SEE	7 TO 10 ABOVE	****	
**** FOR	237 TO 240.	SEE	1 TO 4 ABOVE	****	
**** FOR	238 TO 241.	SEE	2 TO 5 ABOVE	****	
**** FOR	239 TO 242.	SEE	8 TO 11 ABOVE	****	
**** FCR	241 TO 244.	SEE	9 TO 12 ABOVE	****	
**** FOR	242 TO 245.	SEE	2 TO 5 ABOVE	****	
**** FOR	243 TO 246.	SEE	8 TO 11 ABOVE	****	
**** FCR	244 TO 247.	SEE	9 TO 12 ABOVE	****	
**** FCR	245 TO 248.	SEE	6 TO 9 ABOVE	****	
**** FCR	246 TO 249.	SEE	7 TO 10 ABOVE	****	
**** FOR	247 TO 250.	SEE	1 TO 4 ABOVE	****	
**** FOR	248 TO 251.	SEE	2 TO 5 ABOVE	****	
**** FCR	249 TO 252.	SEE	8 TO 11 ABOVE	****	
**** FCR	250 TO 253.	SEE	9 TO 12 ABOVE	****	
**** FCR	251 TO 254.	SEE	6 TO 9 ABOVE	****	
**** FOR	252 TO 255.	SEE	7 TO 10 ABOVE	****	
**** FOR	253 TO 256.	SEE	1 TO 4 ABOVE	****	
**** FCR	254 TO 257.	SEE	2 TO 5 ABOVE	****	
**** FOR	255 TO 258.	SEE	8 TO 11 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 5 NOTES IN LENGTH --
 TONAL RET. INVERSION
 WAS BEGUN AT 291 SECONDS INTO EXECUTION.

PATTERN	NCOTES	RELATED TO	NOTES	TEST	LENGTH
397	1 TO	5	10 TO 14	7	5
398	1 TO	5	12 TO 16	7	5
399	1 TO	5	22 TO 26	7	5
400	1 TO	5	28 TO 32	7	5
401	1 TO	5	30 TO 34	7	5
402	1 TO	5	32 TO 36	7	5
403	1 TO	5	34 TO 38	7	5
404	1 TO	5	53 TO 57	7	5
405	1 TO	5	70 TO 74	7	5
406	1 TO	5	72 TO 76	7	5
407	1 TO	5	74 TO 78	7	5
408	1 TO	5	76 TO 80	7	5
409	1 TO	5	78 TO 82	7	5
410	1 TO	5	80 TO 84	7	5
411	1 TO	5	82 TO 86	7	5
412	1 TO	5	84 TO 88	7	5
413	1 TO	5	107 TO 111	7	5
414	1 TO	5	112 TO 116	7	5
415	1 TO	5	158 TO 162	7	5
416	1 TO	5	160 TO 164	7	5
417	1 TO	5	162 TO 166	7	5
418	1 TO	5	167 TO 171	7	5
419	1 TO	5	173 TO 177	7	5
420	1 TO	5	182 TO 186	7	5
421	1 TO	5	204 TO 208	7	5
422	1 TO	5	214 TO 218	7	5
423	1 TO	5	223 TO 227	7	5
424	2 TO	6	11 TO 15	7	5
425	2 TO	6	17 TO 21	7	5
426	2 TO	6	23 TO 27	7	5
427	2 TO	6	29 TO 33	7	5
428	2 TO	6	31 TO 35	7	5
429	2 TO	6	33 TO 37	7	5
430	2 TO	6	35 TO 39	7	5
431	2 TO	6	52 TO 56	7	5
432	2 TO	6	54 TO 58	7	5
433	2 TO	6	66 TO 70	7	5
434	2 TO	6	71 TO 75	7	5
435	2 TO	6	73 TO 77	7	5
436	2 TO	6	75 TO 79	7	5
437	2 TO	6	77 TO 81	7	5
438	2 TO	6	79 TO 83	7	5
439	2 TO	6	81 TO 85	7	5
440	2 TO	6	83 TO 87	7	5

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
441	2 TO	6	88 TO	92	7 5
442	2 TO	6	108 TO	112	7 5
443	2 TO	6	113 TO	117	7 5
444	2 TO	6	145 TO	149	7 5
445	2 TO	6	154 TO	158	7 5
446	2 TO	6	159 TO	163	7 5
447	2 TO	6	161 TO	165	7 5
448	2 TO	6	166 TO	170	7 5
449	2 TO	6	172 TO	176	7 5
450	2 TO	6	177 TO	181	7 5
451	2 TO	6	190 TO	194	7 5
452	2 TO	6	196 TO	200	7 5
453	2 TC	6	205 TO	209	7 5
454	2 TO	6	215 TO	219	7 5
455	2 TO	6	237 TO	241	7 5
456	2 TO	6	247 TO	251	7 5
457	2 TO	6	253 TO	257	7 5
**** FCR	3 TO	7,	SEE	1 TO	5 ABOVE ****
**** FOR	4 TO	8,	SEE	2 TO	6 ABOVE ****
458	5 TO	9	16 TO	20	7 5
459	5 TO	9	51 TO	55	7 5
460	5 TO	9	87 TO	91	7 5
461	5 TO	9	100 TO	104	7 5
462	5 TO	9	119 TO	123	7 5
463	5 TO	9	122 TO	126	7 5
464	5 TO	9	144 TO	148	7 5
465	5 TO	9	153 TO	157	7 5
466	5 TO	9	165 TO	169	7 5
467	5 TO	9	176 TO	180	7 5
468	5 TO	9	186 TO	190	7 5
469	5 TO	9	189 TO	193	7 5
470	5 TO	9	195 TO	199	7 5
471	5 TO	9	226 TO	230	7 5
472	5 TO	9	229 TO	233	7 5
473	5 TO	9	232 TO	236	7 5
474	5 TO	9	236 TO	240	7 5
475	5 TO	9	246 TO	250	7 5
476	5 TO	9	252 TO	256	7 5
477	6 TO	10	39 TO	43	7 5
478	6 TO	10	50 TO	54	7 5
479	6 TO	10	61 TO	65	7 5
480	6 TO	10	86 TO	90	7 5
481	6 TO	10	121 TO	125	7 5
482	6 TO	10	143 TO	147	7 5
483	6 TO	10	152 TO	156	7 5
484	6 TO	10	164 TO	168	7 5
485	6 TO	10	175 TO	179	7 5
486	6 TO	10	188 TO	192	7 5
487	6 TO	10	194 TO	198	7 5
488	6 TO	10	225 TO	229	7 5
489	6 TO	10	228 TO	232	7 5

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
490	6 TO 10		231 TO 235	7	5
491	6 TO 10		245 TO 249	7	5
492	6 TO 10		251 TO 255	7	5
**** FOR	6 TO 10.	SEE	6 TO 10	ABOVE ****	
493	7 TO 11		38 TO 42	7	5
494	7 TO 11		49 TO 53	7	5
495	7 TO 11		60 TO 64	7	5
496	7 TO 11		116 TO 120	7	5
497	7 TO 11		142 TO 146	7	5
498	7 TO 11		151 TO 155	7	5
499	7 TO 11		193 TO 197	7	5
500	7 TO 11		244 TO 248	7	5
501	7 TO 11		250 TO 254	7	5
502	8 TO 12		37 TO 41	7	5
503	8 TO 12		41 TO 45	7	5
504	8 TO 12		48 TO 52	7	5
505	8 TO 12		56 TO 60	7	5
506	8 TO 12		59 TO 63	7	5
507	8 TO 12		68 TO 72	7	5
508	8 TO 12		90 TO 94	7	5
509	8 TO 12		110 TO 114	7	5
510	8 TO 12		115 TO 119	7	5
511	8 TO 12		129 TO 133	7	5
512	8 TO 12		141 TO 145	7	5
513	8 TO 12		147 TO 151	7	5
514	8 TO 12		150 TO 154	7	5
515	8 TO 12		156 TO 160	7	5
516	8 TO 12		192 TO 196	7	5
517	8 TO 12		243 TO 247	7	5
518	8 TO 12		249 TO 253	7	5
**** FOR	8 TO 12.	SEE	8 TO 12	ABOVE ****	
519	9 TO 13		18 TO 22	7	5
520	9 TO 13		24 TO 28	7	5
521	9 TO 13		36 TO 40	7	5
522	9 TO 13		43 TO 47	7	5
523	9 TO 13		47 TO 51	7	5
524	9 TO 13		55 TO 59	7	5
525	9 TO 13		58 TO 62	7	5
526	9 TO 13		67 TO 71	7	5
527	9 TO 13		89 TO 93	7	5
528	9 TO 13		92 TO 96	7	5
529	9 TO 13		109 TO 113	7	5
530	9 TO 13		114 TO 118	7	5
531	9 TO 13		131 TO 135	7	5
532	9 TO 13		135 TO 139	7	5
533	9 TO 13		140 TO 144	7	5
534	9 TO 13		146 TO 150	7	5
535	9 TO 13		149 TO 153	7	5
536	9 TO 13		155 TO 159	7	5
537	9 TO 13		191 TO 195	7	5
538	9 TO 13		197 TO 201	7	5

PATTERN	NOTES	RELATED TC	NOTES	TEST	LENGTH
539	9 TO	13	238 TO	242	7 5
540	9 TO	13	242 TO	246	7 5
541	9 TO	13	248 TO	252	7 5
542	9 TO	13	254 TO	258	7 5
**** FOR	10 TO	14.	SEE 2 TO	6 ABOVE ****	
**** FOR	11 TO	15.	SEE 1 TO	5 ABOVE ****	
**** FCR	12 TO	16.	SEE 2 TO	6 ABOVE ****	
**** FCR	13 TO	17.	SEE 5 TO	9 ABOVE ****	
543	14 TO	18	118 TO	122	7 5
544	14 TO	18	185 TO	189	7 5
545	14 TO	18	235 TO	239	7 5
546	15 TO	19	117 TO	121	7 5
547	15 TO	19	124 TO	128	7 5
548	15 TO	19	184 TO	188	7 5
549	15 TO	19	234 TO	238	7 5
**** FOR	15 TO	19.	SEE 15 TO	19 ABOVE ****	
550	16 TO	20	85 TO	89	7 5
551	16 TO	20	120 TO	124	7 5
552	16 TO	20	123 TO	127	7 5
553	16 TO	20	163 TO	167	7 5
554	16 TO	20	174 TO	178	7 5
555	16 TO	20	183 TO	187	7 5
556	16 TO	20	187 TO	191	7 5
557	16 TO	20	224 TO	228	7 5
558	16 TO	20	227 TO	231	7 5
559	16 TO	20	230 TO	234	7 5
560	16 TO	20	233 TO	237	7 5
**** FOR	17 TO	21.	SEE 1 TO	5 ABOVE ****	
561	18 TO	22	27 TO	31	7 5
562	18 TO	22	42 TO	46	7 5
563	18 TO	22	46 TO	50	7 5
564	18 TO	22	57 TO	61	7 5
565	18 TO	22	69 TO	73	7 5
566	18 TO	22	91 TO	95	7 5
567	18 TO	22	106 TO	110	7 5
568	18 TO	22	111 TO	115	7 5
569	18 TO	22	130 TO	134	7 5
570	18 TO	22	134 TO	138	7 5
571	18 TO	22	139 TO	143	7 5
572	18 TO	22	148 TO	152	7 5
573	18 TO	22	157 TO	161	7 5
574	18 TO	22	203 TO	207	7 5
575	18 TO	22	241 TO	245	7 5
576	19 TO	23	26 TO	30	7 5
577	19 TO	23	45 TO	49	7 5
578	19 TO	23	94 TO	98	7 5
579	19 TO	23	133 TO	137	7 5
580	19 TO	23	138 TO	142	7 5
581	19 TO	23	202 TO	206	7 5
582	19 TO	23	240 TO	244	7 5
583	20 TO	24	25 TO	29	7 5

PATTERN	NOTES	RELATED TC	NOTES	TEST	LENGTH
584	20 TO 24		44 TO 48	7	5
585	20 TO 24		93 TO 97	7	5
586	20 TO 24		132 TO 136	7	5
587	20 TO 24		136 TO 140	7	5
588	20 TO 24		198 TO 202	7	5
589	20 TO 24		239 TO 243	7	5
590	20 TO 24		255 TO 259	7	5
**** FCR	20 TO 24.	SEE	20 TO 24 ABOVE	****	
**** FCR	21 TO 25.	SEE	9 TO 13 ABOVE	****	
**** FOR	22 TO 26.	SEE	2 TO 6 ABOVE	****	
**** FOR	24 TO 28.	SEE	18 TO 22 ABOVE	****	
**** FOR	25 TO 29.	SEE	19 TO 23 ABOVE	****	
**** FOR	26 TO 30.	SEE	20 TO 24 ABOVE	****	
**** FOR	27 TO 31.	SEE	9 TO 13 ABOVE	****	
**** FOR	35 TO 39.	SEE	1 TO 5 ABOVE	****	
**** FOR	36 TO 40.	SEE	18 TO 22 ABOVE	****	
**** FOR	37 TO 41.	SEE	8 TO 12 ABOVE	****	
**** FCR	39 TO 43.	SEE	6 TO 10 ABOVE	****	
**** FCR	40 TO 44.	SEE	7 TO 11 ABOVE	****	
**** FOR	41 TO 45.	SEE	8 TO 12 ABOVE	****	
**** FOR	42 TO 46.	SEE	9 TO 13 ABOVE	****	
**** FCR	43 TO 47.	SEE	18 TO 22 ABOVE	****	
**** FCR	44 TO 48.	SEE	19 TO 23 ABOVE	****	
**** FOR	45 TO 49.	SEE	20 TO 24 ABOVE	****	
**** FCR	46 TO 50.	SEE	9 TO 13 ABOVE	****	
**** FOR	47 TO 51.	SEE	18 TO 22 ABOVE	****	
**** FOR	48 TO 52.	SEE	8 TO 12 ABOVE	****	
**** FOR	50 TO 54.	SEE	6 TO 10 ABOVE	****	
**** FOR	51 TO 55.	SEE	16 TO 20 ABOVE	****	
**** FOR	52 TO 56.	SEE	1 TO 5 ABOVE	****	
**** FCR	54 TO 58.	SEE	1 TO 5 ABOVE	****	
**** FOR	55 TO 59.	SEE	18 TO 22 ABOVE	****	
**** FOR	56 TO 60.	SEE	8 TO 12 ABOVE	****	
**** FOR	57 TO 61.	SEE	9 TO 13 ABOVE	****	
**** FOR	58 TO 62.	SEE	18 TO 22 ABOVE	****	
**** FCR	59 TO 63.	SEE	8 TO 12 ABOVE	****	
**** FOR	61 TO 65.	SEE	6 TO 10 ABOVE	****	
591	63 TO 67		212 TO 216	7	5
**** FCR	63 TO 67.	SEE	63 TO 67 ABOVE	****	
592	64 TO 68		211 TO 215	7	5
593	65 TO 69		101 TO 105	7	5
594	65 TO 69		168 TO 172	7	5
595	65 TO 69		210 TO 214	7	5
**** FOR	66 TO 70.	SEE	1 TO 5 ABOVE	****	
**** FCR	67 TO 71.	SEE	18 TO 22 ABOVE	****	
**** FCR	68 TO 72.	SEE	8 TO 12 ABOVE	****	
**** FCR	69 TO 73.	SEE	9 TO 13 ABOVE	****	
**** FCR	70 TO 74.	SEE	2 TO 6 ABOVE	****	
**** FOR	83 TO 87.	SEE	1 TO 5 ABOVE	****	
**** FCR	84 TO 88.	SEE	2 TO 6 ABOVE	****	
**** FCR	85 TO 89.	SEE	5 TO 9 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FCR	86 TO	90.	SEF	6 TO	10 ABOVE ****
**** FCR	87 TO	91.	SEE	16 TO	20 ABOVE ****
**** FCR	88 TO	92.	SEE	1 TO	5 ABOVE ****
**** FOR	89 TO	93.	SEE	18 TO	22 ABOVE ****
**** FOR	90 TO	94.	SEE	8 TO	12 ABOVE ****
**** FOR	91 TO	95.	SEE	9 TO	13 ABOVE ****
**** FCR	92 TO	96.	SEE	18 TO	22 ABOVE ****
**** FOR	93 TO	97.	SEE	19 TO	23 ABOVE ****
**** FOR	94 TO	98.	SEE	20 TO	24 ABOVE ****
596	95 TO	99	128 TO	132	7 5
**** FOR	100 TO	104.	SEE	16 TO	20 ABOVE ****
597	101 TO	105	171 TO	175	7 5
598	101 TO	105	209 TO	213	7 5
**** FOR	106 TO	110.	SEE	9 TO	13 ABOVE ****
**** FOR	107 TO	111.	SEE	2 TO	6 ABOVE ****
**** FCR	108 TO	112.	SEE	1 TO	5 ABOVE ****
**** FOR	109 TO	113.	SEE	18 TO	22 ABOVE ****
**** FCR	110 TO	114.	SEF	8 TO	12 ABOVE ****
**** FCR	111 TO	115.	SEE	9 TO	13 ABOVE ****
**** FOR	112 TO	116.	SEF	2 TO	6 ABOVE ****
**** FOR	113 TO	117.	SEE	1 TO	5 ABOVE ****
**** FCR	114 TO	118.	SEE	18 TO	22 ABOVE ****
**** FOR	115 TO	119.	SEE	8 TO	12 ABOVE ****
**** FOR	117 TO	121.	SEE	14 TO	18 ABOVE ****
**** FOR	118 TO	122.	SEE	15 TO	19 ABOVE ****
**** FOR	119 TO	123.	SEE	16 TO	20 ABOVE ****
**** FOR	120 TO	124.	SEE	5 TO	9 ABOVE ****
**** FOR	121 TO	125.	SEE	6 TO	10 ABOVE ****
**** FCR	122 TO	126.	SEE	16 TO	20 ABOVE ****
**** FOR	123 TO	127.	SEE	5 TO	9 ABOVE ****
**** FOR	124 TO	128.	SEE	14 TO	18 ABOVE ****
599	127 TO	131	169 TO	173	7 5
**** FOR	127 TO	131.	SEE	127 TO	131 ABOVE ****
**** FOR	129 TO	133.	SEE	8 TO	12 ABOVE ****
**** FOR	130 TO	134.	SEE	9 TO	13 ABOVE ****
**** FOR	131 TO	135.	SEE	18 TO	22 ABOVE ****
**** FOR	132 TO	136.	SEE	19 TO	23 ABOVE ****
**** FOR	133 TO	137.	SEE	20 TO	24 ABOVE ****
**** FCR	134 TO	138.	SEE	9 TO	13 ABOVE ****
**** FOR	135 TO	139.	SEE	18 TO	22 ABOVE ****
**** FOR	136 TO	140.	SEF	19 TO	23 ABOVE ****
**** FCR	138 TO	142.	SEE	20 TO	24 ABOVE ****
**** FOR	139 TO	143.	SEE	9 TO	13 ABOVE ****
**** FOR	140 TO	144.	SEE	18 TO	22 ABOVE ****
**** FCR	141 TO	145.	SEF	8 TO	12 ABOVE ****
**** FCR	143 TO	147.	SEE	6 TO	10 ABOVE ****
**** FOR	144 TO	148.	SEE	16 TO	20 ABOVE ****
**** FOR	145 TO	149.	SEE	1 TO	5 ABOVE ****
**** FOR	146 TO	150.	SEE	18 TO	22 ABOVE ****
**** FCR	147 TO	151.	SEE	8 TO	12 ABOVE ****
**** FOR	148 TO	152.	SEE	9 TO	13 ABOVE ****

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
**** FCR	149 TO	153,	SEE	18 TO	22 ABOVE ****
**** FOR	150 TO	154,	SEE	8 TO	12 ABOVE ****
**** FOR	152 TO	156,	SEE	6 TO	10 ABOVE ****
**** FOR	153 TO	157,	SEE	16 TO	20 ABOVE ****
**** FOR	154 TO	158,	SEE	1 TO	5 ABOVE ****
**** FCR	155 TO	159,	SEE	18 TO	22 ABOVE ****
**** FOR	156 TO	160,	SEE	8 TO	12 ABOVE ****
**** FOR	157 TO	161,	SEE	9 TO	13 ABOVE ****
**** FOR	163 TO	167,	SEE	5 TO	9 ABOVE ****
**** FCR	164 TO	168,	SEE	6 TO	10 ABOVE ****
**** FOR	165 TO	169,	SEE	16 TO	20 ABOVE ****
**** FCR	166 TO	170,	SEE	1 TO	5 ABOVE ****
**** FCR	167 TO	171,	SEE	2 TO	6 ABOVE ****
**** FOR	168 TO	172,	SEE	101 TO	105 ABOVE ****
**** FOR	170 TO	174,	SEE	127 TO	131 ABOVE ****
**** FCR	171 TO	175,	SEE	65 TO	69 ABOVE ****
**** FOR	172 TO	176,	SEE	1 TO	5 ABOVE ****
**** FOR	173 TO	177,	SEE	2 TO	6 ABOVE ****
**** FOR	174 TO	178,	SEE	5 TO	9 ABOVE ****
**** FOR	175 TO	179,	SEE	6 TO	10 ABOVE ****
**** FOR	176 TO	180,	SEE	16 TO	20 ABOVE ****
**** FOR	177 TO	181,	SEE	1 TO	5 ABOVE ****
600	178 TO	182		213 TO	217 7 5
601	178 TO	182		222 TO	226 7 5
602	181 TO	185		206 TO	210 7 5
603	181 TO	185		216 TO	220 7 5
**** FOR	181 TO	185,	SEE	181 TO	185 ABOVE ****
**** FOR	182 TO	186,	SEE	2 TO	6 ABOVE ****
**** FCR	183 TO	187,	SEE	5 TO	9 ABOVE ****
**** FOR	184 TO	188,	SEE	14 TO	18 ABOVE ****
**** FOR	185 TO	189,	SEE	15 TO	19 ABOVE ****
**** FCR	186 TO	190,	SEE	16 TO	20 ABOVE ****
**** FOR	187 TO	191,	SEE	5 TO	9 ABOVE ****
**** FOR	188 TO	192,	SEE	6 TO	10 ABOVE ****
**** FOR	189 TO	193,	SEE	16 TO	20 ABOVE ****
**** FCR	190 TO	194,	SEE	1 TO	5 ABOVE ****
**** FOR	191 TO	195,	SEE	18 TO	22 ABOVE ****
**** FOR	192 TO	196,	SEE	8 TO	12 ABOVE ****
**** FOR	194 TO	198,	SEE	6 TO	10 ABOVE ****
**** FCR	195 TO	199,	SEE	16 TO	20 ABOVE ****
**** FOR	196 TO	200,	SEE	1 TO	5 ABOVE ****
**** FOR	197 TO	201,	SEE	18 TO	22 ABOVE ****
**** FOR	198 TO	202,	SEE	19 TO	23 ABOVE ****
**** FCR	202 TO	206,	SEE	20 TO	24 ABOVE ****
**** FOR	203 TO	207,	SEE	9 TO	13 ABOVE ****
**** FCR	204 TO	208,	SEE	2 TO	6 ABOVE ****
**** FOR	205 TO	209,	SEE	1 TO	5 ABOVE ****
**** FOR	206 TO	210,	SEE	178 TO	182 ABOVE ****
**** FOR	207 TO	211,	SEE	63 TO	67 ABOVE ****
**** FOR	208 TO	212,	SEE	64 TO	68 ABOVE ****
**** FCR	209 TO	213,	SEE	65 TO	69 ABOVE ****

PATTERN	NOTES	RELATED TO	NOTES	TEST LENGTH
**** FCR 210 TO 214. 6C4	212 TO 216	SEE 101 TO 105	ABOVE 7	5
**** FCR 212 TO 216.	212 TO 216	SEE 212 TO 216	ABOVE	****
**** FOR 213 TO 217.	213 TO 217	SEE 181 TO 185	ABOVE	****
**** FOR 216 TO 220.	216 TO 220	SEE 178 TO 182	ABOVE	****
**** FCR 217 TO 221.	217 TO 221	SEE 63 TO 67	ABOVE	****
**** FOR 222 TO 226.	222 TO 226	SEE 181 TO 185	ABOVE	****
**** FOR 223 TO 227.	223 TO 227	SEE 2 TO 6	ABOVE	****
**** FOR 224 TO 228.	224 TO 228	SEE 5 TO 9	ABOVE	****
**** FOR 225 TO 229.	225 TO 229	SEE 6 TO 10	ABOVE	****
**** FOR 226 TO 230.	226 TO 230	SEE 16 TO 20	ABOVE	****
**** FOR 227 TO 231.	227 TO 231	SEE 5 TO 9	ABOVE	****
**** FOR 228 TO 232.	228 TO 232	SEE 6 TO 10	ABOVE	****
**** FCR 229 TO 233.	229 TO 233	SEE 16 TO 20	ABOVE	****
**** FOR 230 TO 234.	230 TO 234	SEE 5 TO 9	ABOVE	****
**** FOR 231 TO 235.	231 TO 235	SEE 6 TO 10	ABOVE	****
**** FCR 232 TO 236.	232 TO 236	SEE 16 TO 20	ABOVE	****
**** FOR 233 TO 237.	233 TO 237	SEE 5 TO 9	ABOVE	****
**** FOR 234 TO 238.	234 TO 238	SEE 14 TO 18	ABOVE	****
**** FOR 235 TO 239.	235 TO 239	SEE 15 TO 19	ABOVE	****
**** FCR 236 TO 240.	236 TO 240	SEE 16 TO 20	ABOVE	****
**** FOR 237 TO 241.	237 TO 241	SEE 1 TO 5	ABOVE	****
**** FCR 238 TO 242.	238 TO 242	SEE 18 TO 22	ABOVE	****
**** FOR 239 TO 243.	239 TO 243	SEE 19 TO 23	ABOVE	****
**** FOR 240 TO 244.	240 TO 244	SEE 20 TO 24	ABOVE	****
**** FOR 241 TO 245.	241 TO 245	SEE 9 TO 13	ABOVE	****
**** FOR 242 TO 246.	242 TO 246	SEE 18 TO 22	ABOVE	****
**** FOR 243 TO 247.	243 TO 247	SEE 8 TO 12	ABOVE	****
**** FCR 245 TO 249.	245 TO 249	SEE 6 TO 10	ABOVE	****
**** FOR 246 TO 250.	246 TO 250	SEE 16 TO 20	ABOVE	****
**** FOR 247 TO 251.	247 TO 251	SEE 1 TO 5	ABOVE	****
**** FOR 248 TO 252.	248 TO 252	SEE 18 TO 22	ABOVE	****
**** FCR 249 TO 253.	249 TO 253	SEE 8 TO 12	ABOVE	****
**** FCR 251 TO 255.	251 TO 255	SEE 6 TO 10	ABOVE	****
**** FOR 252 TO 256.	252 TO 256	SEE 16 TO 20	ABOVE	****
**** FOR 253 TO 257.	253 TO 257	SEE 1 TO 5	ABOVE	****
**** FOR 254 TO 258.	254 TO 258	SEE 18 TO 22	ABOVE	****
**** FOR 255 TO 259.	255 TO 259	SEE 19 TO 23	ABOVE	****

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 6 NOTES IN LENGTH --
 TONAL RET. INVERSION
 WAS BEGUN AT 479 SECONDS INTO EXECUTION.

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
605	1 TO	6	11 TO 16	7	6
606	1 TO	6	29 TO 34	7	6
607	1 TO	6	31 TO 36	7	6
608	1 TO	6	33 TO 38	7	6
609	1 TO	6	52 TO 57	7	6
610	1 TO	6	71 TO 76	7	6
611	1 TO	6	73 TO 78	7	6
612	1 TO	6	75 TO 80	7	6
613	1 TO	6	77 TO 82	7	6
614	1 TO	6	79 TO 84	7	6
615	1 TO	6	81 TO 86	7	6
616	1 TO	6	83 TO 88	7	6
617	1 TO	6	159 TO 164	7	6
618	1 TO	6	161 TO 166	7	6
619	1 TO	6	166 TO 171	7	6
620	1 TO	6	172 TO 177	7	6
621	2 TO	7	10 TO 15	7	6
622	2 TO	7	22 TO 27	7	6
623	2 TO	7	28 TO 33	7	6
624	2 TO	7	30 TO 35	7	6
625	2 TO	7	32 TO 37	7	6
626	2 TO	7	34 TO 39	7	6
627	2 TO	7	53 TO 58	7	6
628	2 TO	7	70 TO 75	7	6
629	2 TO	7	72 TO 77	7	6
630	2 TO	7	74 TO 79	7	6
631	2 TO	7	76 TO 81	7	6
632	2 TO	7	78 TO 83	7	6
633	2 TO	7	80 TO 85	7	6
634	2 TO	7	82 TO 87	7	6
635	2 TO	7	107 TO 112	7	6
636	2 TO	7	112 TO 117	7	6
637	2 TO	7	158 TO 163	7	6
638	2 TO	7	160 TO 165	7	6
639	2 TO	7	204 TO 209	7	6
640	2 TO	7	214 TO 219	7	6
**** FOR	3 TO	8,	SEE 1 TO 6 ABOVE ****		
641	4 TO	9	16 TO 21	7	6
642	4 TO	9	51 TO 56	7	6
643	4 TO	9	87 TO 92	7	6
644	4 TO	9	144 TO 149	7	6
645	4 TO	9	153 TO 158	7	6
646	4 TO	9	165 TO 170	7	6
647	4 TO	9	176 TO 181	7	6

PATTERN	NCTES	RELATED TC	NOTES	TEST	LENGTH
648	4 TO	9	189 TO 194	7	6
649	4 TO	9	195 TO 200	7	6
650	4 TO	9	236 TO 241	7	6
651	4 TO	9	246 TO 251	7	6
652	4 TO	9	252 TO 257	7	6
653	5 TO	10	50 TO 55	7	6
654	5 TO	10	86 TO 91	7	6
655	5 TO	10	121 TO 126	7	6
656	5 TO	10	143 TO 148	7	6
657	5 TO	10	152 TO 157	7	6
658	5 TO	10	164 TO 169	7	6
659	5 TO	10	175 TO 180	7	6
660	5 TO	10	188 TO 193	7	6
661	5 TO	10	194 TO 199	7	6
662	5 TO	10	225 TO 230	7	6
663	5 TO	10	228 TO 233	7	6
664	5 TO	10	231 TO 236	7	6
665	5 TO	10	245 TO 250	7	6
666	5 TO	10	251 TO 256	7	6
**** FOR	5 TO	10.	SEE 5 TO 10 ABOVE ****		
667	6 TO	11	38 TO 43	7	6
668	6 TO	11	49 TO 54	7	6
669	6 TO	11	60 TO 65	7	6
670	6 TO	11	142 TO 147	7	6
671	6 TO	11	151 TO 156	7	6
672	6 TO	11	193 TO 198	7	6
673	6 TO	11	244 TO 249	7	6
674	6 TO	11	250 TO 255	7	6
675	7 TO	12	37 TO 42	7	6
676	7 TO	12	48 TO 53	7	6
677	7 TO	12	59 TO 64	7	6
678	7 TO	12	115 TO 120	7	6
679	7 TO	12	141 TO 146	7	6
680	7 TO	12	150 TO 155	7	6
681	7 TO	12	192 TO 197	7	6
682	7 TO	12	243 TO 248	7	6
683	7 TO	12	249 TO 254	7	6
684	8 TO	13	36 TO 41	7	6
685	8 TO	13	47 TO 52	7	6
686	8 TO	13	55 TO 60	7	6
687	8 TO	13	58 TO 63	7	6
688	8 TO	13	67 TO 72	7	6
689	8 TO	13	89 TO 94	7	6
690	8 TO	13	109 TO 114	7	6
691	8 TO	13	114 TO 119	7	6
692	8 TO	13	140 TO 145	7	6
693	8 TO	13	146 TO 151	7	6
694	8 TO	13	149 TO 154	7	6
695	8 TO	13	155 TO 160	7	6
696	8 TO	13	191 TO 196	7	6
697	8 TO	13	242 TO 247	7	6

PATTERN	NCTES	RELATED TC	NOTES	TEST	LENGTH
698	8 TO 13		248 TO 253	7	6
699	9 TO 14		17 TO 22	7	6
700	9 TO 14		23 TO 28	7	6
701	9 TO 14		35 TO 40	7	6
702	9 TO 14		54 TO 59	7	6
703	9 TO 14		66 TO 71	7	6
704	9 TO 14		88 TO 93	7	6
705	9 TO 14		108 TO 113	7	6
706	9 TO 14		113 TO 118	7	6
707	9 TO 14		145 TO 150	7	6
708	9 TO 14		154 TO 159	7	6
709	9 TO 14		190 TO 195	7	6
710	9 TO 14		196 TO 201	7	6
711	9 TO 14		237 TO 242	7	6
712	9 TO 14		247 TO 252	7	6
713	9 TO 14		253 TO 258	7	6
**** FGR	10 TO 15.	SEE	2 TO 7	ABOVE ****	
**** FOR	11 TO 16.	SEE	1 TO 6	ABOVE ****	
**** FCR	12 TO 17.	SEE	4 TO 9	ABOVE ****	
714	13 TO 18		118 TO 123	7	6
715	13 TO 18		185 TO 190	7	6
716	13 TO 18		235 TO 240	7	6
717	14 TO 19		117 TO 122	7	6
718	14 TO 19		184 TO 189	7	6
719	14 TO 19		234 TO 239	7	6
**** FOR	14 TO 19.	SEE	14 TO 19	ABOVE ****	
720	15 TO 20		123 TO 128	7	6
721	15 TO 20		183 TO 188	7	6
722	15 TO 20		233 TO 238	7	6
723	16 TO 21		84 TO 89	7	6
724	16 TO 21		162 TO 167	7	6
725	16 TO 21		173 TO 178	7	6
726	16 TO 21		182 TO 187	7	6
727	16 TO 21		223 TO 228	7	6
**** FCR	16 TO 21.	SEE	16 TO 21	ABOVE ****	
728	17 TO 22		27 TO 32	7	6
729	17 TO 22		69 TO 74	7	6
730	17 TO 22		106 TO 111	7	6
731	17 TO 22		111 TO 116	7	6
732	17 TO 22		157 TO 162	7	6
733	17 TO 22		203 TO 208	7	6
734	18 TO 23		26 TO 31	7	6
735	18 TO 23		45 TO 50	7	6
736	18 TO 23		133 TO 138	7	6
737	18 TO 23		138 TO 143	7	6
738	18 TO 23		202 TO 207	7	6
739	18 TO 23		240 TO 245	7	6
**** FOR	18 TO 23.	SEE	18 TO 23	ABOVE ****	
740	19 TO 24		25 TO 30	7	6
741	19 TO 24		44 TO 49	7	6
742	19 TO 24		93 TO 98	7	6

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
743	19 TO	24	132 TO	137	7 6
744	19 TO	24	239 TO	244	7 6
**** FCR	19 TO	24.	SEE 19 TO	24 ABOVE	****
745	20 TO	25	43 TO	48	7 6
746	20 TO	25	92 TO	97	7 6
747	20 TO	25	131 TO	136	7 6
748	20 TO	25	135 TO	140	7 6
749	20 TO	25	197 TO	202	7 6
750	20 TO	25	238 TO	243	7 6
751	20 TO	25	254 TO	259	7 6
**** FOR	21 TO	26.	SEE 9 TO	14 ABOVE	****
**** FCR	22 TO	27.	SEE 2 TO	7 ABOVE	****
**** FOR	23 TO	28.	SEE 17 TO	22 ABOVE	****
**** FCR	24 TO	29.	SEE 18 TO	23 ABOVE	****
**** FOR	25 TO	30.	SEE 19 TO	24 ABOVE	****
**** FCR	26 TO	31.	SEE 20 TO	25 ABOVE	****
**** FCR	27 TO	32.	SEE 9 TO	14 ABOVE	****
**** FCR	34 TO	39.	SEE 2 TO	7 ABOVE	****
**** FOR	35 TO	40.	SEE 17 TO	22 ABOVE	****
752	36 TO	41	41 TO	46	7 6
753	36 TO	41	56 TO	61	7 6
754	36 TO	41	68 TO	73	7 6
755	36 TO	41	90 TO	95	7 6
756	36 TO	41	110 TO	115	7 6
757	36 TO	41	129 TO	134	7 6
758	36 TO	41	147 TO	152	7 6
759	36 TO	41	156 TO	161	7 6
**** FOR	39 TO	44.	SEE 6 TO	11 ABOVE	****
**** FOR	40 TO	45.	SEE 7 TO	12 ABOVE	****
**** FOR	41 TO	46.	SEE 8 TO	13 ABOVE	****
760	42 TO	47	57 TO	62	7 6
761	42 TO	47	91 TO	96	7 6
762	42 TO	47	130 TO	135	7 6
763	42 TO	47	134 TO	139	7 6
764	42 TO	47	139 TO	144	7 6
765	42 TO	47	148 TO	153	7 6
766	42 TO	47	241 TO	246	7 6
**** FOR	43 TO	48.	SEE 18 TO	23 ABOVE	****
**** FOR	44 TO	49.	SEE 19 TO	24 ABOVE	****
**** FCR	45 TO	50.	SEE 20 TO	25 ABOVE	****
**** FCR	46 TO	51.	SEE 42 TO	47 ABOVE	****
**** FOR	47 TO	52.	SEE 36 TO	41 ABOVE	****
767	50 TO	55	85 TO	90	7 6
768	50 TO	55	120 TO	125	7 6
769	50 TO	55	163 TO	168	7 6
770	50 TO	55	174 TO	179	7 6
771	50 TO	55	187 TO	192	7 6
772	50 TO	55	224 TO	229	7 6
773	50 TO	55	227 TO	232	7 6
774	50 TO	55	230 TO	235	7 6
**** FCR	51 TO	56.	SEE 16 TO	21 ABOVE	****

PATTERN	NCTES	RELATED TO	NOTES	TEST	LFNGTH
**** FCR	52 TO	57.	SEE 1 TO	6 ABOVE	****
**** FCR	53 TO	58.	SEE 2 TO	7 ABOVE	****
**** FOR	54 TO	59.	SEE 17 TO	22 ABOVE	****
**** FOR	55 TO	60.	SEE 36 TO	41 ABOVE	****
**** FOR	56 TO	61.	SEE 8 TO	13 ABOVE	****
**** FOR	57 TO	62.	SEE 42 TO	47 ABOVE	****
**** FCR	58 TO	63.	SEE 36 TO	41 ABOVE	****
775	63 TO	68	211 TO	216	7 6
776	64 TO	69	210 TO	215	7 6
777	65 TO	70	167 TO	172	7 6
**** FOR	66 TO	71.	SEE 17 TO	22 ABOVE	****
**** FCR	67 TO	72.	SEE 36 TO	41 ABOVE	****
**** FCR	68 TO	73.	SEE 8 TO	13 ABOVE	****
**** FOR	69 TO	74.	SEE 9 TO	14 ABOVE	****
**** FOR	70 TO	75.	SEE 2 TO	7 ABOVE	****
**** FOR	82 TO	87.	SEE 2 TO	7 ABOVE	****
**** FOR	83 TO	88.	SEE 1 TO	6 ABOVE	****
**** FCR	84 TO	89.	SEE 4 TO	9 ABOVE	****
**** FCR	85 TO	90.	SEE 5 TO	10 ABOVE	****
**** FOR	86 TO	91.	SEE 50 TO	55 ABOVE	****
**** FOR	87 TO	92.	SEE 16 TO	21 ABOVE	****
**** FOR	88 TO	93.	SEE 17 TO	22 ABOVE	****
**** FCR	89 TO	94.	SEE 36 TO	41 ABOVE	****
**** FCR	90 TO	95.	SEE 8 TO	13 ABOVE	****
**** FCR	91 TO	96.	SEE 42 TO	47 ABOVE	****
**** FOR	92 TO	97.	SEE 18 TO	23 ABOVE	****
**** FOR	93 TO	98.	SEE 19 TO	24 ABOVE	****
**** FCR	106 TO	111.	SEE 9 TO	14 ABOVE	****
**** FCR	107 TO	112.	SEE 2 TO	7 ABOVE	****
**** FCR	108 TO	113.	SEE 17 TO	22 ABOVE	****
**** FOR	109 TO	114.	SEE 36 TO	41 ABOVE	****
**** FOR	110 TO	115.	SEE 8 TO	13 ABOVE	****
**** FOR	111 TO	116.	SEE 9 TO	14 ABOVE	****
**** FCR	112 TO	117.	SEE 2 TO	7 ABOVE	****
**** FOR	113 TO	118.	SEE 17 TO	22 ABOVE	****
**** FOR	114 TO	119.	SEE 36 TO	41 ABOVE	****
**** FOR	117 TO	122.	SEE 14 TO	19 ABOVE	****
**** FOR	118 TO	123.	SEE 15 TO	20 ABOVE	****
778	119 TO	124	186 TO	191	7 6
779	119 TO	124	226 TO	231	7 6
780	119 TO	124	229 TO	234	7 6
781	119 TO	124	232 TO	237	7 6
**** FOR	120 TO	125.	SEE 5 TO	10 ABOVE	****
**** FOR	121 TO	126.	SEE 50 TO	55 ABOVE	****
**** FOR	122 TO	127.	SEE 119 TO	124 ABOVE	****
**** FOR	123 TO	128.	SEE 13 TO	18 ABOVE	****
**** FCR	129 TO	134.	SEE 8 TO	13 ABOVE	****
**** FOR	130 TO	135.	SEE 42 TO	47 ABOVE	****
**** FOR	131 TO	136.	SEE 18 TO	23 ABOVE	****
**** FOR	132 TO	137.	SEE 19 TO	24 ABOVE	****
**** FCR	133 TO	138.	SEE 20 TO	25 ABOVE	****

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FCR	134 TO 139.	SEE	42 TO 47 ABOVE	****	
**** FOR	135 TO 140.	SEE	18 TO 23 ABOVE	****	
782	136 TO 141		201 TO 206	7	6
783	137 TO 142		198 TO 203	7	6
784	137 TO 142		255 TO 260	7	6
**** FOR	137 TO 142.	SEE	137 TO 142 ABOVE	****	
**** FCR	138 TO 143.	SEE	20 TO 25 ABOVE	****	
**** FCR	139 TO 144.	SEE	42 TO 47 ABOVE	****	
**** FOR	140 TO 145.	SEE	36 TO 41 ABOVE	****	
**** FOR	143 TO 148.	SEE	50 TO 55 ABOVE	****	
**** FOR	144 TO 149.	SEE	16 TO 21 ABOVE	****	
**** FOR	145 TO 150.	SEE	17 TO 22 ABOVE	****	
**** FOR	146 TO 151.	SEE	36 TO 41 ABOVE	****	
**** FOR	147 TO 152.	SEE	8 TO 13 ABOVE	****	
**** FOR	148 TO 153.	SEE	42 TO 47 ABOVE	****	
**** FOR	149 TO 154.	SEE	36 TO 41 ABOVE	****	
**** FOR	152 TO 157.	SEE	50 TO 55 ABOVE	****	
**** FOR	153 TO 158.	SEE	16 TO 21 ABOVE	****	
**** FOR	154 TO 159.	SEE	17 TO 22 ABOVE	****	
**** FOR	155 TO 160.	SEE	36 TO 41 ABOVE	****	
**** FOR	156 TO 161.	SEE	8 TO 13 ABOVE	****	
**** FOR	157 TO 162.	SEE	9 TO 14 ABOVE	****	
**** FOR	162 TO 167.	SEE	4 TO 9 ABOVE	****	
**** FOR	163 TO 168.	SEE	5 TO 10 ABOVE	****	
**** FOR	164 TO 169.	SEE	50 TO 55 ABOVE	****	
**** FOR	165 TO 170.	SEE	16 TO 21 ABOVE	****	
**** FOR	166 TO 171.	SEE	1 TO 6 ABOVE	****	
**** FOR	171 TO 176.	SEE	65 TO 70 ABOVE	****	
**** FOR	172 TO 177.	SEE	1 TO 6 ABOVE	****	
**** FCR	173 TO 178.	SEE	4 TO 9 ABOVE	****	
**** FOR	174 TO 179.	SEE	5 TO 10 ABOVE	****	
**** FOR	175 TO 180.	SEE	50 TO 55 ABOVE	****	
**** FOR	176 TO 181.	SEE	16 TO 21 ABOVE	****	
785	177 TO 182		213 TO 218	7	6
786	177 TO 182		222 TO 227	7	6
787	181 TO 186		205 TO 210	7	6
788	181 TO 186		215 TO 220	7	6
**** FOR	182 TO 187.	SEE	4 TO 9 ABOVE	****	
**** FOR	183 TO 188.	SEE	13 TO 18 ABOVE	****	
**** FOR	184 TO 189.	SEE	14 TO 19 ABOVE	****	
**** FCR	185 TO 190.	SEE	15 TO 20 ABOVE	****	
**** FCR	186 TO 191.	SEE	119 TO 124 ABOVE	****	
**** FOR	187 TO 192.	SEE	5 TO 10 ABOVE	****	
**** FOR	188 TO 193.	SEE	50 TO 55 ABOVE	****	
**** FCR	189 TO 194.	SEE	16 TO 21 ABOVE	****	
**** FOR	190 TO 195.	SEE	17 TO 22 ABOVE	****	
**** FCR	191 TO 196.	SEE	36 TO 41 ABOVE	****	
**** FCR	194 TO 199.	SEE	50 TO 55 ABOVE	****	
**** FOR	195 TO 200.	SEE	16 TO 21 ABOVE	****	
**** FCR	196 TO 201.	SEE	17 TO 22 ABOVE	****	
**** FCR	197 TO 202.	SEE	18 TO 23 ABOVE	****	

PATTERN	NOTES	RELATED TC	NOTES	TEST	LENGTH
**** FOR	198 TO 203.	SEE	136 TO 141 ABOVE	****	
**** FOR	201 TO 206.	SEE	137 TO 142 ABOVE	****	
**** FOR	202 TO 207.	SEE	20 TO 25 ABOVE	****	
**** FOR	203 TO 208.	SEE	9 TO 14 ABOVE	****	
**** FOR	204 TO 209.	SEE	2 TO 7 ABOVE	****	
**** FCR	205 TO 210.	SEE	177 TO 182 ABOVE	****	
789	206 TO 211		212 TO 217	7	6
**** FOR	207 TO 212.	SEE	63 TO 68 ABOVE	****	
**** FOR	208 TO 213.	SEE	64 TO 69 ABOVE	****	
**** FCR	213 TO 218.	SEE	181 TO 186 ABOVE	****	
**** FOR	215 TO 220.	SEE	177 TO 182 ABOVE	****	
**** FCR	216 TO 221.	SEE	206 TO 211 ABOVE	****	
**** FOR	222 TO 227.	SEE	181 TO 186 ABOVE	****	
**** FOR	223 TO 228.	SEE	4 TO 9 ABOVE	****	
**** FOR	224 TO 229.	SEE	5 TO 10 ABOVE	****	
**** FOR	225 TO 230.	SEE	50 TO 55 ABOVE	****	
**** FOR	226 TO 231.	SEE	119 TO 124 ABOVE	****	
**** FOR	227 TO 232.	SEE	5 TO 10 ABOVE	****	
**** FOR	228 TO 233.	SEE	50 TO 55 ABOVE	****	
**** FOR	229 TO 234.	SEE	119 TO 124 ABOVE	****	
**** FOR	230 TO 235.	SEE	5 TO 10 ABOVE	****	
**** FCR	231 TO 236.	SEE	50 TO 55 ABOVE	****	
**** FOR	232 TO 237.	SEE	119 TO 124 ABOVE	****	
**** FCR	233 TO 238.	SEE	13 TO 18 ABOVE	****	
**** FOR	234 TO 239.	SEE	14 TO 19 ABOVE	****	
**** FOR	235 TO 240.	SEE	15 TO 20 ABOVE	****	
**** FOR	236 TO 241.	SEE	16 TO 21 ABOVE	****	
**** FCR	237 TO 242.	SEE	17 TO 22 ABOVE	****	
**** FCR	238 TO 243.	SEE	18 TO 23 ABOVE	****	
**** FOR	239 TO 244.	SEE	19 TO 24 ABOVE	****	
**** FCR	240 TO 245.	SEE	20 TO 25 ABOVE	****	
**** FCR	241 TO 246.	SEE	42 TO 47 ABOVE	****	
**** FOR	242 TO 247.	SEE	36 TO 41 ABOVE	****	
**** FOR	245 TO 250.	SEE	50 TO 55 ABOVE	****	
**** FCR	246 TO 251.	SEE	16 TO 21 ABOVE	****	
**** FOR	247 TO 252.	SEE	17 TO 22 ABOVE	****	
**** FOR	248 TO 253.	SEE	36 TO 41 ABOVE	****	
**** FOR	251 TO 256.	SEE	50 TO 55 ABOVE	****	
**** FOR	252 TO 257.	SEE	16 TO 21 ABOVE	****	
**** FOR	253 TO 258.	SEE	17 TO 22 ABOVE	****	
**** FCR	254 TO 259.	SEE	18 TO 23 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 7 NOTES IN LENGTH --
 TONAL RET. INVERSION
 WAS BEGUN AT 699 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
790	1 TO	7	10 TO	16	7
791	1 TO	7	28 TO	34	7
792	1 TO	7	30 TO	36	7
793	1 TO	7	32 TO	38	7
794	1 TO	7	70 TO	76	7
795	1 TO	7	72 TO	78	7
796	1 TO	7	74 TO	80	7
797	1 TO	7	76 TO	82	7
798	1 TO	7	78 TO	84	7
799	1 TO	7	80 TO	86	7
800	1 TO	7	82 TO	88	7
801	1 TO	7	158 TO	164	7
802	1 TO	7	160 TO	166	7
803	2 TO	8	29 TO	35	7
804	2 TO	8	31 TO	37	7
805	2 TO	8	33 TO	39	7
806	2 TO	8	52 TO	58	7
807	2 TO	8	71 TO	77	7
808	2 TO	8	73 TO	79	7
809	2 TO	8	75 TO	81	7
810	2 TO	8	77 TO	83	7
811	2 TO	8	79 TO	85	7
812	2 TO	8	81 TO	87	7
813	2 TO	8	159 TO	165	7
814	4 TO	10	50 TO	56	7
815	4 TO	10	86 TO	92	7
816	4 TO	10	143 TO	149	7
817	4 TO	10	152 TO	158	7
818	4 TO	10	164 TO	170	7
819	4 TO	10	175 TO	181	7
820	4 TO	10	188 TO	194	7
821	4 TO	10	194 TO	200	7
822	4 TO	10	245 TO	251	7
823	4 TO	10	251 TO	257	7
824	5 TO	11	49 TO	55	7
825	5 TO	11	142 TO	148	7
826	5 TO	11	151 TO	157	7
827	5 TO	11	193 TO	199	7
828	5 TO	11	244 TO	250	7
829	5 TO	11	250 TO	256	7
830	6 TO	12	37 TO	43	7
831	6 TO	12	48 TO	54	7
832	6 TO	12	59 TO	65	7
833	6 TO	12	141 TO	147	7

PATTERN	NCTES		RELATED TC	NOTES		TEST	LENGTH
834	6	TO	12	150	TO 156	7	7
835	6	TO	12	192	TO 198	7	7
836	6	TO	12	243	TO 249	7	7
837	6	TO	12	249	TO 255	7	7
838	7	TO	13	36	TO 42	7	7
839	7	TO	13	47	TO 53	7	7
840	7	TO	13	58	TO 64	7	7
841	7	TO	13	114	TO 120	7	7
842	7	TO	13	140	TO 146	7	7
843	7	TO	13	149	TO 155	7	7
844	7	TO	13	191	TO 197	7	7
845	7	TO	13	242	TO 248	7	7
846	7	TO	13	248	TO 254	7	7
847	8	TO	14	35	TO 41	7	7
848	8	TO	14	54	TO 60	7	7
849	8	TO	14	66	TO 72	7	7
850	8	TO	14	88	TO 94	7	7
851	8	TO	14	108	TO 114	7	7
852	8	TO	14	113	TO 119	7	7
853	8	TO	14	145	TO 151	7	7
854	8	TO	14	154	TO 160	7	7
855	8	TO	14	190	TO 196	7	7
856	8	TO	14	247	TO 253	7	7
857	9	TO	15	22	TO 28	7	7
858	9	TO	15	34	TO 40	7	7
859	9	TO	15	53	TO 59	7	7
860	9	TO	15	107	TO 113	7	7
861	9	TO	15	112	TO 118	7	7
862	13	TO	19	117	TO 123	7	7
863	13	TO	19	184	TO 190	7	7
864	13	TO	19	234	TO 240	7	7
865	14	TO	20	183	TO 189	7	7
866	14	TO	20	233	TO 239	7	7
867	15	TO	21	182	TO 188	7	7
868	17	TO	23	26	TO 32	7	7
869	17	TO	23	202	TO 208	7	7
870	18	TO	24	25	TO 31	7	7
871	18	TO	24	44	TO 50	7	7
872	18	TO	24	132	TO 138	7	7
873	18	TO	24	239	TO 245	7	7
874	19	TO	25	43	TO 49	7	7
875	19	TO	25	92	TO 98	7	7
876	19	TO	25	131	TO 137	7	7
877	19	TO	25	238	TO 244	7	7
878	20	TO	26	196	TO 202	7	7
879	20	TO	26	237	TO 243	7	7
880	20	TO	26	253	TO 259	7	7
881	42	TO	48	133	TO 139	7	7
882	42	TO	48	138	TO 144	7	7
883	42	TO	48	240	TO 246	7	7
884	50	TO	56	84	TO 90	7	7

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
885	50 TO	56	162 TO 168	7	7
886	50 TO	56	173 TO 179	7	7
887	50 TO	56	223 TO 229	7	7
888	63 TO	69	210 TO 216	7	7
889	119 TO	125	225 TO 231	7	7
890	119 TO	125	228 TO 234	7	7
891	119 TO	125	231 TO 237	7	7
892	137 TO	143	197 TO 203	7	7
893	137 TO	143	254 TO 260	7	7

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 8 NOTES IN LENGTH --
 TONAL RET. INVERSION
 WAS BEGUN AT 724 SECCNDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
894	1 TO	8	29 TO 36	7	8
895	1 TO	8	31 TO 38	7	8
896	1 TO	8	71 TO 78	7	8
897	1 TO	8	73 TO 80	7	8
898	1 TO	8	75 TO 82	7	8
899	1 TO	8	77 TO 84	7	8
900	1 TO	8	79 TO 86	7	8
901	1 TO	8	81 TO 88	7	8
902	1 TO	8	159 TO 166	7	8
903	2 TO	9	51 TO 58	7	8
904	4 TO	11	49 TO 56	7	8
905	4 TO	11	142 TO 149	7	8
906	4 TO	11	151 TO 158	7	8
907	4 TO	11	193 TO 200	7	8
908	4 TO	11	244 TO 251	7	8
909	4 TO	11	250 TO 257	7	8
910	5 TO	12	48 TO 55	7	8
911	5 TO	12	141 TO 148	7	8
912	5 TO	12	150 TO 157	7	8
913	5 TO	12	192 TO 199	7	8
914	5 TO	12	243 TO 250	7	8
915	5 TO	12	249 TO 256	7	8
916	6 TO	13	36 TO 43	7	8
917	6 TO	13	47 TO 54	7	8
918	6 TO	13	58 TO 65	7	8
919	6 TO	13	140 TO 147	7	8
920	6 TO	13	149 TO 156	7	8
921	6 TO	13	191 TO 198	7	8
922	6 TO	13	242 TO 249	7	8
923	6 TO	13	248 TO 255	7	8
924	7 TO	14	35 TO 42	7	8
925	7 TO	14	113 TO 120	7	8
926	7 TO	14	190 TO 197	7	8
927	7 TO	14	247 TO 254	7	8
928	8 TO	15	34 TO 41	7	8
929	8 TO	15	53 TO 60	7	8
930	8 TO	15	107 TO 114	7	8
931	8 TO	15	112 TO 119	7	8
932	9 TO	16	33 TO 40	7	8
933	9 TO	16	52 TO 59	7	8
934	13 TO	20	183 TO 190	7	8
935	13 TO	20	233 TO 240	7	8
936	14 TO	21	182 TO 189	7	8
937	17 TO	24	25 TO 32	7	8

PATTERN	NCTES	RELATED TC	NOTES	TEST	LENGTH
938	18 TO 25		43 TO 50	7	8
939	18 TO 25		131 TO 138	7	8
940	18 TO 25		238 TO 245	7	8
941	19 TO 26		237 TO 244	7	8
942	42 TO 49		132 TO 139	7	8
943	42 TO 49		239 TO 246	7	8
944	50 TO 57		83 TO 90	7	8
945	50 TO 57		161 TO 168	7	8
946	50 TO 57		172 TO 179	7	8
947	119 TO 126		224 TO 231	7	8
948	119 TO 126		227 TO 234	7	8
949	119 TO 126		230 TO 237	7	8
950	199 TO 206		255 TO 262	7	8

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 9 NOTES IN LENGTH --
 TONAL RET. INVERSION
 WAS BEGUN AT 745 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TC	NOTES	TEST	LENGTH
951	2 TO	10	50 TO	58	7 9
952	4 TO	12	48 TO	56	7 9
953	4 TO	12	141 TO	149	7 9
954	4 TO	12	150 TO	158	7 9
955	4 TO	12	192 TO	200	7 9
956	4 TO	12	243 TO	251	7 9
957	4 TO	12	249 TO	257	7 9
958	5 TO	13	47 TO	55	7 9
959	5 TO	13	140 TO	148	7 9
960	5 TO	13	149 TO	157	7 9
961	5 TO	13	191 TO	199	7 9
962	5 TO	13	242 TO	250	7 9
963	5 TO	13	248 TO	256	7 9
964	6 TO	14	35 TO	43	7 9
965	6 TO	14	190 TO	198	7 9
966	6 TO	14	247 TO	255	7 9
967	7 TO	15	34 TO	42	7 9
968	7 TO	15	112 TO	120	7 9
969	8 TO	16	33 TO	41	7 9
970	8 TO	16	52 TO	60	7 9
971	9 TO	17	51 TO	59	7 9
972	13 TO	21	182 TO	190	7 9
973	18 TO	26	237 TO	245	7 9
974	42 TO	50	131 TO	139	7 9
975	42 TO	50	238 TO	246	7 9
976	50 TO	58	82 TO	90	7 9
977	50 TO	58	160 TO	168	7 9
978	119 TO	127	226 TO	234	7 9
979	119 TO	127	229 TO	237	7 9
980	199 TO	207	254 TO	262	7 9

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 10 NOTES IN LENGTH --
 TONAL RET. INVERSION
 WAS BEGUN AT 764 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
981	2 TO 11		49 TO 58	7	10
982	4 TO 13		47 TO 56	7	10
983	4 TO 13		140 TO 149	7	10
984	4 TO 13		149 TO 158	7	10
985	4 TO 13		191 TO 200	7	10
986	4 TO 13		242 TO 251	7	10
987	4 TO 13		248 TO 257	7	10
988	5 TO 14		190 TO 199	7	10
989	5 TO 14		247 TO 256	7	10
990	6 TO 15		34 TO 43	7	10
991	7 TO 16		33 TO 42	7	10
992	8 TO 17		51 TO 60	7	10
993	42 TO 51		130 TO 139	7	10
994	199 TO 208		253 TO 262	7	10

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 11 NOTES IN LENGTH --
TONAL RET. INVERSION
WAS BEGUN AT 781 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
995	2 TO 12		48 TO 58	7	11
996	4 TO 14		190 TO 200	7	11
997	4 TO 14		247 TO 257	7	11
998	6 TO 16		33 TO 43	7	11
999	42 TO 52		129 TO 139	7	11

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 12 NOTES IN LENGTH --
TONAL RET. INVERSION
WAS BEGUN AT 797 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1000	2 TO 13		47 TO 58	7	12

440

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 13 NOTES IN LENGTH --
TONAL RET. INVERSION
WAS BEGUN AT 813 SECONDS INTO EXECUTION.

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
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END CF TYPE I LISTING. TOTAL OF 1000 PATTERNS LOCATED.

*** TYPE II LISTING ***

EDGARD VARESE DENSITY 21.5 FOR SOLO FLUTE
TCHAL RET. INVERSION

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	2 TO 13	2	12
SUBPATTERN	4 TO 13	7	10
SUBPATTERN	5 TO 13	7	9
SUBPATTERN	4 TO 12	7	9
SUBPATTERN	6 TO 13	9	8
SUBPATTERN	5 TO 12	7	8
SUBPATTERN	4 TO 11	7	8
SUBPATTERN	7 TO 13	10	7
SUBPATTERN	6 TO 12	9	7
SUBPATTERN	5 TO 11	7	7
SUBPATTERN	4 TO 10	11	7
SUBPATTERN	2 TO 8	12	7
SUBPATTERN	8 TO 13	16	6
SUBPATTERN	7 TO 12	10	6
SUBPATTERN	6 TO 11	9	6
SUBPATTERN	5 TO 10	15	6
SUBPATTERN	4 TO 9	13	6
SUBPATTERN	2 TO 7	21	6
SUBPATTERN	9 TO 13	25	5
SUBPATTERN	8 TO 12	18	5
SUBPATTERN	7 TO 11	10	5
SUBPATTERN	6 TO 10	17	5
SUBPATTERN	5 TO 9	20	5
SUBPATTERN	2 TO 6	35	5
SUBPATTERN	9 TO 12	27	4
SUBPATTERN	8 TO 11	27	4
SUBPATTERN	7 TO 10	22	4
SUBPATTERN	6 TO 9	22	4
SUBPATTERN	2 TO 5	55	4
SUBPATTERN	2 TO 4	82	3

**** TEST 7 COMPLETED AT 1000 SECONDS INTO EXECUTION ****

***** MUSIC MELODIC PATTERN ANALYSIS *****

EDGARD VARESE DENSITY 21.5 FOR SOLO FLUTE

TEST REQUESTED 8
UNITS OF DATA PER CARD 15

CCMPLTER REFERENCE NUMBER ASSIGNMENT

NOTES	1	THROUGH	15											
55	54	56	51	56	51	57	55	54	56	57	51	57	56	57

NOTES	16	THROUGH	30											
56	54	51	57	51	57	59	60	57	60	57	60	62	63	62

NOTES	31	THROUGH	45											
63	62	63	62	63	62	63	62	64	70	64	58	64	70	53

NOTES	46	THROUGH	60											
59	65	71	59	72	78	66	65	67	65	67	65	66	68	55

NOTES	61	THROUGH	75											
56	81	61	60	61	61	59	61	58	61	75	74	75	74	75

NOTES	76	THROUGH	90											
74	75	74	75	74	75	74	75	74	75	74	76	61	60	61

NOTES	91	THROUGH	105											
59	60	61	59	60	74	75	74	74	74	54	51	54	51	51

NOTES	106	THROUGH	120											
51	54	64	51	64	51	52	58	54	58	52	65	81	80	68

NOTES	121	THROUGH	135											
67	81	80	68	81	80	68	67	67	57	68	69	56	57	58

NOTES	136	THROUGH	150											
59	54	60	70	73	83	73	80	83	80	73	83	73	80	83

NOTES	151	THROUGH	165											
73	80	83	80	73	83	73	80	83	80	83	80	83	80	83

NOTES	166	THROUGH	180											
80	73	74	65	74	65	65	64	65	63	65	64	63	65	63

NOTES	181	THROUGH	195											
64	64	65	63	65	61	56	55	57	56	55	57	55	56	57

NOTES 196 THROUGH 210

56 55 57 52 58 59 66 72 75 90 85 88 85 88 88

NOTES 211 THROUGH 225

85 88 85 85 88 85 88 85 88 88 58 58 58 59 57

NOTES 226 THROUGH 240

74 68 67 74 68 67 74 68 67 74 54 52 51 54 51

NOTES 241 THROUGH 255

54 56 57 54 57 71 60 54 60 50 54 64 54 50 64

NOTES 256 THROUGH 265

50 54 60 64 68 75 77 79 85 -99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

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*** TYPE I LISTING ***

FDGARD VARESE

DENSITY 21.5 FOR SOLO FLUTE

SEARCH FOR PATTERNS OF 3 NOTES IN LENGTH --
 EXACT RET. INVERSION
 WAS BEGUN AT 27 SECCNDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO 3		175 TO 177	8	3
2	1 TO 3		188 TO 190	8	3
3	7 TO 9		15 TO 17	8	3
**** FOR	8 TO 10.	SEE	1 TO 3	ABOVE ****	
4	9 TO 11		57 TO 59	8	3
5	11 TO 13		18 TO 20	8	3
6	11 TO 13		39 TO 41	8	3
7	13 TO 15		28 TO 30	8	3
8	13 TO 15		30 TO 32	8	3
9	13 TO 15		32 TO 34	8	3
10	13 TO 15		34 TO 36	8	3
11	13 TO 15		36 TO 38	8	3
12	13 TO 15		72 TO 74	8	3
13	13 TO 15		74 TO 76	8	3
14	13 TO 15		76 TO 78	8	3
15	13 TO 15		78 TO 80	8	3
16	13 TO 15		80 TO 82	8	3
17	13 TO 15		82 TO 84	8	3
18	13 TO 15		84 TO 86	8	3
19	13 TO 15		96 TO 98	8	3
20	13 TO 15		194 TO 196	8	3
21	14 TO 16		29 TO 31	8	3
22	14 TO 16		31 TO 33	8	3
23	14 TO 16		33 TO 35	8	3
24	14 TO 16		35 TO 37	8	3
25	14 TO 16		63 TO 65	8	3
26	14 TO 16		71 TO 73	8	3
27	14 TO 16		73 TO 75	8	3
28	14 TO 16		75 TO 77	8	3
29	14 TO 16		77 TO 79	8	3
30	14 TO 16		79 TO 81	8	3
31	14 TO 16		81 TO 83	8	3
32	14 TO 16		83 TO 85	8	3
33	14 TO 16		88 TO 90	8	3
34	14 TO 16		172 TO 174	8	3
35	15 TO 17		236 TO 238	8	3
36	18 TO 20		41 TO 43	8	3
37	18 TO 20		247 TO 249	8	3
**** FOR	19 TO 21.	SEE	11 TO 13	ABOVE ****	
38	20 TO 22		38 TO 40	8	3
39	20 TO 22		262 TO 264	8	3
**** FOR	21 TO 23.	SEE	9 TO 11	ABOVE ****	

[illegible]

PATTERN	NOTES		RELATED TO	NOTES		TEST	LENGTH
40	23	TO	25	102	TO 104	8	3
41	23	TO	25	143	TO 145	8	3
42	23	TO	25	152	TO 154	8	3
43	23	TO	25	158	TO 160	8	3
44	23	TO	25	160	TO 162	8	3
45	23	TO	25	162	TO 164	8	3
46	23	TO	25	164	TO 166	8	3
47	23	TO	25	206	TO 208	8	3
48	23	TO	25	211	TO 213	8	3
49	23	TO	25	214	TO 216	8	3
50	23	TO	25	216	TO 218	8	3
51	23	TO	25	238	TO 240	8	3
52	24	TO	26	68	TO 70	8	3
53	24	TO	26	101	TO 103	8	3
54	24	TO	26	159	TO 161	8	3
55	24	TO	26	161	TO 163	8	3
56	24	TO	26	163	TO 165	8	3
57	24	TO	26	207	TO 209	8	3
58	24	TO	26	210	TO 212	8	3
59	24	TO	26	215	TO 217	8	3
60	24	TO	26	217	TO 219	8	3
61	24	TO	26	239	TO 241	8	3
62	24	TO	26	243	TO 245	8	3
**** FOR	25	TO	27.	SEE	23 TO 25	ABOVE ****	
**** FOR	27	TO	29.	SEE	9 TO 11	ABOVE ****	
**** FOR	28	TO	30.	SEE	14 TO 16	ABOVE ****	
**** FOR	29	TO	31.	SEE	13 TO 15	ABOVE ****	
**** FOR	30	TO	32.	SEE	14 TO 16	ABOVE ****	
**** FOR	31	TO	33.	SEE	13 TO 15	ABOVE ****	
**** FOR	32	TO	34.	SEE	14 TO 16	ABOVE ****	
**** FOR	33	TO	35.	SEE	13 TO 15	ABOVE ****	
**** FOR	34	TO	36.	SEE	14 TO 16	ABOVE ****	
**** FOR	35	TO	37.	SEE	13 TO 15	ABOVE ****	
**** FOR	36	TO	38.	SEE	14 TO 16	ABOVE ****	
**** FOR	37	TO	39.	SEE	1 TO 3	ABOVE ****	
**** FOR	39	TO	41.	SEE	18 TO 20	ABOVE ****	
**** FOR	41	TO	43.	SEE	11 TO 13	ABOVE ****	
63	42	TO	44		45 TO 47	8	3
64	42	TO	44		46 TO 48	8	3
**** FOR	45	TO	47.	SEE	42 TO 44	ABOVE ****	
**** FOR	46	TO	48.	SEE	42 TO 44	ABOVE ****	
65	51	TO	53		118 TO 120	8	3
66	51	TO	53		122 TO 124	8	3
67	51	TO	53		125 TO 127	8	3
**** FOR	52	TO	54.	SEE	1 TO 3	ABOVE ****	
68	53	TO	55		66 TO 68	8	3
69	53	TO	55		174 TO 176	8	3
70	53	TO	55		183 TO 185	8	3
71	54	TO	56		178 TO 180	8	3
72	54	TO	56		191 TO 193	8	3
**** FOR	55	TO	57.	SEE	53 TO 55	ABOVE ****	

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
73	56 TO	58	89 TO	91	8 3
74	56 TO	58	92 TO	94	8 3
75	56 TO	58	173 TO	175	8 3
76	56 TO	58	182 TO	184	8 3
77	56 TO	58	223 TO	225	8 3
78	57 TO	59	241 TO	243	8 3
79	59 TO	61	131 TO	133	8 3
**** FOR	63 TO	65.	SEE 13 TO	15 ABOVE	****
80	64 TO	66	181 TO	183	8 3
81	64 TO	66	222 TO	224	8 3
**** FCR	66 TO	68.	SEE 54 TO	56 ABOVE	****
**** FCR	68 TO	70.	SEE 23 TO	25 ABOVE	****
82	70 TO	72	120 TO	122	8 3
**** FOR	71 TO	73.	SEE 13 TO	15 ABOVE	****
**** FCR	72 TO	74.	SEE 14 TO	16 ABOVE	****
**** FOR	73 TO	75.	SEE 13 TO	15 ABOVE	****
**** FOR	74 TO	76.	SEE 14 TO	16 ABOVE	****
**** FOR	75 TO	77.	SEE 13 TO	15 ABOVE	****
**** FOR	76 TO	78.	SEE 14 TO	16 ABOVE	****
**** FOR	77 TO	79.	SEE 13 TO	15 ABOVE	****
**** FCR	78 TO	80.	SEE 14 TO	16 ABOVE	****
**** FOR	79 TO	81.	SEE 13 TO	15 ABOVE	****
**** FOR	80 TO	82.	SEE 14 TO	16 ABOVE	****
**** FOR	81 TO	83.	SEE 13 TO	15 ABOVE	****
**** FOR	82 TO	84.	SEE 14 TO	16 ABOVE	****
**** FOR	83 TO	85.	SEE 13 TO	15 ABOVE	****
**** FCR	84 TO	86.	SEE 14 TO	16 ABOVE	****
**** FOR	85 TO	87.	SEE 1 TO	3 ABOVE	****
**** FOR	88 TO	90.	SEE 13 TO	15 ABOVE	****
83	89 TO	91	93 TO	95	8 3
84	89 TO	91	179 TO	181	8 3
85	89 TO	91	192 TO	194	8 3
**** FOR	90 TO	92.	SEE 56 TO	58 ABOVE	****
86	91 TO	93	133 TO	135	8 3
87	91 TO	93	134 TO	136	8 3
88	91 TO	93	193 TO	195	8 3
**** FOR	92 TO	94.	SEE 89 TO	91 ABOVE	****
**** FCR	93 TO	95.	SEE 56 TO	58 ABOVE	****
**** FCR	96 TO	98.	SEE 14 TO	16 ABOVE	****
89	97 TO	99	171 TO	173	8 3
90	98 TO	100	104 TO	106	8 3
91	98 TO	100	221 TO	223	8 3
**** FCR	101 TO	103.	SEE 23 TO	25 ABOVE	****
**** FCR	102 TO	104.	SEE 24 TO	26 ABOVE	****
92	103 TO	105	209 TO	211	8 3
**** FOR	104 TO	106.	SEE 98 TO	100 ABOVE	****
93	105 TO	107	208 TO	210	8 3
94	105 TO	107	218 TO	220	8 3
95	106 TO	108	138 TO	140	8 3
**** FCR	110 TO	112.	SEE 59 TO	61 ABOVE	****
96	111 TO	113	199 TO	201	8 3

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
57	118 TO 120		126 TO 128	8	3
**** FCR	119 TO 121.	SEE	51 TO 53	ABOVE ****	
**** FCR	121 TO 123.	SEE	70 TO 72	ABOVE ****	
**** FOR	122 TO 124.	SEE	118 TO 120	ABOVE ****	
**** FOR	125 TO 127.	SEE	118 TO 120	ABOVE ****	
**** FOR	126 TO 128.	SEE	51 TO 53	ABOVE ****	
**** FOR	127 TO 129.	SEE	97 TO 99	ABOVE ****	
**** FCR	132 TO 134.	SEE	59 TO 61	ABOVE ****	
**** FOR	133 TO 135.	SEE	91 TO 93	ABOVE ****	
**** FOR	134 TO 136.	SEE	91 TO 93	ABOVE ****	
**** FOR	139 TO 141.	SEE	106 TO 108	ABOVE ****	
**** FOR	143 TO 145.	SEE	24 TO 26	ABOVE ****	
**** FOR	152 TO 154.	SEE	24 TO 26	ABOVE ****	
**** FOR	158 TO 160.	SEE	24 TO 26	ABOVE ****	
**** FCR	159 TO 161.	SEE	23 TO 25	ABOVE ****	
**** FCR	160 TO 162.	SEE	24 TO 26	ABOVE ****	
**** FOR	161 TO 163.	SEE	23 TO 25	ABOVE ****	
**** FOR	162 TO 164.	SEE	24 TO 26	ABOVE ****	
**** FOR	163 TO 165.	SEE	23 TO 25	ABOVE ****	
**** FCR	164 TO 166.	SEE	24 TO 26	ABOVE ****	
**** FCR	172 TO 174.	SEE	13 TO 15	ABOVE ****	
**** FCR	173 TO 175.	SEE	89 TO 91	ABOVE ****	
**** FOR	174 TO 176.	SEE	54 TO 56	ABOVE ****	
58	175 TO 177		177 TO 179	8	3
59	175 TO 177		187 TO 189	8	3
100	175 TO 177		190 TO 192	8	3
101	175 TO 177		196 TO 198	8	3
102	176 TO 178		189 TO 191	8	3
103	176 TO 178		195 TO 197	8	3
**** FOR	177 TO 179.	SEE	1 TO 3	ABOVE ****	
**** FOR	178 TO 180.	SEE	53 TO 55	ABOVE ****	
**** FCR	179 TO 181.	SEE	56 TO 58	ABOVE ****	
**** FOR	180 TO 182.	SEE	64 TO 66	ABOVE ****	
**** FOR	182 TO 184.	SEE	89 TO 91	ABOVE ****	
**** FOR	183 TO 185.	SEE	54 TO 56	ABOVE ****	
**** FOR	187 TO 189.	SEE	1 TO 3	ABOVE ****	
**** FOR	188 TO 190.	SEE	175 TO 177	ABOVE ****	
**** FCR	189 TO 191.	SEE	176 TO 178	ABOVE ****	
**** FOR	190 TO 192.	SEE	1 TO 3	ABOVE ****	
**** FOR	191 TO 193.	SEE	53 TO 55	ABOVE ****	
**** FCR	192 TO 194.	SEE	56 TO 58	ABOVE ****	
**** FOR	193 TO 195.	SEE	91 TO 93	ABOVE ****	
**** FOR	194 TO 196.	SEE	14 TO 16	ABOVE ****	
**** FCR	195 TO 197.	SEE	176 TO 178	ABOVE ****	
**** FOR	196 TO 198.	SEE	1 TO 3	ABOVE ****	
**** FOR	206 TO 208.	SEE	24 TO 26	ABOVE ****	
**** FOR	207 TO 209.	SEE	23 TO 25	ABOVE ****	
104	208 TO 210		213 TO 215	8	3
105	209 TO 211		212 TO 214	8	3
**** FOR	210 TO 212.	SEE	23 TO 25	ABOVE ****	
**** FOR	211 TO 213.	SEE	24 TO 26	ABOVE ****	

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PATTERN	NOTES	RELATED TO	NOTES	TEST LENGTH
**** FOR 212 TO 214.	SEE 103 TO 105 ABOVE	****		
**** FOR 213 TO 215.	SEE 105 TO 107 ABOVE	****		
**** FOR 214 TO 216.	SEE 24 TO 26 ABOVE	****		
**** FOR 215 TO 217.	SEE 23 TO 25 ABOVE	****		
**** FOR 216 TO 218.	SEE 24 TO 26 ABOVE	****		
**** FOR 217 TO 219.	SEE 23 TO 25 ABOVE	****		
**** FOR 218 TO 220.	SEE 208 TO 210 ABOVE	****		
**** FOR 221 TO 223.	SEE 98 TO 100 ABOVE	****		
**** FOR 223 TO 225.	SEE 89 TO 91 ABOVE	****		
**** FOR 236 TO 238.	SEE 7 TO 9 ABOVE	****		
**** FOR 238 TO 240.	SEE 24 TO 26 ABOVE	****		
**** FOR 239 TO 241.	SEE 23 TO 25 ABOVE	****		
**** FOR 241 TO 243.	SEE 9 TO 11 ABOVE	****		
**** FOR 243 TO 245.	SEE 23 TO 25 ABOVE	****		
**** FOR 247 TO 249.	SEE 11 TO 13 ABOVE	****		

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 4 NOTES IN LENGTH --
 EXACT RET. INVERSION
 WAS BEGUN AT 205 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
106	13 TO 16		29 TO 32	8	4
107	13 TO 16		31 TO 34	8	4
108	13 TO 16		33 TO 36	8	4
109	13 TO 16		35 TO 38	8	4
110	13 TO 16		71 TO 74	8	4
111	13 TO 16		73 TO 76	8	4
112	13 TO 16		75 TO 78	8	4
113	13 TO 16		77 TO 80	8	4
114	13 TO 16		79 TO 82	8	4
115	13 TO 16		81 TO 84	8	4
116	13 TO 16		83 TO 86	8	4
117	19 TO 22		38 TO 41	8	4
118	23 TO 26		101 TO 104	8	4
119	23 TO 26		159 TO 162	8	4
120	23 TO 26		161 TO 164	8	4
121	23 TO 26		163 TO 166	8	4
122	23 TO 26		210 TO 213	8	4
123	23 TO 26		215 TO 218	8	4
124	24 TO 27		158 TO 161	8	4
125	24 TO 27		160 TO 163	8	4
126	24 TO 27		162 TO 165	8	4
127	24 TO 27		206 TO 209	8	4
128	24 TO 27		214 TO 217	8	4
129	24 TO 27		216 TO 219	8	4
130	24 TO 27		238 TO 241	8	4
131	28 TO 31		32 TO 35	8	4
132	28 TO 31		34 TO 37	8	4
133	28 TO 31		72 TO 75	8	4
134	28 TO 31		74 TO 77	8	4
135	28 TO 31		76 TO 79	8	4
136	28 TO 31		78 TO 81	8	4
137	28 TO 31		80 TO 83	8	4
138	28 TO 31		82 TO 85	8	4
**** FOR	29 TO 32.	SEE	13 TO 16 ABOVE	****	
**** FOR	30 TO 33.	SEE	28 TO 31 ABOVE	****	
**** FOR	31 TO 34.	SEE	13 TO 16 ABOVE	****	
**** FOR	32 TO 35.	SEE	28 TO 31 ABOVE	****	
**** FOR	33 TO 36.	SEE	13 TO 16 ABOVE	****	
**** FOR	34 TO 37.	SEE	28 TO 31 ABOVE	****	
**** FOR	35 TO 38.	SEE	13 TO 16 ABOVE	****	
139	52 TO 55		174 TO 177	8	4
140	55 TO 58		173 TO 176	8	4
141	55 TO 58		182 TO 185	8	4
**** FOR	71 TO 74.	SEE	13 TO 16 ABOVE	****	

PATTERN	NCOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	72 TO 75,	SEE	28 TO 31 ABOVE	****	
**** FOR	73 TO 76,	SEE	13 TO 16 ABOVE	****	
**** FCR	74 TO 77,	SEE	28 TO 31 ABOVE	****	
**** FCR	75 TO 78,	SEE	13 TO 16 ABOVE	****	
**** FOR	76 TO 79,	SEE	28 TO 31 ABOVE	****	
**** FCR	77 TO 80,	SEE	13 TO 16 ABOVE	****	
**** FOR	78 TO 81,	SEE	28 TO 31 ABOVE	****	
**** FOR	79 TO 82,	SEE	13 TO 16 ABOVE	****	
**** FOR	80 TO 83,	SEE	28 TO 31 ABOVE	****	
**** FOR	81 TO 84,	SEE	13 TO 16 ABOVE	****	
**** FCR	82 TO 85,	SEE	28 TO 31 ABOVE	****	
**** FOR	83 TO 86,	SEE	13 TO 16 ABOVE	****	
142	89 TO 92		92 TO 95	8	4
143	91 TO 94		192 TO 195	8	4
**** FCR	92 TO 95,	SEE	89 TO 92 ABOVE	****	
144	96 TO 99		171 TO 174	8	4
**** FOR	101 TO 104,	SEE	23 TO 26 ABOVE	****	
145	102 TO 105		209 TO 212	8	4
146	118 TO 121		125 TO 128	8	4
**** FOR	125 TO 128,	SEE	118 TO 121 ABOVE	****	
**** FOR	158 TO 161,	SEE	24 TO 27 ABOVE	****	
**** FCR	159 TO 162,	SEE	23 TO 26 ABOVE	****	
**** FOR	160 TO 163,	SEE	24 TO 27 ABOVE	****	
**** FCR	161 TO 164,	SEE	23 TO 26 ABOVE	****	
**** FOR	162 TO 165,	SEE	24 TO 27 ABOVE	****	
**** FOR	163 TO 166,	SEE	23 TO 26 ABOVE	****	
147	173 TO 176		178 TO 181	8	4
148	173 TO 176		191 TO 194	8	4
149	174 TO 177		177 TO 180	8	4
150	174 TO 177		190 TO 193	8	4
151	175 TO 178		189 TO 192	8	4
152	175 TO 178		195 TO 198	8	4
153	176 TO 179		188 TO 191	8	4
**** FOR	177 TO 180,	SEE	52 TO 55 ABOVE	****	
**** FOR	178 TO 181,	SEE	55 TO 58 ABOVE	****	
154	179 TO 182		222 TO 225	8	4
**** FOR	182 TO 185,	SEE	173 TO 176 ABOVE	****	
**** FOR	188 TO 191,	SEE	175 TO 178 ABOVE	****	
**** FCR	189 TO 192,	SEE	176 TO 179 ABOVE	****	
**** FOR	190 TO 193,	SEE	52 TO 55 ABOVE	****	
**** FOR	191 TO 194,	SEE	55 TO 58 ABOVE	****	
**** FOR	195 TO 198,	SEE	176 TO 179 ABOVE	****	
**** FCR	206 TO 209,	SEE	24 TO 27 ABOVE	****	
155	207 TO 210		213 TO 216	8	4
156	208 TO 211		212 TO 215	8	4
**** FOR	210 TO 213,	SEE	23 TO 26 ABOVE	****	
**** FOR	211 TO 214,	SEE	102 TO 105 ABOVE	****	
157	213 TO 216		217 TO 220	8	4
**** FCR	214 TO 217,	SEE	24 TO 27 ABOVE	****	
**** FCR	215 TO 218,	SEE	23 TO 26 ABOVE	****	
**** FCR	216 TO 219,	SEE	24 TO 27 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	217 TO 220.	SEE	207 TO 210 ABOVE	****	
**** FOR	238 TO 241.	SEE	24 TO 27 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 5 NOTES IN LENGTH --
 EXACT RET. INVERSION
 WAS BEGUN AT 275 SECCNDS INTO EXECUTION.

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
158	101 TO 105		209 TO 213	8	5
159	173 TO 177		177 TO 181	8	5
160	173 TO 177		190 TO 194	8	5
**** FOR	173 TO 177.	SEE	173 TO 177 ABOVE	****	
161	174 TO 178		189 TO 193	8	5
**** FOR	174 TO 178.	SEE	174 TO 178 ABOVE	****	
162	175 TO 179		188 TO 192	8	5
**** FOR	188 TO 192.	SEE	175 TO 179 ABOVE	****	
163	206 TO 210		213 TO 217	8	5
164	207 TO 211		212 TO 216	8	5
**** FOR	207 TO 211.	SEE	207 TO 211 ABOVE	****	
**** FOR	210 TO 214.	SEE	101 TO 105 ABOVE	****	
**** FOR	216 TO 220.	SEE	206 TO 210 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 6 NOTES IN LENGTH --
 EXACT RET. INVERSION
 WAS BEGUN AT 341 SECCNDS INTO EXECUTION.

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
165	173 TO 178		189 TO 194	8	6
166	174 TO 179		188 TO 193	8	6
167	206 TO 211		212 TO 217	8	6
**** FOR	206 TO 211,	SEE	206 TO 211 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 7 NOTES IN LENGTH --
EXACT RET. INVERSION
WAS BEGUN AT 401 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
168	173 TO 179		188 TO 194	8	7

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 8 NOTES IN LENGTH --
EXACT RET. INVERSION
WAS BEGUN AT 417 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST LENGTH
---------	-------	------------	-------	-------------

END OF TYPE I LISTING. TOTAL OF 168 PATTERNS LOCATED.

*** TYPE II LISTING ***

EDGARD VARESE DENSITY 21.5 FOR SOLO FLUTE
EXACT RET. INVERSION

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	173 TO 179	2	7
SLBPATTERN	175 TO 177	5	3

**** TEST 8 COMPLETED AT 522 SECONDS INTO EXECUTION ****

For Tests 5 and 13 of the Dunstable motet, the three voices were submitted in the following order: tenor, alto, and soprano. For Test 12, the three voices were submitted in the following order: soprano, alto, and tenor. (The number 99999 was inserted in the input data deck to separate each successive voice entry.)

The computer program assigned a reference number to each sixteenth-duration contained in each measure. (Twelve numbers were assigned to each $\frac{3}{4}$ measure; eight numbers were assigned to each $\frac{2}{4}$ measure.) The numbers shown in the scores refer to the location of the first sixteenth-duration of the measure for each voice part. The numbers assigned to notes found later in the measure are not shown, but may be calculated by adding the appropriate number of sixteenth-durations to the number shown at the beginning of the measure for each individual part.

The following score shows the computer-assigned reference numbers used for Tests 5 and 13 of the Dunstable motet.

Veni Sancte Spiritus

Dunstable

1847 1859 1871 1883 1895 1907

5 #

Va - ni San - cte Spi - ri - tus et

870 881 894 906 918 930

Con - se - la - tor o -

1919 1931 1943 1955 1967 1979

10

e - mit - te ce - li - tua lu - cis tu -

942 954 966 978 990 1002

- - - - -

pti - me, dul -

San -

1991 2003 2015 2027

15 #

- e ra - di - um.

1014 1026 1038 1050 1062

cis ho - pes a ni -

37 49 73

eli Spi - ri

2051 2063 2075 2087 2099 2111

20

Ve - ni pa - ter pa - perum, ve - ni da - tor mu - na -

1074 1086 1098 1110 1122 1134

- me, dul - ci re - fri - ge - ri -

109 121 133 145 157

tus as - sit no - bis

2123 2135 2147 2159 2171 2183

25

rum, ve - ni lu - men cor - di -

1146 1158 1170 1182 1194 1206

um. In la - bo - re qui -

169 217

gra - ti -

2195 2219 2231 2243 2255 2267

30 35

um. La - va quod est sar - di -

1218 1242 1254 1266 1278 1290

es, in a - dus tem - po -

291

a.

2179 2291 2303 2315 2327 2339

40

- dum, ri gi quod est a - ri dum, sa - na quod

1302 1314 1326 1338 1350 1362

- ri - es, re fle - tu - so - la - ti - um. O

373

141

2351 2363 2375 2387 2399 2411 2423

45

est sau - ci um. Fle - cle quod est

1374 1386 1398 1410 1422 1434 1446

be - a tis si - ma, re - ple cor

409 421 445

2435 2447 2459 2471 2483

50

ri - gi dum, fo ve quod est

1458 1470 1482 1494 1506

dis in ti - ma tu

481 493 505 517 529

1495 2507 2519 2531 2543

55

fri - gi - dum, re - ge quod est de -

1518 1530 1592 1554 589

2555 2567 2591 2599 2607 2615

60 65

vi - um, Da tu - is fi - de - li - bus, in te

1578 1590 1614 1622 1630 1638

2625 2631 2639 2647 2655 2663

70

com - fi - den - ti - bus, sa - crum de - po - ni - mi

1646 1654 1662 1670 1678 1686

2679 2687 2695 2703 2711

75

1694 Da vir tu tis me vi
1702 1710 1718 1726 1734

hil est in lu - mi

733

2719 2727 2735 2743 2751 2759 2767

80 85

tum, da sa lu-tis ex - i
1742 1750 1758 1766 1774 1782 1790

me, ni - hil est in lu - mi

765 773 781 789 797 805

2775 2783 2791 2799 2807

90

tum, da per-en - me gau - di um,
1798 1806 1814 1822 1830

in - me - xi um.

824 832 853

TEST REQUESTED 5
UNITS OF DATA PER CARD 12

NOTES 45	1 0	THROUGH 0	12 0	0	0	0	0	0	0	0
NOTES 0	13 0	THROUGH 0	24 0	0	0	0	0	0	0	0
NOTES -1	25 0	THROUGH 0	36 0	0	0	0	0	0	0	0
NOTES 45	37 0	THROUGH 0	48 0	0	0	0	0	0	0	0
NOTES 47	49 0	THROUGH 0	60 0	0	0	0	0	0	0	0
NOTES 0	61 0	THROUGH 0	72 0	0	0	0	0	0	0	0
NOTES 45	73 0	THROUGH 0	84 0	0	0	0	0	0	0	0
NOTES 0	85 0	THROUGH 0	96 0	0	0	0	0	0	0	0
NOTES -1	97 0	THROUGH 0	108 0	0	0	0	0	0	0	0
NOTES 50	109 0	THROUGH 0	120 0	0	0	0	0	0	0	0
NOTES 49	121 0	THROUGH 0	132 0	0	0	0	0	0	0	0
NOTES 50	133 0	THROUGH 0	144 0	0	0	0	0	0	0	0
NOTES 47	145 0	THROUGH 0	156 0	0	0	0	0	0	0	0

NOTES	157	THROUGH	168								
45	0	0	0	0	0	0	J	0	0	0	0
NOTES	169	THROUGH	180								
43	0	0	0	0	0	0	J	0	0	0	0
NOTES	181	THROUGH	192								
-1	0	0	0	0	0	0	J	0	0	0	0
NOTES	193	THROUGH	204								
0	0	0	0	0	0	0	J	0	0	0	0
NOTES	205	THROUGH	216								
0	0	0	0	0	0	0	J	0	0	0	0
NOTES	217	THROUGH	228								
45	0	0	0	0	0	0	J	0	0	0	0
NOTES	229	THROUGH	240								
-1	0	0	0	0	0	0	J	0	0	0	0
NOTES	241	THROUGH	252								
45	0	0	0	0	0	0	J	0	0	0	0
NOTES	253	THROUGH	264								
0	0	0	0	0	0	0	J	0	0	0	0
NOTES	265	THROUGH	276								
-1	0	0	0	0	0	0	J	0	0	0	0
NOTES	277	THROUGH	288								
0	0	0	0	0	0	0	J	0	0	0	0
NOTES	289	THROUGH	300								
0	0	0	0	0	0	0	J	0	0	0	0
NOTES	301	THROUGH	312								
0	0	0	0	0	0	0	J	0	0	0	0
NOTES	313	THROUGH	324								
0	0	0	0	0	0	0	J	0	0	0	0
NOTES	325	THROUGH	336								
0	0	0	0	0	0	0	J	0	0	0	0
NOTES	337	THROUGH	348								
0	0	0	0	0	0	0	J	0	0	0	0
NOTES	349	THROUGH	360								
0	0	0	0	0	0	0	J	0	0	0	0
NOTES	361	THROUGH	372								
0	0	0	0	0	0	0	J	0	0	0	0

NOTES 45	373 C	THROUGH 0	384 0	0	0	0	0	0	0	0
NOTES 0	385 0	THROUGH 0	396 0	0	0	0	0	0	0	0
NCTES -1	397 0	THROUGH 0	408 0	0	0	0	0	0	0	0
NOTES 45	409 0	THROUGH 0	420 0	0	0	0	0	0	0	0
NCTES 43	421 C	THROUGH 0	432 0	0	0	0	0	0	0	0
NOTES 0	433 0	THROUGH 0	444 0	0	0	0	0	0	0	0
NCTES 45	445 C	THROUGH 0	456 0	0	0	0	0	0	0	0
NOTES 0	457 0	THROUGH 0	468 0	0	0	0	0	0	0	0
NCTES -1	469 0	THROUGH 0	480 0	0	0	0	0	0	0	0
NOTES 40	481 0	THROUGH 0	492 0	0	0	0	0	0	0	0
NOTES 42	493 0	THROUGH 0	504 0	0	0	0	0	0	0	0
NCTES 40	505 0	THROUGH 0	516 0	0	0	0	0	0	0	0
NOTES 43	517 C	THROUGH 0	528 0	0	0	0	0	0	0	0
NOTES 45	529 0	THROUGH 0	540 0	0	0	0	0	0	0	0
NCTES 47	541 C	THROUGH 0	552 0	0	0	0	0	0	0	0
NCTES -1	553 0	THROUGH 0	564 0	0	0	0	0	0	0	0
NOTES 0	565 C	THROUGH 0	576 0	0	0	0	0	0	0	0
NOTES 0	577 0	THROUGH 0	588 0	0	0	0	0	0	0	0

589 THROUGH 600
 0 0 0 0 0 0 0 0 0 0

601 THROUGH 612
 0 0 0 0 0 0 0 0 0 0

613 THROUGH 624
 0 0 0 0 0 0 0 0 0 0

625 THROUGH 636
 0 0 0 0 0 0 0 0 0 0

UNITS OF DATA PER CARD CHANGED TO 8

637 THROUGH 644
 0 0 0 0 0 0 0

645 THROUGH 652
 0 0 0 0 0 0 0

653 THROUGH 660
 0 0 0 0 0 0 0

661 THROUGH 668
 0 0 0 0 0 0 0

669 THROUGH 676
 0 0 0 0 0 0 0

677 THROUGH 684
 0 0 0 0 0 0 0

685 THROUGH 692
 0 0 0 0 0 0 0

693 THROUGH 700
 0 0 0 0 0 0 0

701 THROUGH 708
 0 0 0 0 0 0 0

709 THROUGH 716
 0 0 0 0 0 0 0

717 THROUGH 724
 0 0 0 0 0 0 0

725 THROUGH 732
 0 0 0 0 0 0 0

733 THROUGH 740
 0 0 0 0 0 0 0

741 THROUGH 748
0 0 0 0 0 0 J

749 THROUGH 756
0 0 0 0 0 0 0

757 THROUGH 764
0 0 0 0 0 0 0

765 THROUGH 772
0 0 0 0 0 0 0

773 THROUGH 780
0 0 0 0 0 0 0

781 THROUGH 788
0 0 0 0 0 0 0

789 THROUGH 796
0 0 0 0 0 0 0

797 THROUGH 804
0 0 0 0 0 0 0

805 THROUGH 812
0 0 0 0 0 0 0

813 THROUGH 820
0 0 0 0 0 0 0

821 THROUGH 828
0 0 0 0 0 0 0

829 THROUGH 836
0 0 0 0 0 0 0

837 THROUGH 844
0 0 0 0 0 0 0

845 THROUGH 852
0 0 0 0 0 0 0

853 THROUGH 860
0 0 0 0 0 0 0

861 THROUGH 868
0 0 0 0 0 0 0

869 UNITS OF DATA PER CARD CHANGED TO 1
99999

UNITS OF DATA PER CARD CHANGED TO 12

870 THROUGH 881	0	0	0	0	0	0	J	0	0	0	0
882 THROUGH 893	0	0	0	0	0	0	J	0	0	0	0
894 THROUGH 905	0	0	0	45	0	0	J	48	0	0	0
906 THROUGH 917	0	0	0	50	0	0	J	48	0	0	0
918 THROUGH 929	0	0	0	47	0	0	J	0	0	0	0
930 THROUGH 941	0	0	0	38	0	0	J	0	0	0	0
942 THROUGH 953	0	0	0	40	0	45	J	0	0	42	0
954 THROUGH 965	0	42	0	43	0	0	J	38	0	0	0
966 THROUGH 977	0	0	0	40	0	0	J	0	0	0	0
978 THROUGH 989	0	0	0	0	0	0	J	0	0	0	0
990 THROUGH 1001	0	0	0	0	0	0	J	0	0	0	0
1002 THROUGH 1013	0	0	0	0	0	0	J	0	0	0	0
1014 THROUGH 1025	0	0	0	0	0	0	J	42	0	0	0
1026 THROUGH 1037	0	0	0	0	0	0	J	43	0	0	0
1038 THROUGH 1049	0	0	0	40	0	0	J	0	0	0	0
1050 THROUGH 1061	0	0	0	0	0	0	J	0	0	0	0
1062 THROUGH 1073	0	0	0	0	0	0	J	48	0	0	0

ES 1074 THROUGH 1085											
7	0	0	0	0	0	0	J	48	0	0	0
ES 1086 THROUGH 1097											
3	0	0	0	0	0	0	0	38	0	0	0
ES 1098 THROUGH 1109											
1	0	0	0	42	0	43	J	45	0	0	0
ES 1110 THROUGH 1121											
8	0	0	0	0	0	0	J	43	0	0	0
ES 1122 THROUGH 1133											
0	0	0	0	40	0	0	J	43	0	0	0
ES 1134 THROUGH 1145											
8	0	0	0	-1	0	50	0	49	0	0	0
ES 1146 THROUGH 1157											
0	0	0	0	0	0	0	J	0	0	0	0
ES 1158 THROUGH 1169											
5	0	0	0	0	0	0	J	45	0	0	0
ES 1170 THROUGH 1181											
7	0	0	0	0	0	0	J	47	0	0	0
ES 1182 THROUGH 1193											
7	0	0	0	0	0	0	0	45	0	0	0
ES 1194 THROUGH 1205											
1	0	0	0	45	0	0	J	38	0	0	0
ES 1206 THROUGH 1217											
2	0	0	0	40	0	0	0	0	0	0	0
ES 1218 THROUGH 1229											
8	0	0	0	0	0	0	0	0	0	0	0
ES 1230 THROUGH 1241											
0	0	0	0	0	0	0	0	0	0	0	0
ES 1242 THROUGH 1253											
0	0	0	0	0	0	0	0	0	0	0	0
ES 1254 THROUGH 1265											
0	0	0	0	0	0	0	J	0	0	0	0
ES 1266 THROUGH 1277											
7	0	0	0	48	0	0	0	43	0	0	0
ES 1278 THROUGH 1289											
0	0	0	0	45	0	0	J	47	0	0	0

1290 THROUGH 1301

0 0 0 45 0 0 0 0 0 0 0

1302 THROUGH 1313

0 0 0 43 0 0 0 0 0 0 0

1314 THROUGH 1325

0 0 0 42 0 40 0 0 45 0 0

1326 THROUGH 1337

0 48 0 50 0 0 0 45 0 0 0

1338 THROUGH 1349

0 0 0 47 0 0 0 0 0 0 0

1350 THROUGH 1361

0 0 0 52 0 0 0 0 0 0 0

1362 THROUGH 1373

0 0 0 0 0 0 0 52 0 0 0

1374 THROUGH 1385

0 0 0 48 0 0 0 47 0 0 0

1386 THROUGH 1397

0 52 0 0 0 50 0 49 0 0 0

1398 THROUGH 1409

0 0 0 0 0 0 0 0 0 0 0

1410 THROUGH 1421

0 0 0 0 0 0 0 0 0 0 0

1422 THROUGH 1433

0 0 0 0 0 0 0 52 0 0 0

1434 THROUGH 1445

0 0 0 48 0 0 0 0 0 0 0

1446 THROUGH 1457

0 0 0 0 0 0 0 45 0 0 0

1458 THROUGH 1469

0 0 0 -1 0 0 0 47 0 0 0

1470 THROUGH 1481

0 50 0 49 0 47 0 0 0 45 0

1482 THROUGH 1493

0 0 0 52 0 0 0 0 0 0 0

1494 THROUGH 1505

0 0 0 47 0 0 0 -1 0 0 0

S	1506	THROUGH	1517								
	0	0	0	42	0	0	0	0	0	0	0
S	1518	THROUGH	1529								
	0	0	0	0	0	0	0	43	0	0	0
S	1530	THROUGH	1541								
	0	0	0	43	0	0	0	0	0	0	0
S	1542	THROUGH	1553								
	0	0	0	42	0	0	0	0	0	0	0
S	1554	THROUGH	1565								
	0	0	0	0	0	0	0	0	0	0	0
S	1566	THROUGH	1577								
	0	0	0	0	0	0	0	0	0	0	0
S	1578	THROUGH	1589								
	0	43	0	42	0	0	0	40	0	0	0
S	1590	THROUGH	1601								
	0	0	0	0	0	0	0	0	0	0	0
S	1602	THROUGH	1613								
	0	0	0	0	0	0	0	0	0	0	0

UNITS OF DATA PER CARD CHANGED TO 8

S	1614	THROUGH	1621								
	0	0	0	0	0	0	0	0	0	0	0
S	1622	THROUGH	1629								
	0	0	0	0	52	0	0	0	0	0	0
S	1630	THROUGH	1637								
	0	0	0	0	0	0	0	0	0	0	0
S	1638	THROUGH	1645								
	0	52	0	0	0	50	0	0	0	0	0
S	1646	THROUGH	1653								
	0	48	0	50	0	0	0	0	0	0	0
S	1654	THROUGH	1661								
	0	0	0	0	-1	0	0	0	0	0	0
S	1662	THROUGH	1669								
	0	0	0	0	43	0	0	0	0	0	0
S	1670	THROUGH	1677								
	0	0	0	0	45	0	0	0	0	0	0

TES 1678 THROUGH 1685							
0	0	0	0	40	0	0	0
TES 1686 THROUGH 1693							
38	0	0	0	45	0	0	0
TES 1694 THROUGH 1701							
0	0	0	0	50	0	0	0
TES 1702 THROUGH 1709							
0	0	0	0	48	0	47	0
TES 1710 THROUGH 1717							
45	0	0	0	0	0	0	0
TES 1718 THROUGH 1725							
43	0	0	0	45	0	0	0
TES 1726 THROUGH 1733							
40	0	42	0	0	0	43	0
TES 1734 THROUGH 1741							
45	0	0	0	42	0	0	0
TES 1742 THROUGH 1749							
40	0	0	0	0	0	0	0
TES 1750 THROUGH 1757							
41	0	45	0	50	0	48	0
TES 1758 THROUGH 1765							
47	0	0	0	48	0	0	0
TES 1766 THROUGH 1773							
41	0	47	0	47	0	45	0
TES 1774 THROUGH 1781							
49	0	0	0	54	0	0	0
TES 1782 THROUGH 1789							
42	0	50	0	0	0	48	0
TES 1790 THROUGH 1797							
47	0	0	0	0	0	0	0
TES 1798 THROUGH 1805							
45	0	0	0	0	0	0	0
TES 1806 THROUGH 1813							
0	0	0	0	42	0	0	0
TES 1814 THROUGH 1821							
4	0	0	0	45	44	45	0

ES 1822 THROUGH 1829
 7 0 44 0 0 42 44 0

ES 1830 THROUGH 1837
 5 0 0 0 0 0 0 0

ES 1838 THROUGH 1845
 C 0 0 0 0 0 0 0

E 1846 UNITS OF DATA PER CARD CHANGED TO 1
 99999

UNITS OF DATA PER CARD CHANGED TO 12

ES 1847 THROUGH 1858
 0 0 0 0 0 0 0 0 54 0 0 0

ES 1859 THROUGH 1870
 0 0 0 0 57 0 0 0 59 0 0 0

ES 1871 THROUGH 1882
 0 0 0 0 57 0 0 0 0 0 55 0

ES 1883 THROUGH 1894
 2 0 55 0 54 0 0 0 52 0 0 0

ES 1895 THROUGH 1906
 7 0 0 0 0 0 57 0 56 0 54 0

ES 1907 THROUGH 1918
 7 0 0 0 -1 0 0 0 54 0 0 0

ES 1919 THROUGH 1930
 0 0 55 0 0 0 54 0 52 0 50 0

ES 1931 THROUGH 1942
 9 0 50 0 52 0 0 0 54 0 0 0

ES 1943 THROUGH 1954
 0 0 0 0 0 0 50 0 49 0 47 0

ES 1955 THROUGH 1966
 0 0 0 0 -1 0 0 0 0 0 0 0

ES 1967 THROUGH 1978
 4 0 0 0 0 0 52 0 50 0 0 0

ES 1979 THROUGH 1990
 2 0 0 0 0 0 0 0 54 0 0 0

[illegible]

S	2207	THROUGH	2218								
	0	0	0	0	0	0	0	0	0	0	0
S	2219	THROUGH	2230								
	0	0	0	0	0	0	J	57	0	0	0
S	2231	THROUGH	2242								
	0	0	0	57	0	55	J	54	0	0	0
S	2243	THROUGH	2254								
	0	0	0	52	0	0	J	0	0	50	0
S	2255	THROUGH	2266								
	0	50	0	49	0	0	J	50	0	0	0
S	2267	THROUGH	2278								
	0	0	0	0	0	55	J	54	0	52	0
S	2279	THROUGH	2290								
	0	0	0	-1	0	0	J	59	0	0	0
S	2291	THROUGH	2302								
	0	54	0	0	0	55	J	52	0	54	0
S	2303	THROUGH	2314								
	0	57	0	59	0	0	J	60	0	0	0
S	2315	THROUGH	2326								
	0	0	0	0	0	57	J	56	0	54	0
S	2327	THROUGH	2338								
	0	0	0	-1	0	0	0	0	0	0	0
S	2339	THROUGH	2350								
	0	0	0	57	0	52	J	57	0	55	0
S	2351	THROUGH	2362								
	0	0	0	52	0	0	J	54	0	50	0
S	2363	THROUGH	2374								
	0	55	0	57	0	0	J	0	0	55	0
S	2375	THROUGH	2386								
	0	0	0	0	0	0	J	0	0	0	0
S	2387	THROUGH	2398								
	0	0	0	55	0	0	J	0	0	0	0
S	2399	THROUGH	2410								
	0	0	0	57	0	0	J	0	0	55	0
S	2411	THROUGH	2422								
	0	0	0	52	0	0	J	54	0	0	0

2423	THROUGH	2434									
0	0	0	0	0	54	0	54	0	0	52	
2435	THROUGH	2446									
0	0	0	50	0	47	0	0	52	0		
2447	THROUGH	2458									
52	54	0	0	52	52	0	51	0	52	49	
2459	THROUGH	2470									
0	0	0	-1	0	0	0	59	0	0	0	
2471	THROUGH	2482									
0	0	0	59	0	57	0	55	0	0	0	
2483	THROUGH	2494									
0	0	0	54	0	57	0	0	0	54	0	
2495	THROUGH	2506									
0	57	0	59	0	0	0	55	0	0	0	
2507	THROUGH	2518									
0	52	0	0	0	55	0	54	55	52	0	
2519	THROUGH	2530									
0	0	0	-1	0	0	0	50	0	0	0	
2531	THROUGH	2542									
0	49	0	47	0	52	0	0	0	50	0	
2543	THROUGH	2554									
0	0	0	52	0	54	0	0	0	55	0	
2555	THROUGH	2566									
0	52	0	57	0	57	0	56	0	57	54	
2567	THROUGH	2578									
0	0	0	0	0	0	0	0	0	0	0	
2579	THROUGH	2590									
0	0	0	0	0	0	0	0	0	0	0	

UNITS OF DATA PER CARD CHANGED TO 8

2591	THROUGH	2598									
0	0	0	0	0	0	0	0				
2599	THROUGH	2606									
0	0	0	52	0	0	0					
2607	THROUGH	2614									
0	0	0	57	0	57	0					

ES 2615 THROUGH 2622
 5 0 0 0 59 0 59 0

ES 2623 THROUGH 2630
 0 0 57 0 57 0 54 0

ES 2631 THROUGH 2638
 5 0 57 0 54 0 0 0

ES 2639 THROUGH 2646
 0 0 0 0 -1 0 55 0

S 2647 THROUGH 2654
 0 0 0 54 0 52 0

S 2655 THROUGH 2662
 0 50 0 49 0 50 47

S 2663 THROUGH 2670
 0 0 0 0 0 0 0

S 2671 THROUGH 2678
 0 0 0 0 0 0 0

2679 THROUGH 2686
 C 0 0 52 C 0 0

2687 THROUGH 2694
 0 0 0 0 0 50 0

2695 THROUGH 2702
 0 57 0 54 0 52 0

2703 THROUGH 2710
 0 50 0 49 0 47 0

2711 THROUGH 2718
 C 0 0 50 0 0 0

2719 THROUGH 2726
 C C 0 0 0 0 0

2727 THROUGH 2734
 0 50 0 0 0 54 0

2735 THROUGH 2742
 0 0 0 52 0 0 0

2743 THROUGH 2750
 C 0 -1 C 0 0

2751 THROUGH 2758
 0 0 57 C 0 0

OTES 2759 THROUGH 2766

55 0 57 0 59 0 55 0

OTES 2767 THROUGH 2774

57 0 56 0 0 0 54 0

OTES 2775 THROUGH 2782

57 0 0 0 -1 0 54 0

OTES 2783 THROUGH 2790

54 0 50 0 0 0 47 0

OTES 2791 THROUGH 2798

9 0 50 0 52 0 49 0

OTES 2799 THROUGH 2806

7 0 50 0 49 0 50 47

OTES 2807 THROUGH 2814

0 0 0 0 0 0 0 0

OTES 2815 THROUGH 2822

0 0 0 0 0 0 0 0

OTES 2823 THROUGH 2824

-99

FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

PATTERNS WHICH LACK CHANGE-OF-DIRECTION

JOHN DUNSTABLE ISORHYTHMIC MOTET VENI SANCTE SPIRITUS

ASCENDING AND DESCENDING INTERVALS*
(INCLUDING ENHARMONIC EQUIVALENTS)

	TOTAL OCCURRENCES	PERCENTAGE OF OCCURRENCE
NOR 2	88	18.72
UOR 2	173	36.81
NOR 3	71	15.11
UOR 3	41	8.72
F. 4	44	9.36
ONE	0	0.0
F. 5	11	2.34
OR 6	0	0.0
OR 6	0	0.0
OR 7	0	0.0
OR 7	0	0.0
AVE	4	0.85
OR 9	0	0.0
OR 9	0	0.0
OR 10	0	0.0
OR 10	0	0.0
F. 11	0	0.0
. TT	0	0.0
. 12	0	0.0
R 13	0	0.0
R 13	0	0.0
R 14	0	0.0
R 14	0	0.0
UCT.	0	0.0
ON	38	8.09
VALS	0	0.0
CEEDING TWO		
AVES		

470 INTERVALS COUNTED

ADDITIONAL UNISONS

JCHA DUNSTABLE ISORHYTHMIC MOTET VENI SANCTE SPIRITUS

ASCENDING INTERVALS
(INCLUDING ENHARMONIC EQUIVALENTS)

	TOTAL OCCURRENCES	PERCENTAGE OF OCCURRENCE
MINOR 2	42	20.79
MAJOR 2	76	37.62
MINOR 3	29	14.36
MAJOR 3	20	9.90
PERF. 4	27	13.37
TRITONE	0	0.0
PERF. 5	4	1.98
MINOR 6	0	0.0
MAJOR 6	0	0.0
MINOR 7	0	0.0
MAJOR 7	0	0.0
OCTAVE	4	1.98
MINOR 9	0	0.0
MAJOR 9	0	0.0
MINOR 10	0	0.0
MAJOR 10	0	0.0
PERF. 11	0	0.0
COMPOUND 11	0	0.0
PERF. 12	0	0.0
MINOR 13	0	0.0
MAJOR 13	0	0.0
MINOR 14	0	0.0
MAJOR 14	0	0.0
TWO OCT. INTERVALS	0	0.0
EXCEEDING TWO OCTAVES	0	0.0

202 ASCENDING INTERVALS COUNTED

JOHN DUNSTABLE ISORHYTHMIC MOTET VENI SANCTE SPIRITUS

DESCENDING INTERVALS
(INCLUDING ENHARMONIC EQUIVALENTS)

	TOTAL OCCURRENCES	PERCENTAGE OF OCCURRENCE
MINOR 2	46	20.00
MAJOR 2	57	42.17
MINOR 3	42	18.26
MAJOR 3	21	9.13
PERF. 4	17	7.39
TRITONE	0	0.0
PERF. 5	7	3.04
MINOR 6	0	0.0
MAJOR 6	0	0.0
MINOR 7	0	0.0
MAJOR 7	0	0.0
OCTAVE	0	0.0
MINOR 9	0	0.0
MAJOR 9	0	0.0
MINOR 10	0	0.0
MAJOR 10	0	0.0
PERF. 11	0	0.0
COMF. 11	0	0.0
PERF. 12	0	0.0
MINOR 13	0	0.0
MAJOR 13	0	0.0
MINOR 14	0	0.0
MAJOR 14	0	0.0
Two OCT.	0	0.0
INTERVALS EXCEEDING TWO OCTAVES	0	0.0

230 DESCENDING INTERVALS COUNTED

*** TYPE I LISTING ***

JOHN CUNSTARLE ISORHYTHMIC MOTET VENI SANCTE SPIRITUS

SEARCH FOR PATTERNS OF 3 NOTES IN LENGTH --
 TCNAL RETROGRADE
 WAS BEGUN AT 55 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	1 TC	49	541 TO 613	5	3
2	1 TO	49	613 TO 733	5	3
3	1 TO	49	1146 TO 1166	5	3
4	1 TO	49	1182 TO 1198	5	3
5	1 TO	49	1294 TO 1306	5	3
6	1 TC	49	1762 TO 1770	5	3
7	1 TC	49	1939 TO 1949	5	3
8	1 TO	49	2089 TO 2095	5	3
9	1 TO	49	2311 TO 2321	5	3
10	1 TC	49	2423 TO 2431	5	3
11	1 TO	49	2431 TO 2435	5	3
12	1 TC	49	2449 TO 2453	5	3
13	1 TO	49	2621 TO 2627	5	3
14	1 TO	49	2775 TO 2783	5	3
15	37 TO	73	73 TO 121	5	3
16	37 TO	73	121 TO 145	5	3
17	37 TO	73	421 TO 481	5	3
18	37 TC	73	481 TO 505	5	3
19	37 TO	73	529 TO 589	5	3
20	37 TO	73	781 TO 797	5	3
21	37 TO	73	797 TO 821	5	3
22	37 TO	73	821 TO 853	5	3
23	37 TO	73	902 TO 914	5	3
24	37 TO	73	934 TO 946	5	3
25	37 TC	73	946 TO 952	5	3
26	37 TC	73	956 TO 962	5	3
27	37 TO	73	962 TC 970	5	3
28	37 TO	73	978 TO 1014	5	3
29	37 TO	73	1014 TC 1026	5	3
30	37 TO	73	1026 TO 1042	5	3
31	37 TO	73	1042 TO 1070	5	3
32	37 TO	73	1074 TO 1086	5	3
33	37 TO	73	1104 TO 1110	5	3
34	37 TO	73	1110 TO 1126	5	3
35	37 TO	73	1126 TO 1134	5	3
36	37 TO	73	1134 TO 1142	5	3
37	37 TC	73	1142 TO 1158	5	3
38	37 TO	73	1202 TO 1210	5	3
39	37 TO	73	1218 TO 1266	5	3
40	37 TC	73	1266 TO 1274	5	3
41	37 TC	73	1282 TO 1294	5	3
42	37 TO	73	1314 TO 1320	5	3

PATTERN	NOTES	RELATED TC	NOTES	TEST	LENGTH
43	37 TC	73	1328 TO 1334	5	3
44	37 TO	73	1334 TO 1342	5	3
45	37 TO	73	1386 TO 1392	5	3
46	37 TO	73	1394 TO 1422	5	3
47	37 TO	73	1422 TO 1438	5	3
48	37 TO	73	1470 TO 1474	5	3
49	37 TC	73	1482 TO 1494	5	3
50	37 TO	73	1542 TO 1554	5	3
51	37 TO	73	1554 TO 1580	5	3
52	37 TO	73	1614 TO 1630	5	3
53	37 TO	73	1638 TO 1644	5	3
54	37 TO	73	1648 TO 1662	5	3
55	37 TO	73	1666 TO 1682	5	3
56	37 TO	73	1690 TO 1706	5	3
57	37 TC	73	1718 TO 1726	5	3
58	37 TC	73	1732 TO 1738	5	3
59	37 TO	73	1752 TO 1756	5	3
60	37 TO	73	1758 TO 1768	5	3
61	37 TO	73	1774 TO 1782	5	3
62	37 TO	73	1814 TO 1819	5	3
63	37 TC	73	1820 TO 1824	5	3
64	37 TC	73	1863 TO 1875	5	3
65	37 TO	73	1883 TO 1887	5	3
66	37 TO	73	1905 TO 1915	5	3
67	37 TO	73	1919 TO 1925	5	3
68	37 TO	73	1935 TO 1943	5	3
69	37 TO	73	1955 TO 1973	5	3
70	37 TO	73	1987 TO 2001	5	3
71	37 TO	73	2005 TO 2009	5	3
72	37 TC	73	2013 TO 2016	5	3
73	37 TO	73	2016 TO 2019	5	3
74	37 TO	73	2020 TO 2023	5	3
75	37 TO	73	2023 TO 2025	5	3
76	37 TC	73	2071 TO 2081	5	3
77	37 TO	73	2083 TO 2093	5	3
78	37 TO	73	2103 TO 2109	5	3
79	37 TO	73	2111 TO 2117	5	3
80	37 TC	73	2155 TO 2155	5	3
81	37 TC	73	2169 TO 2175	5	3
82	37 TO	73	2177 TO 2183	5	3
83	37 TO	73	2185 TO 2189	5	3
84	37 TC	73	2255 TO 2255	5	3
85	37 TO	73	2279 TO 2291	5	3
86	37 TC	73	2293 TO 2299	5	3
87	37 TO	73	2307 TO 2315	5	3
88	37 TC	73	2345 TO 2349	5	3
89	37 TO	73	2355 TO 2361	5	3
90	37 TO	73	2365 TO 2373	5	3
91	37 TO	73	2373 TO 2391	5	3
92	37 TC	73	2399 TO 2409	5	3
93	37 TO	73	2409 TO 2415	5	3

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
94	37 TO	73	2419 TO 2429	5	3
95	37 TO	73	2441 TO 2447	5	3
96	37 TO	73	2448 TO 2452	5	3
97	37 TO	73	2455 TO 2458	5	3
98	37 TO	73	2487 TO 2493	5	3
99	37 TO	73	2497 TO 2503	5	3
100	37 TO	73	2509 TO 2515	5	3
101	37 TO	73	2515 TO 2517	5	3
102	37 TO	73	2517 TO 2527	5	3
103	37 TO	73	2527 TO 2533	5	3
104	37 TO	73	2535 TO 2541	5	3
105	37 TO	73	2553 TO 2557	5	3
106	37 TO	73	2562 TO 2566	5	3
107	37 TO	73	2566 TO 2591	5	3
108	37 TO	73	2591 TO 2603	5	3
109	37 TO	73	2631 TO 2635	5	3
110	37 TO	73	2659 TO 2662	5	3
111	37 TO	73	2662 TO 2679	5	3
112	37 TO	73	2683 TO 2693	5	3
113	37 TO	73	2695 TO 2699	5	3
114	37 TO	73	2719 TO 2729	5	3
115	37 TO	73	2733 TO 2739	5	3
116	37 TO	73	2751 TO 2759	5	3
117	37 TO	73	2761 TO 2765	5	3
118	37 TO	73	2765 TO 2769	5	3
119	37 TO	73	2773 TO 2781	5	3
120	37 TO	73	2793 TO 2797	5	3
121	37 TO	73	2799 TO 2803	5	3
122	37 TO	73	2803 TO 2806	5	3
123	49 TO	109	109 TO 133	5	3
124	49 TO	109	157 TO 217	5	3
125	49 TO	109	409 TO 445	5	3
126	49 TO	109	445 TO 493	5	3
127	49 TO	109	493 TO 517	5	3
128	49 TO	109	733 TO 773	5	3
129	49 TO	109	789 TO 805	5	3
130	49 TO	109	805 TO 837	5	3
131	49 TO	109	870 TO 898	5	3
132	49 TO	109	930 TO 942	5	3
133	49 TO	109	942 TO 948	5	3
134	49 TO	109	952 TO 956	5	3
135	49 TO	109	958 TO 966	5	3
136	49 TO	109	970 TO 1002	5	3
137	49 TO	109	1002 TO 1022	5	3
138	49 TO	109	1022 TO 1034	5	3
139	49 TO	109	1034 TO 1050	5	3
140	49 TO	109	1070 TO 1082	5	3
141	49 TO	109	1086 TO 1102	5	3
142	49 TO	109	1106 TO 1118	5	3
143	49 TO	109	1118 TO 1130	5	3
144	49 TO	109	1130 TO 1140	5	3

PATTERN	NCTES	RELATED TC	NCTES	TEST	LENGTH
145	49 TO	109	1140 TO 1146	5	3
146	49 TO	109	1198 TO 1206	5	3
147	49 TO	109	1210 TO 1242	5	3
148	49 TC	109	1242 TO 1270	5	3
149	49 TO	109	1270 TO 1282	5	3
150	49 TO	109	1306 TO 1318	5	3
151	49 TO	109	1318 TO 1324	5	3
152	49 TO	109	1330 TO 1338	5	3
153	49 TO	109	1342 TO 1354	5	3
154	49 TO	109	1378 TO 1386	5	3
155	49 TO	109	1392 TO 1398	5	3
156	49 TO	109	1398 TO 1430	5	3
157	49 TO	109	1438 TO 1454	5	3
158	49 TO	109	1466 TO 1472	5	3
159	49 TC	109	1476 TO 1482	5	3
160	49 TC	109	1510 TO 1526	5	3
161	49 TO	109	1534 TO 1546	5	3
162	49 TO	109	1546 TO 1578	5	3
163	49 TO	109	1586 TO 1614	5	3
164	49 TO	109	1630 TO 1640	5	3
165	49 TO	109	1644 TO 1648	5	3
166	49 TO	109	1662 TO 1674	5	3
167	49 TO	109	1682 TO 1690	5	3
168	49 TO	109	1710 TO 1722	5	3
169	49 TO	109	1722 TO 1728	5	3
170	49 TO	109	1738 TO 1752	5	3
171	49 TO	109	1756 TO 1762	5	3
172	49 TO	109	1770 TO 1774	5	3
173	49 TO	109	1798 TO 1814	5	3
174	49 TO	109	1818 TO 1820	5	3
175	49 TO	109	1824 TO 1828	5	3
176	49 TO	109	1881 TO 1885	5	3
177	49 TO	109	1887 TO 1895	5	3
178	49 TO	109	1903 TO 1907	5	3
179	49 TO	109	1915 TO 1921	5	3
180	49 TC	109	1929 TO 1933	5	3
181	49 TO	109	1951 TO 1955	5	3
182	49 TO	109	1973 TO 1979	5	3
183	49 TO	109	1995 TO 2003	5	3
184	49 TO	109	2009 TO 2013	5	3
185	49 TO	109	2015 TO 2017	5	3
186	49 TO	109	2019 TO 2021	5	3
187	49 TO	109	2021 TO 2024	5	3
188	49 TO	109	2024 TO 2027	5	3
189	49 TO	109	2063 TO 2075	5	3
190	49 TO	109	2081 TO 2089	5	3
191	49 TO	109	2105 TO 2113	5	3
192	49 TO	109	2119 TO 2123	5	3
193	49 TO	109	2147 TO 2155	5	3
194	49 TO	109	2165 TO 2169	5	3
195	49 TO	109	2175 TO 2181	5	3

PATTERN	NCES	RELATED TC	NOTES	TEST	LENGTH
196	49 TO 109		2181 TO 2185	5	3
197	49 TO 109		2191 TO 2194	5	3
198	49 TO 109		2253 TO 2257	5	3
199	49 TO 109		2257 TO 2263	5	3
200	49 TO 109		2275 TO 2279	5	3
201	49 TO 109		2291 TO 2297	5	3
202	49 TO 109		2297 TO 2301	5	3
203	49 TO 109		2323 TO 2327	5	3
204	49 TO 109		2343 TO 2347	5	3
205	49 TO 109		2351 TO 2359	5	3
206	49 TO 109		2359 TO 2363	5	3
207	49 TO 109		2367 TO 2375	5	3
208	49 TO 109		2391 TO 2403	5	3
209	49 TO 109		2403 TO 2411	5	3
210	49 TO 109		2411 TO 2419	5	3
211	49 TO 109		2439 TO 2445	5	3
212	49 TO 109		2445 TO 2448	5	3
213	49 TO 109		2453 TO 2457	5	3
214	49 TO 109		2457 TO 2459	5	3
215	49 TO 109		2479 TO 2487	5	3
216	49 TO 109		2489 TO 2495	5	3
217	49 TO 109		2503 TO 2513	5	3
218	49 TO 109		2513 TO 2516	5	3
219	49 TO 109		2516 TO 2519	5	3
220	49 TO 109		2519 TO 2531	5	3
221	49 TO 109		2533 TO 2537	5	3
222	49 TO 109		2537 TO 2543	5	3
223	49 TO 109		2555 TO 2559	5	3
224	49 TO 109		2561 TO 2565	5	3
225	49 TO 109		2565 TO 2567	5	3
226	49 TO 109		2567 TO 2599	5	3
227	49 TO 109		2599 TO 2607	5	3
228	49 TO 109		2613 TO 2619	5	3
229	49 TO 109		2627 TO 2631	5	3
230	49 TO 109		2635 TO 2645	5	3
231	49 TO 109		2657 TO 2661	5	3
232	49 TO 109		2661 TO 2663	5	3
233	49 TO 109		2663 TO 2683	5	3
234	49 TO 109		2687 TO 2695	5	3
235	49 TO 109		2707 TO 2711	5	3
236	49 TO 109		2727 TO 2733	5	3
237	49 TO 109		2739 TO 2751	5	3
238	49 TO 109		2755 TO 2761	5	3
239	49 TO 109		2763 TO 2767	5	3
240	49 TO 109		2769 TO 2775	5	3
241	49 TO 109		2785 TO 2791	5	3
242	49 TO 109		2797 TO 2801	5	3
243	49 TO 109		2801 TO 2805	5	3
244	49 TO 109		2805 TO 2807	5	3
**** FOR	73 TO 121.	SEE	37 TO 73 ABOVE	****	
**** FOR	109 TO 133.	SEE	49 TO 109 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FCR	121 TO 145.	SEE	37 TO 73 ABOVE	****	
**** FCR	157 TO 217.	SEE	49 TO 109 ABOVE	****	
245	169 TO 241		373 TO 421	5	3
246	169 TO 241		589 TO 705	5	3
247	169 TO 241		709 TO 765	5	3
248	169 TO 241		1178 TO 1190	5	3
249	169 TO 241		1190 TO 1202	5	3
250	169 TO 241		1302 TO 1314	5	3
251	169 TO 241		1354 TO 1374	5	3
252	169 TO 241		1458 TO 1470	5	3
253	169 TO 241		1526 TO 1542	5	3
254	169 TO 241		1768 TO 1772	5	3
255	169 TO 241		1895 TO 1903	5	3
256	169 TO 241		1943 TO 1951	5	3
257	169 TO 241		2051 TO 2059	5	3
258	169 TO 241		2139 TO 2145	5	3
259	169 TO 241		2227 TO 2237	5	3
260	169 TO 241		2267 TO 2275	5	3
261	169 TO 241		2315 TO 2323	5	3
262	169 TO 241		2339 TO 2345	5	3
263	169 TO 241		2429 TO 2434	5	3
264	169 TO 241		2434 TO 2439	5	3
265	169 TO 241		2452 TO 2455	5	3
266	169 TO 241		2467 TO 2477	5	3
267	169 TO 241		2559 TO 2563	5	3
268	169 TO 241		2611 TO 2615	5	3
269	169 TO 241		2619 TO 2625	5	3
270	169 TO 241		2625 TO 2629	5	3
271	169 TO 241		2645 TO 2651	5	3
272	169 TO 241		2781 TO 2785	5	3
273	373 TO 421		1166 TO 1178	5	3
274	373 TO 421		1350 TO 1370	5	3
275	373 TO 421		1454 TO 1466	5	3
276	373 TO 421		1518 TO 1534	5	3
277	373 TO 421		1891 TO 1901	5	3
278	373 TO 421		2027 TO 2055	5	3
279	373 TO 421		2123 TO 2139	5	3
280	373 TO 421		2219 TO 2235	5	3
281	373 TO 421		2263 TO 2273	5	3
282	373 TO 421		2325 TO 2339	5	3
283	373 TO 421		2459 TO 2475	5	3
284	373 TO 421		2541 TO 2547	5	3
285	373 TO 421		2557 TO 2561	5	3
286	373 TO 421		2603 TO 2611	5	3
287	373 TO 421		2615 TO 2621	5	3
288	373 TO 421		2639 TO 2647	5	3
**** FCR	409 TO 445.	SEE	49 TO 109 ABOVE	****	
**** FCR	421 TO 481.	SEE	37 TO 73 ABOVE	****	
**** FCR	445 TO 493.	SEE	49 TO 109 ABOVE	****	
**** FCR	481 TO 505.	SEE	37 TO 73 ABOVE	****	
**** FCR	453 TO 517.	SEE	49 TO 109 ABOVE	****	

PATTERN	NCES	RELATED TC	NOTES	TEST	LENGTH
**** FOR	529 TO 589.	SEE	37 TO 73 ABOVE	****	
289	541 TO 613		1158 TO 1170	5	3
290	541 TO 613		2093 TO 2099	5	3
291	541 TO 613		2543 TO 2549	5	3
**** FCR	589 TO 709.	SEE	373 TO 421 ABOVE	****	
**** FCR	613 TO 733.	SEE	541 TO 613 ABOVE	****	
**** FCR	709 TO 765.	SEE	373 TO 421 ABOVE	****	
**** FCR	733 TO 773.	SEE	49 TO 109 ABOVE	****	
**** FCR	781 TO 797.	SEE	37 TO 73 ABOVE	****	
**** FOR	789 TO 805.	SEE	49 TO 109 ABOVE	****	
**** FCR	797 TO 821.	SEE	37 TO 73 ABOVE	****	
**** FOR	805 TO 837.	SEE	49 TO 109 ABOVE	****	
**** FCR	821 TO 853.	SEE	37 TO 73 ABOVE	****	
**** FCR	837 TO 869.	SEE	49 TO 109 ABOVE	****	
**** FCR	853 TO 870.	SEE	37 TO 73 ABOVE	****	
**** FOR	870 TO 898.	SEE	49 TO 109 ABOVE	****	
**** FCR	902 TO 914.	SEE	37 TO 73 ABOVE	****	
**** FCR	930 TO 942.	SEE	49 TO 109 ABOVE	****	
**** FCR	934 TO 946.	SEE	37 TO 73 ABOVE	****	
**** FCR	942 TO 948.	SEE	49 TO 109 ABOVE	****	
**** FCR	946 TO 952.	SEE	37 TO 73 ABOVE	****	
**** FCR	952 TO 956.	SEE	49 TO 109 ABOVE	****	
**** FCR	956 TO 962.	SEE	37 TO 73 ABOVE	****	
**** FCR	958 TO 966.	SEE	49 TO 109 ABOVE	****	
**** FCR	962 TO 970.	SEE	37 TO 73 ABOVE	****	
**** FOR	970 TO 1002.	SEE	49 TO 109 ABOVE	****	
**** FCR	978 TO 1014.	SEE	37 TO 73 ABOVE	****	
**** FCR	1002 TO 1022.	SEE	49 TO 109 ABOVE	****	
**** FCR	1014 TO 1026.	SEE	37 TO 73 ABOVE	****	
**** FCR	1022 TO 1034.	SEE	49 TO 109 ABOVE	****	
**** FCR	1026 TO 1042.	SEE	37 TO 73 ABOVE	****	
**** FOR	1034 TO 1050.	SEE	49 TO 109 ABOVE	****	
**** FOR	1042 TO 1070.	SEE	37 TO 73 ABOVE	****	
**** FCR	1070 TO 1082.	SEE	49 TO 109 ABOVE	****	
**** FCR	1074 TO 1086.	SEE	37 TO 73 ABOVE	****	
**** FCR	1086 TO 1102.	SEE	49 TO 109 ABOVE	****	
**** FCR	1104 TO 1110.	SEE	37 TO 73 ABOVE	****	
**** FCR	1106 TO 1118.	SEE	49 TO 109 ABOVE	****	
**** FCR	1110 TO 1126.	SEE	37 TO 73 ABOVE	****	
**** FOR	1118 TO 1130.	SEE	49 TO 109 ABOVE	****	
**** FOR	1126 TO 1134.	SEE	37 TO 73 ABOVE	****	
**** FCR	1130 TO 1140.	SEE	49 TO 109 ABOVE	****	
**** FCR	1134 TO 1142.	SEE	37 TO 73 ABOVE	****	
**** FCR	1140 TO 1146.	SEE	49 TO 109 ABOVE	****	
**** FCR	1142 TO 1158.	SEE	37 TO 73 ABOVE	****	
**** FCR	1146 TO 1166.	SEE	541 TO 613 ABOVE	****	
**** FCR	1158 TO 1170.	SEE	1 TO 49 ABOVE	****	
**** FCR	1166 TO 1178.	SEE	169 TO 241 ABOVE	****	
**** FOR	1178 TO 1190.	SEE	373 TO 421 ABOVE	****	
**** FOR	1182 TO 1198.	SEE	541 TO 613 ABOVE	****	
**** FOR	1190 TO 1202.	SEE	373 TO 421 ABOVE	****	

PATTERN	NCES	RELATED TC	NOTES	TEST	LENGTH
**** FCR 1158 TO 1206.	SEE	49 TO	109 ABOVE	****	
**** FCR 1202 TO 1210.	SEE	37 TO	73 ABOVE	****	
**** FCR 1210 TO 1242.	SEE	49 TO	109 ABOVE	****	
**** FOR 1218 TO 1266.	SEE	37 TO	73 ABOVE	****	
**** FOR 1242 TO 1270.	SEE	49 TO	109 ABOVE	****	
**** FOR 1266 TO 1274.	SEE	37 TO	73 ABOVE	****	
**** FCR 1270 TO 1282.	SEE	49 TO	109 ABOVE	****	
**** FCR 1282 TO 1294.	SEE	37 TO	73 ABOVE	****	
**** FOR 1294 TO 1306.	SEE	541 TO	613 ABOVE	****	
**** FOR 1302 TO 1314.	SEE	373 TO	421 ABOVE	****	
**** FCR 1306 TO 1318.	SEE	49 TO	109 ABOVE	****	
**** FOR 1314 TO 1320.	SEE	37 TO	73 ABOVE	****	
**** FCR 1318 TO 1324.	SEE	49 TO	109 ABOVE	****	
**** FCR 1328 TO 1334.	SEE	37 TO	73 ABOVE	****	
**** FCR 1330 TO 1338.	SEE	49 TO	109 ABOVE	****	
**** FOR 1334 TO 1342.	SEE	37 TO	73 ABOVE	****	
**** FCR 1342 TO 1354.	SEE	49 TO	109 ABOVE	****	
**** FCR 1350 TO 1370.	SEE	169 TO	241 ABOVE	****	
**** FCR 1354 TO 1374.	SEE	373 TO	421 ABOVE	****	
**** FCR 1378 TO 1386.	SEE	49 TO	109 ABOVE	****	
**** FCR 1386 TO 1392.	SEE	37 TO	73 ABOVE	****	
**** FOR 1392 TO 1398.	SEE	49 TO	109 ABOVE	****	
**** FOR 1394 TO 1422.	SEE	37 TO	73 ABOVE	****	
**** FOR 1398 TO 1430.	SEE	49 TO	109 ABOVE	****	
**** FCR 1422 TO 1438.	SEE	37 TO	73 ABOVE	****	
**** FCR 1438 TO 1454.	SEE	49 TO	109 ABOVE	****	
**** FOR 1454 TO 1466.	SEE	169 TO	241 ABOVE	****	
**** FOR 1458 TO 1470.	SEE	373 TO	421 ABOVE	****	
**** FOR 1466 TO 1472.	SEE	49 TO	109 ABOVE	****	
**** FCR 1470 TO 1474.	SEE	37 TO	73 ABOVE	****	
**** FCR 1476 TO 1482.	SEE	49 TO	109 ABOVE	****	
**** FCR 1482 TO 1494.	SEE	37 TO	73 ABOVE	****	
**** FOR 1510 TO 1526.	SEE	49 TO	109 ABOVE	****	
**** FCR 1518 TO 1534.	SEE	169 TO	241 ABOVE	****	
**** FCR 1526 TO 1542.	SEE	373 TO	421 ABOVE	****	
**** FCR 1534 TO 1546.	SEE	49 TO	109 ABOVE	****	
**** FCR 1542 TO 1554.	SEE	37 TO	73 ABOVE	****	
**** FCR 1546 TO 1578.	SEE	49 TO	109 ABOVE	****	
**** FCR 1554 TO 1580.	SEE	37 TO	73 ABOVE	****	
**** FCR 1586 TO 1614.	SEE	49 TO	109 ABOVE	****	
**** FCR 1614 TO 1630.	SEE	37 TO	73 ABOVE	****	
**** FCR 1630 TO 1640.	SEE	49 TO	109 ABOVE	****	
**** FOR 1638 TO 1644.	SEE	37 TO	73 ABOVE	****	
**** FCR 1644 TO 1648.	SEE	49 TO	109 ABOVE	****	
**** FCR 1648 TO 1662.	SEE	37 TO	73 ABOVE	****	
**** FCR 1662 TO 1674.	SEE	49 TO	109 ABOVE	****	
**** FCR 1666 TO 1682.	SEE	37 TO	73 ABOVE	****	
**** FCR 1682 TO 1690.	SEE	49 TO	109 ABOVE	****	
**** FCR 1690 TO 1706.	SEE	37 TO	73 ABOVE	****	
**** FCR 1710 TO 1722.	SEE	49 TO	109 ABOVE	****	
**** FCR 1718 TO 1726.	SEE	37 TO	73 ABOVE	****	

PATTERN	NOTES	RELATED TC	NOTES	TEST	LENGTH
****	FCR 1722 TC 1728.	SEE	49 TO 109	ABOVE	****
****	FCR 1732 TO 1738.	SEE	37 TO 73	ABOVE	****
****	FCR 1738 TO 1752.	SEE	49 TO 109	ABOVE	****
****	FOR 1752 TO 1756.	SEE	37 TO 73	ABOVE	****
****	FCR 1756 TO 1762.	SEE	49 TO 109	ABOVE	****
****	FOR 1758 TO 1768.	SEE	37 TO 73	ABOVE	****
****	FCR 1762 TO 1770.	SEE	541 TO 613	ABOVE	****
****	FCR 1768 TO 1772.	SEE	373 TO 421	ABOVE	****
****	FCR 1770 TO 1774.	SEE	49 TO 109	ABOVE	****
****	FOR 1774 TO 1782.	SEE	37 TO 73	ABOVE	****
****	FCR 1798 TO 1814.	SEE	49 TO 109	ABOVE	****
****	FCR 1814 TO 1819.	SEE	37 TO 73	ABOVE	****
****	FCR 1818 TO 1820.	SEE	49 TO 109	ABOVE	****
****	FCR 1820 TO 1824.	SEE	37 TO 73	ABOVE	****
****	FCR 1824 TO 1828.	SEE	49 TO 109	ABOVE	****
****	FCR 1830 TO 1847.	SEE	37 TO 73	ABOVE	****
****	FCF 1846 TO 1855.	SEE	49 TO 109	ABOVE	****
****	FCR 1863 TO 1875.	SEE	37 TO 73	ABOVE	****
****	FCR 1881 TO 1885.	SEE	49 TO 109	ABOVE	****
****	FCR 1883 TO 1887.	SEE	37 TO 73	ABOVE	****
****	FCR 1887 TO 1895.	SEE	49 TO 109	ABOVE	****
****	FCR 1891 TO 1901.	SEE	169 TO 241	ABOVE	****
****	FCF 1895 TO 1903.	SEE	373 TO 421	ABOVE	****
****	FCR 1903 TO 1907.	SEE	49 TO 109	ABOVE	****
****	FCF 1905 TO 1915.	SEE	37 TO 73	ABOVE	****
****	FOR 1915 TO 1921.	SEE	49 TO 109	ABOVE	****
****	FCR 1919 TO 1925.	SEE	37 TO 73	ABOVE	****
****	FCR 1929 TO 1933.	SEE	49 TO 109	ABOVE	****
****	FCF 1935 TO 1943.	SEE	37 TO 73	ABOVE	****
****	FCF 1939 TO 1949.	SEE	541 TO 613	ABOVE	****
****	FCR 1943 TO 1951.	SEE	373 TO 421	ABOVE	****
****	FCR 1951 TO 1955.	SEE	49 TO 109	ABOVE	****
****	FCR 1955 TO 1973.	SEE	37 TO 73	ABOVE	****
****	FCR 1973 TO 1979.	SEE	49 TO 109	ABOVE	****
****	FCR 1987 TO 2001.	SEE	37 TO 73	ABOVE	****
****	FCR 1995 TO 2003.	SEE	49 TO 109	ABOVE	****
****	FCR 2005 TO 2009.	SEE	37 TO 73	ABOVE	****
****	FCR 2009 TO 2013.	SEE	49 TO 109	ABOVE	****
****	FCF 2013 TO 2016.	SEE	37 TO 73	ABOVE	****
****	FOR 2015 TO 2017.	SEE	49 TO 109	ABOVE	****
****	FCF 2016 TO 2019.	SEE	37 TO 73	ABOVE	****
****	FCR 2019 TO 2021.	SEE	49 TO 109	ABOVE	****
****	FCR 2020 TO 2023.	SEE	37 TO 73	ABOVE	****
****	FOR 2021 TO 2024.	SEE	49 TO 109	ABOVE	****
****	FCR 2023 TO 2025.	SEE	37 TO 73	ABOVE	****
****	FCF 2024 TO 2027.	SEE	49 TO 109	ABOVE	****
****	FCR 2027 TO 2055.	SEE	169 TO 241	ABOVE	****
****	FCR 2051 TO 2059.	SEE	373 TO 421	ABOVE	****
****	FOR 2063 TO 2075.	SEE	49 TO 109	ABOVE	****
****	FOR 2071 TO 2081.	SEE	37 TO 73	ABOVE	****
****	FOR 2081 TO 2089.	SEE	49 TO 109	ABOVE	****

PATTERN	NOTES	RELATED TO	NOTES	TEST LENGTH
**** FCR 2083 TO 2093.	SEE	37 TO	73 ABOVE	****
**** FCR 2089 TO 2095.	SEE	541 TO	613 ABOVE	****
**** FCR 2093 TO 2099.	SEE	1 TO	49 ABOVE	****
**** FCR 2103 TO 2109.	SEE	37 TO	73 ABOVE	****
**** FCR 2109 TO 2113.	SEE	49 TO	109 ABOVE	****
**** FCR 2111 TO 2117.	SEE	37 TO	73 ABOVE	****
**** FCR 2119 TO 2123.	SEE	49 TO	109 ABOVE	****
**** FCR 2123 TO 2139.	SEE	169 TO	241 ABOVE	****
**** FCR 2139 TO 2145.	SEE	373 TO	421 ABOVE	****
**** FCR 2147 TO 2155.	SEE	49 TO	109 ABOVE	****
**** FCR 2155 TO 2159.	SEE	37 TO	73 ABOVE	****
**** FCR 2165 TO 2169.	SEE	49 TO	109 ABOVE	****
**** FCR 2169 TO 2175.	SEE	37 TO	73 ABOVE	****
**** FCR 2175 TO 2181.	SEE	49 TO	109 ABOVE	****
**** FCR 2177 TO 2183.	SEE	37 TO	73 ABOVE	****
**** FCR 2181 TO 2185.	SEE	49 TO	109 ABOVE	****
**** FCR 2185 TO 2189.	SEE	37 TO	73 ABOVE	****
**** FCR 2191 TO 2194.	SEE	49 TO	109 ABOVE	****
**** FCR 2219 TO 2235.	SEE	169 TO	241 ABOVE	****
**** FCR 2227 TO 2237.	SEE	373 TO	421 ABOVE	****
**** FCR 2253 TO 2257.	SEE	49 TO	109 ABOVE	****
**** FCR 2255 TO 2259.	SEE	37 TO	73 ABOVE	****
**** FCR 2257 TO 2263.	SEE	49 TO	109 ABOVE	****
**** FCR 2263 TO 2273.	SEE	169 TO	241 ABOVE	****
**** FCR 2267 TO 2275.	SEE	373 TO	421 ABOVE	****
**** FCR 2275 TO 2279.	SEE	49 TO	109 ABOVE	****
**** FCR 2279 TO 2291.	SEE	37 TO	73 ABOVE	****
**** FCR 2291 TO 2297.	SEE	49 TO	109 ABOVE	****
**** FCR 2293 TO 2299.	SEE	37 TO	73 ABOVE	****
**** FCR 2297 TO 2301.	SEE	49 TO	109 ABOVE	****
**** FCR 2307 TO 2315.	SEE	37 TO	73 ABOVE	****
**** FCR 2311 TO 2321.	SEE	541 TO	613 ABOVE	****
**** FCR 2315 TO 2323.	SEE	373 TO	421 ABOVE	****
**** FCR 2323 TO 2327.	SEE	49 TO	109 ABOVE	****
**** FCR 2325 TO 2339.	SEE	169 TO	241 ABOVE	****
**** FCR 2339 TO 2345.	SEE	373 TO	421 ABOVE	****
**** FCR 2343 TO 2347.	SEE	49 TO	109 ABOVE	****
**** FCR 2345 TO 2349.	SEE	37 TO	73 ABOVE	****
**** FCR 2351 TO 2359.	SEE	49 TO	109 ABOVE	****
**** FCR 2355 TO 2361.	SEE	37 TO	73 ABOVE	****
**** FCR 2359 TO 2363.	SEE	49 TO	109 ABOVE	****
**** FCR 2365 TO 2373.	SEE	37 TO	73 ABOVE	****
**** FCR 2367 TO 2375.	SEE	49 TO	109 ABOVE	****
**** FCR 2373 TO 2391.	SEE	37 TO	73 ABOVE	****
**** FCR 2391 TO 2403.	SEE	49 TO	109 ABOVE	****
**** FCR 2399 TO 2409.	SEE	37 TO	73 ABOVE	****
**** FCR 2403 TO 2411.	SEE	49 TO	109 ABOVE	****
**** FCR 2409 TO 2415.	SEE	37 TO	73 ABOVE	****
**** FCR 2411 TO 2419.	SEE	49 TO	109 ABOVE	****
**** FCR 2419 TO 2429.	SEE	37 TO	73 ABOVE	****
**** FCR 2423 TO 2431.	SEE	541 TO	613 ABOVE	****

PAT1FRN	NOTES	RELATED TC	NOTES	TEST	LENGTH
**** FCR 2429 TO 2434.	SEE	373 TO	421 ABOVE	****	
**** FOR 2431 TO 2435.	SEE	541 TO	613 ABOVE	****	
**** FOR 2434 TO 2439.	SEE	373 TO	421 ABOVE	****	
**** FCR 2439 TO 2445.	SEE	49 TO	109 ABOVE	****	
**** FOR 2441 TO 2447.	SEE	37 TO	73 ABOVE	****	
**** FCR 2445 TO 2448.	SEE	49 TO	109 ABOVE	****	
**** FCR 2448 TO 2452.	SEE	37 TO	73 ABOVE	****	
**** FCR 2449 TO 2453.	SEE	541 TO	613 ABOVE	****	
**** FCR 2452 TO 2455.	SEE	373 TO	421 ABOVE	****	
**** FCR 2453 TO 2457.	SEE	49 TO	109 ABOVE	****	
**** FCR 2455 TO 2458.	SEE	37 TO	73 ABOVE	****	
**** FCR 2457 TO 2459.	SEE	49 TO	109 ABOVE	****	
**** FCR 2459 TO 2475.	SEE	169 TO	241 ABOVE	****	
**** FCR 2467 TO 2477.	SEE	373 TO	421 ABOVE	****	
**** FCR 2479 TO 2487.	SEE	49 TO	109 ABOVE	****	
**** FCR 2487 TO 2493.	SEE	37 TO	73 ABOVE	****	
**** FCR 2489 TO 2495.	SEE	49 TO	109 ABOVE	****	
**** FCR 2497 TO 2503.	SEE	37 TO	73 ABOVE	****	
**** FCR 2503 TO 2513.	SEE	49 TO	109 ABOVE	****	
**** FCR 2509 TO 2515.	SEE	37 TO	73 ABOVE	****	
**** FOR 2513 TO 2516.	SEE	49 TO	109 ABOVE	****	
**** FCR 2515 TO 2517.	SEE	37 TO	73 ABOVE	****	
**** FOR 2516 TO 2519.	SEE	49 TO	109 ABOVE	****	
**** FCR 2517 TO 2527.	SEE	37 TO	73 ABOVE	****	
**** FCR 2519 TO 2531.	SEE	49 TO	109 ABOVE	****	
**** FOR 2527 TO 2533.	SEE	37 TO	73 ABOVE	****	
**** FOR 2533 TO 2537.	SEE	49 TO	109 ABOVE	****	
**** FCR 2535 TO 2541.	SEE	37 TO	73 ABOVE	****	
**** FCR 2537 TO 2543.	SEE	49 TO	109 ABOVE	****	
**** FCR 2541 TO 2547.	SEE	169 TO	241 ABOVE	****	
**** FCR 2543 TO 2549.	SEE	1 TO	49 ABOVE	****	
**** FCR 2553 TO 2557.	SEE	37 TO	73 ABOVE	****	
**** FCR 2555 TO 2559.	SEE	49 TO	109 ABOVE	****	
**** FCR 2557 TO 2561.	SEE	169 TO	241 ABOVE	****	
**** FCR 2559 TO 2563.	SEE	373 TO	421 ABOVE	****	
**** FCR 2561 TO 2565.	SEE	49 TO	109 ABOVE	****	
**** FOR 2563 TO 2566.	SEE	37 TO	73 ABOVE	****	
**** FCR 2565 TO 2567.	SEE	49 TO	109 ABOVE	****	
**** FOR 2566 TO 2591.	SEE	37 TO	73 ABOVE	****	
**** FOR 2567 TO 2599.	SEE	49 TO	109 ABOVE	****	
**** FOR 2591 TO 2603.	SEE	37 TO	73 ABOVE	****	
**** FCR 2599 TO 2607.	SEE	49 TO	109 ABOVE	****	
**** FOR 2603 TO 2611.	SEE	169 TO	241 ABOVE	****	
**** FOR 2611 TO 2615.	SEE	373 TO	421 ABOVE	****	
**** FCR 2613 TO 2619.	SEE	49 TO	109 ABOVE	****	
**** FCR 2615 TO 2621.	SEE	169 TO	241 ABOVE	****	
**** FCR 2619 TO 2625.	SEE	373 TO	421 ABOVE	****	
**** FCR 2621 TO 2627.	SEE	541 TO	613 ABOVE	****	
**** FOR 2625 TO 2629.	SEE	373 TO	421 ABOVE	****	
**** FCR 2627 TO 2631.	SEE	49 TO	109 ABOVE	****	
**** FOR 2631 TO 2635.	SEE	37 TO	73 ABOVE	****	

PATTERN	NCES	RELATED TC	NOTES	TEST LENGTH
**** FCR 2635 TO 2645.	SEE	49 TO 109	ABOVE ****	
**** FCR 2639 TO 2647.	SEE	169 TO 241	ABOVE ****	
**** FCR 2645 TO 2651.	SEE	273 TO 421	ABOVE ****	
**** FCR 2657 TO 2661.	SEE	49 TO 109	ABOVE ****	
**** FCR 2659 TO 2662.	SEE	37 TO 73	ABOVE ****	
**** FCR 2661 TO 2663.	SEE	49 TO 109	ABOVE ****	
**** FCR 2662 TO 2675.	SEE	37 TO 73	ABOVE ****	
**** FCR 2663 TO 2683.	SEE	49 TO 109	ABOVE ****	
**** FCR 2683 TO 2693.	SEE	37 TO 73	ABOVE ****	
**** FCR 2687 TO 2695.	SEE	49 TO 109	ABOVE ****	
**** FCR 2695 TO 2699.	SEE	37 TO 73	ABOVE ****	
**** FCR 2707 TO 2711.	SEE	49 TO 109	ABOVE ****	
**** FCR 2719 TO 2729.	SEE	37 TO 73	ABOVE ****	
**** FCR 2727 TO 2733.	SEE	49 TO 109	ABOVE ****	
**** FCR 2733 TO 2739.	SEE	37 TO 73	ABOVE ****	
**** FCR 2739 TO 2751.	SEE	49 TO 109	ABOVE ****	
**** FCR 2751 TO 2759.	SEE	37 TO 73	ABOVE ****	
**** FCR 2755 TO 2761.	SEE	49 TO 109	ABOVE ****	
**** FCR 2761 TO 2765.	SEE	37 TO 73	ABOVE ****	
**** FCR 2763 TO 2767.	SEE	49 TO 109	ABOVE ****	
**** FCR 2765 TO 2769.	SEE	37 TO 73	ABOVE ****	
**** FCR 2769 TO 2775.	SEE	49 TO 109	ABOVE ****	
**** FCR 2773 TO 2781.	SEE	37 TO 73	ABOVE ****	
**** FCR 2775 TO 2783.	SEE	541 TO 613	ABOVE ****	
**** FCR 2781 TO 2785.	SEE	373 TO 421	ABOVE ****	
**** FCR 2785 TO 2791.	SEE	49 TO 109	ABOVE ****	
**** FCR 2793 TO 2797.	SEE	37 TO 73	ABOVE ****	
**** FCR 2797 TO 2801.	SEE	49 TO 109	ABOVE ****	
**** FCR 2799 TO 2803.	SEE	37 TO 73	ABOVE ****	
**** FCR 2801 TO 2805.	SEE	49 TO 109	ABOVE ****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 4 NOTES IN LENGTH --
TUNAL RETROGRADE
WAS BEGUN AT 1128 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
292	1 TO 73		529 TO 613	5	4
293	1 TO 73		1142 TO 1166	5	4
294	1 TO 73		1758 TO 1770	5	4
295	1 TO 73		1935 TO 1949	5	4
296	1 TO 73		2083 TO 2095	5	4
297	1 TO 73		2307 TO 2321	5	4
298	1 TO 73		2419 TO 2431	5	4
299	1 TO 73		2448 TO 2453	5	4
300	1 TO 73		2773 TO 2783	5	4
301	37 TO 109		109 TO 145	5	4
302	37 TO 109		409 TO 481	5	4
303	37 TO 109		445 TO 505	5	4
304	37 TO 109		789 TO 821	5	4
305	37 TO 109		805 TO 853	5	4
306	37 TO 109		930 TO 946	5	4
307	37 TO 109		942 TO 952	5	4
308	37 TO 109		958 TO 970	5	4
309	37 TO 109		970 TO 1014	5	4
310	37 TO 109		1002 TO 1026	5	4
311	37 TO 109		1022 TO 1042	5	4
312	37 TO 109		1034 TO 1070	5	4
313	37 TO 109		1070 TO 1086	5	4
314	37 TO 109		1106 TO 1126	5	4
315	37 TO 109		1118 TO 1134	5	4
316	37 TO 109		1130 TO 1142	5	4
317	37 TO 109		1140 TO 1158	5	4
318	37 TO 109		1198 TO 1210	5	4
319	37 TO 109		1210 TO 1266	5	4
320	37 TO 109		1242 TO 1274	5	4
321	37 TO 109		1306 TO 1320	5	4
322	37 TO 109		1330 TO 1342	5	4
323	37 TO 109		1392 TO 1422	5	4
324	37 TO 109		1398 TO 1438	5	4
325	37 TO 109		1466 TO 1474	5	4
326	37 TO 109		1534 TO 1554	5	4
327	37 TO 109		1546 TO 1580	5	4
328	37 TO 109		1630 TO 1644	5	4
329	37 TO 109		1662 TO 1682	5	4
330	37 TO 109		1710 TO 1726	5	4
331	37 TO 109		1756 TO 1768	5	4
332	37 TO 109		1881 TO 1887	5	4
333	37 TO 109		1903 TO 1915	5	4
334	37 TO 109		1915 TO 1925	5	4
335	37 TO 109		2015 TO 2019	5	4

PATTERN	NCIES	RELATFD TO	NOTES	TFST	LENGTH
336	37 TO	109	2019 TO 2023	5	4
337	37 TO	109	2021 TO 2025	5	4
338	37 TO	109	2063 TO 2081	5	4
339	37 TO	109	2081 TO 2093	5	4
340	37 TO	109	2109 TO 2117	5	4
341	37 TO	109	2175 TO 2183	5	4
342	37 TO	109	2253 TO 2259	5	4
343	37 TO	109	2291 TO 2299	5	4
344	37 TO	109	2343 TO 2349	5	4
345	37 TO	109	2351 TO 2361	5	4
346	37 TO	109	2367 TO 2391	5	4
347	37 TO	109	2391 TO 2409	5	4
348	37 TO	109	2403 TO 2415	5	4
349	37 TO	109	2439 TO 2447	5	4
350	37 TO	109	2453 TO 2458	5	4
351	37 TO	109	2503 TO 2515	5	4
352	37 TO	109	2513 TO 2517	5	4
353	37 TO	109	2516 TO 2527	5	4
354	37 TO	109	2519 TO 2533	5	4
355	37 TO	109	2533 TO 2541	5	4
356	37 TO	109	2561 TO 2566	5	4
357	37 TO	109	2565 TO 2591	5	4
358	37 TO	109	2567 TO 2603	5	4
359	37 TO	109	2657 TO 2662	5	4
360	37 TO	109	2661 TO 2679	5	4
361	37 TO	109	2763 TO 2769	5	4
362	37 TO	109	2769 TO 2781	5	4
363	37 TO	109	2797 TO 2803	5	4
364	37 TO	109	2801 TO 2806	5	4
365	49 TO	121	421 TO 493	5	4
366	49 TO	121	481 TO 517	5	4
367	49 TO	121	781 TO 805	5	4
368	49 TO	121	797 TO 837	5	4
369	49 TO	121	934 TO 948	5	4
370	49 TO	121	956 TO 966	5	4
371	49 TO	121	978 TO 1022	5	4
372	49 TO	121	1014 TO 1034	5	4
373	49 TO	121	1026 TO 1050	5	4
374	49 TO	121	1104 TO 1118	5	4
375	49 TO	121	1110 TO 1130	5	4
376	49 TO	121	1126 TO 1140	5	4
377	49 TO	121	1134 TO 1146	5	4
378	49 TO	121	1218 TO 1270	5	4
379	49 TO	121	1266 TO 1282	5	4
380	49 TO	121	1314 TO 1324	5	4
381	49 TO	121	1328 TO 1338	5	4
382	49 TO	121	1394 TO 1430	5	4
383	49 TO	121	1542 TO 1578	5	4
384	49 TO	121	1718 TO 1728	5	4
385	49 TO	121	1814 TO 1820	5	4
386	49 TO	121	1987 TO 2003	5	4

PATTERN	NCES	RELATED TC	NOTES	TEST	LENGTH
387	49 TO 121		2013 TO 2017	5	4
388	49 TO 121		2020 TO 2024	5	4
389	49 TO 121		2023 TO 2027	5	4
390	49 TO 121		2177 TO 2185	5	4
391	49 TO 121		2255 TO 2263	5	4
392	49 TO 121		2293 TO 2301	5	4
393	49 TO 121		2355 TO 2363	5	4
394	49 TO 121		2365 TO 2375	5	4
395	49 TO 121		2399 TO 2411	5	4
396	49 TO 121		2409 TO 2419	5	4
397	49 TO 121		2441 TO 2448	5	4
398	49 TO 121		2455 TO 2459	5	4
399	49 TO 121		2487 TO 2495	5	4
400	49 TO 121		2509 TO 2516	5	4
401	49 TO 121		2515 TO 2519	5	4
402	49 TO 121		2517 TO 2531	5	4
403	49 TO 121		2535 TO 2543	5	4
404	49 TO 121		2553 TO 2559	5	4
405	49 TO 121		2563 TO 2567	5	4
406	49 TO 121		2566 TO 2599	5	4
407	49 TO 121		2591 TO 2607	5	4
408	49 TO 121		2659 TO 2663	5	4
409	49 TO 121		2662 TO 2683	5	4
410	49 TO 121		2683 TO 2695	5	4
411	49 TO 121		2719 TO 2733	5	4
412	49 TO 121		2751 TO 2761	5	4
413	49 TO 121		2761 TO 2767	5	4
414	49 TO 121		2799 TO 2805	5	4
415	49 TO 121		2803 TO 2807	5	4
**** FOR	73 TO 133.	SEE	37 TO 109	ABOVE ****	
**** FOR	109 TO 145.	SEE	49 TO 121	ABOVE ****	
416	121 TO 157		517 TO 585	5	4
417	121 TO 157		773 TO 797	5	4
418	121 TO 157		898 TO 914	5	4
419	121 TO 157		954 TO 962	5	4
420	121 TO 157		1102 TO 1110	5	4
421	121 TO 157		1274 TO 1294	5	4
422	121 TO 157		1326 TO 1334	5	4
423	121 TO 157		1382 TO 1392	5	4
424	121 TO 157		1480 TO 1494	5	4
425	121 TO 157		1590 TO 1630	5	4
426	121 TO 157		1646 TO 1662	5	4
427	121 TO 157		1686 TO 1706	5	4
428	121 TO 157		1728 TO 1738	5	4
429	121 TO 157		1742 TO 1756	5	4
430	121 TO 157		1772 TO 1782	5	4
431	121 TO 157		1810 TO 1819	5	4
432	121 TO 157		1819 TO 1824	5	4
433	121 TO 157		1855 TO 1875	5	4
434	121 TO 157		1933 TO 1943	5	4
435	121 TO 157		1953 TO 1973	5	4

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
436	121 TO 157		1575 TO 2001	5	4
437	121 TO 157		2004 TO 2009	5	4
438	121 TO 157		2011 TO 2016	5	4
439	121 TO 157		2099 TO 2109	5	4
440	121 TO 157		2151 TO 2159	5	4
441	121 TO 157		2167 TO 2175	5	4
442	121 TO 157		2183 TO 2189	5	4
443	121 TO 157		2277 TO 2291	5	4
444	121 TO 157		2305 TO 2315	5	4
445	121 TO 157		2363 TO 2373	5	4
446	121 TO 157		2415 TO 2429	5	4
447	121 TO 157		2447 TO 2452	5	4
448	121 TO 157		2483 TO 2493	5	4
449	121 TO 157		2495 TO 2503	5	4
450	121 TO 157		2549 TO 2557	5	4
451	121 TO 157		2629 TO 2635	5	4
452	121 TO 157		2679 TO 2693	5	4
453	121 TO 157		2693 TO 2699	5	4
454	121 TO 157		2715 TO 2729	5	4
455	121 TO 157		2729 TO 2739	5	4
456	121 TO 157		2743 TO 2759	5	4
457	121 TO 157		2759 TO 2765	5	4
458	121 TO 157		2791 TO 2797	5	4
459	145 TO 217		493 TO 529	5	4
460	145 TO 217		733 TO 781	5	4
461	145 TO 217		870 TO 902	5	4
462	145 TO 217		952 TO 958	5	4
463	145 TO 217		1086 TO 1104	5	4
464	145 TO 217		1270 TO 1286	5	4
465	145 TO 217		1318 TO 1326	5	4
466	145 TO 217		1378 TO 1388	5	4
467	145 TO 217		1438 TO 1458	5	4
468	145 TO 217		1476 TO 1486	5	4
469	145 TO 217		1586 TO 1626	5	4
470	145 TO 217		1644 TO 1650	5	4
471	145 TO 217		1682 TO 1698	5	4
472	145 TO 217		1722 TO 1732	5	4
473	145 TO 217		1738 TO 1754	5	4
474	145 TO 217		1770 TO 1778	5	4
475	145 TO 217		1798 TO 1818	5	4
476	145 TO 217		1818 TO 1822	5	4
477	145 TO 217		1824 TO 1830	5	4
478	145 TO 217		1929 TO 1935	5	4
479	145 TO 217		1951 TO 1967	5	4
480	145 TO 217		1973 TO 1987	5	4
481	145 TO 217		1995 TO 2004	5	4
482	145 TO 217		2009 TO 2015	5	4
483	145 TO 217		2024 TO 2051	5	4
484	145 TO 217		2115 TO 2135	5	4
485	145 TO 217		2147 TO 2157	5	4
486	145 TO 217		2165 TO 2171	5	4

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
487	145 TO 217		2181 TO 2187	5	4
488	145 TO 217		2191 TO 2195	5	4
489	145 TO 217		2257 TO 2267	5	4
490	145 TO 217		2275 TO 2287	5	4
491	145 TO 217		2297 TO 2303	5	4
492	145 TO 217		2359 TO 2365	5	4
493	145 TO 217		2411 TO 2423	5	4
494	145 TO 217		2445 TO 2449	5	4
495	145 TO 217		2457 TO 2467	5	4
496	145 TO 217		2479 TO 2489	5	4
497	145 TO 217		2489 TO 2497	5	4
498	145 TO 217		2627 TO 2633	5	4
499	145 TO 217		2663 TO 2687	5	4
500	145 TO 217		2687 TO 2697	5	4
501	145 TO 217		2707 TO 2715	5	4
502	145 TO 217		2727 TO 2735	5	4
503	145 TO 217		2739 TO 2755	5	4
504	145 TO 217		2755 TO 2763	5	4
505	145 TO 217		2785 TO 2793	5	4
506	157 TO 241		373 TO 445	5	4
507	157 TO 241		709 TO 773	5	4
508	157 TO 241		1190 TO 1206	5	4
509	157 TO 241		1302 TO 1318	5	4
510	157 TO 241		1458 TO 1472	5	4
511	157 TO 241		1526 TO 1546	5	4
512	157 TO 241		1768 TO 1774	5	4
513	157 TO 241		2339 TO 2347	5	4
514	157 TO 241		2452 TO 2457	5	4
515	157 TO 241		2559 TO 2565	5	4
516	157 TO 241		2611 TO 2619	5	4
517	157 TO 241		2625 TO 2631	5	4
518	169 TO 373		1170 TO 1190	5	4
519	169 TO 373		2135 TO 2145	5	4
520	169 TO 373		2327 TO 2345	5	4
521	169 TO 373		2607 TO 2615	5	4
522	241 TO 421		1166 TO 1182	5	4
523	241 TO 421		2123 TO 2143	5	4
524	241 TO 421		2325 TO 2343	5	4
525	241 TO 421		2603 TO 2613	5	4
526	373 TO 445		1342 TO 1370	5	4
527	373 TO 445		1510 TO 1534	5	4
528	373 TO 445		1887 TO 1901	5	4
529	373 TO 445		2323 TO 2339	5	4
530	373 TO 445		2537 TO 2547	5	4
531	373 TO 445		2555 TO 2561	5	4
532	373 TO 445		2599 TO 2611	5	4
533	373 TO 445		2613 TO 2621	5	4
534	373 TO 445		2635 TO 2647	5	4
**** FCR	409 TO 481.	SEE	49 TO 121 ABOVE	****	
**** FCR	421 TO 493.	SEE	37 TO 109 ABOVE	****	
**** FCR	445 TO 505.	SEE	49 TO 121 ABOVE	****	

PATTERN	NCIES	RELATED TO	NOTES	TEST	LENGTH
**** FCR	481 TO 517.	SEE	37 TO 109 ABOVE ****		
535	493 TO 529		922 TO 942	5	4
536	493 TO 529		948 TO 956	5	4
537	493 TO 529		966 TO 1002	5	4
538	493 TO 529		1050 TO 1082	5	4
539	493 TO 529		1082 TO 1102	5	4
540	493 TO 529		1206 TO 1242	5	4
541	493 TO 529		1338 TO 1354	5	4
542	493 TO 529		1374 TO 1386	5	4
543	493 TO 529		1388 TO 1398	5	4
544	493 TO 529		1430 TO 1454	5	4
545	493 TO 529		1474 TO 1482	5	4
546	493 TO 529		1506 TO 1526	5	4
547	493 TO 529		1582 TO 1614	5	4
548	493 TO 529		1626 TO 1640	5	4
549	493 TO 529		1640 TO 1648	5	4
550	493 TO 529		1650 TO 1674	5	4
551	493 TO 529		1674 TO 1690	5	4
552	493 TO 529		1708 TO 1722	5	4
553	493 TO 529		1734 TO 1752	5	4
554	493 TO 529		1754 TO 1762	5	4
555	493 TO 529		1790 TO 1814	5	4
556	493 TO 529		1822 TO 1828	5	4
557	493 TO 529		1875 TO 1885	5	4
558	493 TO 529		1885 TO 1895	5	4
559	493 TO 529		1901 TO 1907	5	4
560	493 TO 529		1907 TO 1921	5	4
561	493 TO 529		1927 TO 1933	5	4
562	493 TO 529		1949 TO 1955	5	4
563	493 TO 529		1967 TO 1979	5	4
564	493 TO 529		2007 TO 2013	5	4
565	493 TO 529		2017 TO 2021	5	4
566	493 TO 529		2059 TO 2075	5	4
567	493 TO 529		2075 TO 2089	5	4
568	493 TO 529		2105 TO 2113	5	4
569	493 TO 529		2117 TO 2123	5	4
570	493 TO 529		2145 TO 2155	5	4
571	493 TO 529		2159 TO 2169	5	4
572	493 TO 529		2171 TO 2181	5	4
573	493 TO 529		2189 TO 2194	5	4
574	493 TO 529		2247 TO 2257	5	4
575	493 TO 529		2273 TO 2279	5	4
576	493 TO 529		2287 TO 2297	5	4
577	493 TO 529		2321 TO 2327	5	4
578	493 TO 529		2349 TO 2359	5	4
579	493 TO 529		2375 TO 2403	5	4
580	493 TO 529		2435 TO 2445	5	4
581	493 TO 529		2477 TO 2487	5	4
582	493 TO 529		2499 TO 2513	5	4
583	493 TO 529		2531 TO 2537	5	4
584	493 TO 529		2633 TO 2645	5	4

PATTERN	NCES	RELATED TC	NOTES	TEST	LENGTH
585	493 TO 529		2653 TO 2661	5	4
586	493 TO 529		2705 TO 2711	5	4
587	493 TO 529		2735 TO 2751	5	4
588	493 TO 529		2767 TO 2775	5	4
589	493 TO 529		2783 TO 2791	5	4
590	493 TO 529		2795 TO 2801	5	4
591	517 TO 589		502 TO 922	5	4
592	517 TO 589		546 TO 954	5	4
593	517 TO 589		562 TO 978	5	4
594	517 TO 589		1042 TO 1074	5	4
595	517 TO 589		1074 TO 1094	5	4
596	517 TO 589		1202 TO 1218	5	4
597	517 TO 589		1282 TO 1302	5	4
598	517 TO 589		1334 TO 1350	5	4
599	517 TO 589		1386 TO 1394	5	4
600	517 TO 589		1422 TO 1446	5	4
601	517 TO 589		1470 TO 1476	5	4
602	517 TO 589		1482 TO 1498	5	4
603	517 TO 589		1554 TO 1582	5	4
604	517 TO 589		1614 TO 1638	5	4
605	517 TO 589		1638 TO 1646	5	4
606	517 TO 589		1648 TO 1666	5	4
607	517 TO 589		1666 TO 1686	5	4
608	517 TO 589		1690 TO 1708	5	4
609	517 TO 589		1732 TO 1742	5	4
610	517 TO 589		1752 TO 1758	5	4
611	517 TO 589		1774 TO 1784	5	4
612	517 TO 589		1820 TO 1827	5	4
613	517 TO 589		1863 TO 1881	5	4
614	517 TO 589		1883 TO 1891	5	4
615	517 TO 589		1905 TO 1919	5	4
616	517 TO 589		1919 TO 1927	5	4
617	517 TO 589		1955 TO 1975	5	4
618	517 TO 589		2005 TO 2011	5	4
619	517 TO 589		2016 TO 2020	5	4
620	517 TO 589		2071 TO 2083	5	4
621	517 TO 589		2103 TO 2111	5	4
622	517 TO 589		2111 TO 2119	5	4
623	517 TO 589		2155 TO 2165	5	4
624	517 TO 589		2169 TO 2177	5	4
625	517 TO 589		2185 TO 2191	5	4
626	517 TO 589		2279 TO 2293	5	4
627	517 TO 589		2345 TO 2351	5	4
628	517 TO 589		2373 TO 2399	5	4
629	517 TO 589		2497 TO 2509	5	4
630	517 TO 589		2527 TO 2535	5	4
631	517 TO 589		2631 TO 2639	5	4
632	517 TO 589		2695 TO 2701	5	4
633	517 TO 589		2733 TO 2743	5	4
634	517 TO 589		2765 TO 2773	5	4
635	517 TO 589		2793 TO 2799	5	4

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
636	541 TO 709		2541 TO 2549	5	4
637	589 TO 733		1158 TO 1178	5	4
**** FCR	613 TO 765.	SEE	541 TO 709 ABOVE	****	
**** FCR	709 TO 773.	SEE	373 TO 445 ABOVE	****	
**** FCR	733 TO 781.	SEE	493 TO 529 ABOVE	****	
**** FCR	773 TO 797.	SEE	517 TO 589 ABOVE	****	
**** FCR	781 TO 805.	SEE	37 TO 109 ABOVE	****	
**** FCR	789 TO 821.	SEE	49 TO 121 ABOVE	****	
**** FCR	757 TO 837.	SEE	37 TO 109 ABOVE	****	
**** FCR	805 TO 853.	SEE	49 TO 121 ABOVE	****	
**** FCR	821 TO 869.	SEE	37 TO 109 ABOVE	****	
**** FCR	837 TO 870.	SEE	49 TO 121 ABOVE	****	
**** FCR	853 TO 894.	SEE	121 TO 157 ABOVE	****	
**** FCR	869 TO 898.	SEE	145 TO 217 ABOVE	****	
**** FCR	870 TO 902.	SEE	493 TO 529 ABOVE	****	
**** FCR	898 TO 914.	SEE	517 TO 589 ABOVE	****	
**** FCR	902 TO 922.	SEE	121 TO 157 ABOVE	****	
**** FCR	922 TO 942.	SEE	145 TO 217 ABOVE	****	
**** FCR	930 TO 946.	SEE	49 TO 121 ABOVE	****	
**** FCR	934 TO 948.	SEE	37 TO 109 ABOVE	****	
**** FCR	942 TO 952.	SEE	49 TO 121 ABOVE	****	
**** FCR	946 TO 954.	SEE	121 TO 157 ABOVE	****	
**** FCR	948 TO 956.	SEE	145 TO 217 ABOVE	****	
**** FCR	952 TO 958.	SEE	493 TO 529 ABOVE	****	
**** FCR	954 TO 962.	SEE	517 TO 589 ABOVE	****	
**** FCR	956 TO 966.	SEE	37 TO 109 ABOVE	****	
**** FCR	958 TO 970.	SEE	49 TO 121 ABOVE	****	
**** FCR	962 TO 978.	SEE	121 TO 157 ABOVE	****	
**** FCR	966 TO 1002.	SEE	145 TO 217 ABOVE	****	
**** FCR	970 TO 1014.	SEE	49 TO 121 ABOVE	****	
**** FCR	978 TO 1022.	SEE	37 TO 109 ABOVE	****	
**** FCR	1002 TO 1026.	SEE	49 TO 121 ABOVE	****	
**** FCR	1014 TO 1034.	SEE	37 TO 109 ABOVE	****	
**** FCR	1022 TO 1042.	SEE	49 TO 121 ABOVE	****	
**** FCR	1026 TO 1050.	SEE	37 TO 109 ABOVE	****	
**** FCR	1034 TO 1070.	SEE	49 TO 121 ABOVE	****	
**** FCR	1042 TO 1074.	SEE	121 TO 157 ABOVE	****	
**** FCR	1050 TO 1082.	SEE	145 TO 217 ABOVE	****	
**** FCR	1070 TO 1086.	SEE	49 TO 121 ABOVE	****	
**** FCR	1074 TO 1094.	SEE	121 TO 157 ABOVE	****	
**** FCR	1082 TO 1102.	SEE	145 TO 217 ABOVE	****	
**** FCR	1086 TO 1104.	SEE	493 TO 529 ABOVE	****	
**** FCR	1102 TO 1110.	SEE	517 TO 589 ABOVE	****	
**** FCR	1104 TO 1118.	SEE	37 TO 109 ABOVE	****	
**** FCR	1106 TO 1126.	SEE	49 TO 121 ABOVE	****	
**** FCR	1110 TO 1130.	SEE	37 TO 109 ABOVE	****	
**** FCR	1118 TO 1134.	SEE	49 TO 121 ABOVE	****	
**** FCR	1126 TO 1140.	SEE	37 TO 109 ABOVE	****	
**** FCR	1130 TO 1142.	SEE	49 TO 121 ABOVE	****	
**** FCR	1134 TO 1146.	SEE	37 TO 109 ABOVE	****	
**** FCR	1140 TO 1158.	SEE	49 TO 121 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
638	1146 TO 1170		2089 TO 2099	5	4
639	1158 TO 1178		1178 TO 1198	5	4
640	1158 TO 1178		2429 TO 2435	5	4
641	1158 TO 1178		2619 TO 2627	5	4
**** FCR	1166 TO 1182.	SEE	169 TO 373 ABOVE	****	
**** FCF	1170 TO 1190.	SEE	241 TO 421 ABOVE	****	
**** FCR	1178 TO 1198.	SEE	589 TO 733 ABOVE	****	
**** FCF	1182 TO 1202.	SEE	541 TO 709 ABOVE	****	
**** FCR	1190 TO 1206.	SEE	373 TO 445 ABOVE	****	
**** FCF	1198 TO 1210.	SEE	49 TO 121 ABOVE	****	
**** FCR	1202 TO 1218.	SEE	121 TO 157 ABOVE	****	
**** FCF	1206 TO 1242.	SEE	145 TO 217 ABOVE	****	
**** FCR	1210 TO 1266.	SEE	49 TO 121 ABOVE	****	
**** FCF	1218 TO 1270.	SEE	37 TO 109 ABOVE	****	
**** FCR	1242 TO 1274.	SEE	49 TO 121 ABOVE	****	
**** FCR	1266 TO 1282.	SEE	37 TO 109 ABOVE	****	
**** FCR	1270 TO 1286.	SEE	493 TO 529 ABOVE	****	
**** FCR	1274 TO 1294.	SEE	517 TO 589 ABOVE	****	
**** FCR	1282 TO 1302.	SEE	121 TO 157 ABOVE	****	
642	1286 TO 1306		2093 TO 2103	5	4
643	1286 TO 1306		2543 TO 2553	5	4
**** FCR	1294 TO 1314.	SEE	541 TO 709 ABOVE	****	
**** FCR	1302 TO 1318.	SEE	373 TO 445 ABOVE	****	
**** FCR	1306 TO 1320.	SEE	49 TO 121 ABOVE	****	
**** FCR	1314 TO 1324.	SEE	37 TO 109 ABOVE	****	
**** FCR	1318 TO 1326.	SEE	493 TO 529 ABOVE	****	
**** FCR	1326 TO 1334.	SEE	517 TO 589 ABOVE	****	
**** FCR	1328 TO 1338.	SEE	37 TO 109 ABOVE	****	
**** FCR	1330 TO 1342.	SEE	49 TO 121 ABOVE	****	
**** FCR	1334 TO 1350.	SEE	121 TO 157 ABOVE	****	
**** FCR	1338 TO 1354.	SEE	145 TO 217 ABOVE	****	
**** FCR	1342 TO 1370.	SEE	157 TO 241 ABOVE	****	
644	1350 TO 1374		1454 TO 1470	5	4
645	1350 TO 1374		1518 TO 1542	5	4
646	1350 TO 1374		1891 TO 1903	5	4
647	1350 TO 1374		2027 TO 2059	5	4
648	1350 TO 1374		2219 TO 2237	5	4
649	1350 TO 1374		2283 TO 2275	5	4
650	1350 TO 1374		2459 TO 2477	5	4
651	1350 TO 1374		2557 TO 2563	5	4
652	1350 TO 1374		2615 TO 2625	5	4
653	1350 TO 1374		2639 TO 2651	5	4
654	1354 TO 1378		1446 TO 1466	5	4
655	1354 TO 1378		2025 TO 2055	5	4
656	1354 TO 1378		2121 TO 2139	5	4
657	1354 TO 1378		2195 TO 2235	5	4
658	1354 TO 1378		2259 TO 2273	5	4
659	1354 TO 1378		2458 TO 2475	5	4
**** FCR	1374 TO 1386.	SEE	145 TO 217 ABOVE	****	
**** FCR	1378 TO 1388.	SEE	493 TO 529 ABOVE	****	
**** FCR	1382 TO 1392.	SEE	517 TO 589 ABOVE	****	

PATTEFN	NCTES	RELATED TO	NOTES	TEST	LFNGTH
****	FCR 1386 TO 1394.	SEE	121 TO 157 ABOVE	****	
****	FCR 1388 TO 1398.	SEE	145 TO 217 ABOVE	****	
****	FCR 1392 TO 1422.	SEE	49 TO 121 ABOVE	****	
****	FCR 1394 TO 1430.	SEE	37 TO 109 ABOVE	****	
****	FCR 1398 TO 1438.	SEE	49 TO 121 ABOVE	****	
****	FCR 1422 TO 1446.	SEE	121 TO 157 ABOVE	****	
****	FCR 1430 TO 1454.	SEE	145 TO 217 ABOVE	****	
****	FOR 1438 TO 1458.	SEE	493 TO 529 ABOVE	****	
660	1446 TO 1466		1895 TO 1905	5	4
661	1446 TO 1466		1943 TO 1953	5	4
662	1446 TO 1466		2051 TO 2063	5	4
663	1446 TO 1466		2139 TO 2147	5	4
664	1446 TO 1466		2227 TO 2239	5	4
665	1446 TO 1466		2267 TO 2277	5	4
666	1446 TO 1466		2315 TO 2325	5	4
667	1446 TO 1466		2434 TO 2441	5	4
668	1446 TO 1466		2467 TO 2479	5	4
669	1446 TO 1466		2645 TO 2653	5	4
670	1446 TO 1466		2781 TO 2789	5	4
****	FOR 1454 TO 1470.	SEE	1350 TO 1374 ABOVE	****	
****	FOR 1458 TO 1472.	SEE	373 TO 445 ABOVE	****	
****	FCR 1466 TO 1474.	SEE	49 TO 121 ABOVE	****	
****	FOR 1470 TO 1476.	SEE	121 TO 157 ABOVE	****	
****	FCR 1474 TO 1482.	SEE	145 TO 217 ABOVE	****	
****	FOR 1476 TO 1486.	SEE	493 TO 529 ABOVE	****	
****	FCR 1480 TO 1494.	SEE	517 TO 589 ABOVE	****	
****	FCR 1482 TO 1498.	SEE	121 TO 157 ABOVE	****	
****	FCR 1506 TO 1526.	SEE	145 TO 217 ABOVE	****	
****	FCR 1510 TO 1534.	SEE	157 TO 241 ABOVE	****	
****	FOR 1518 TO 1542.	SEE	1350 TO 1374 ABOVE	****	
****	FCR 1526 TO 1546.	SEE	373 TO 445 ABOVE	****	
****	FCR 1534 TO 1554.	SEE	49 TO 121 ABOVE	****	
****	FCR 1542 TO 1578.	SEE	37 TO 109 ABOVE	****	
****	FOR 1546 TO 1580.	SEE	49 TO 121 ABOVE	****	
****	FOR 1554 TO 1582.	SEE	121 TO 157 ABOVE	****	
****	FOR 1582 TO 1614.	SEE	145 TO 217 ABOVE	****	
****	FCR 1586 TO 1626.	SEE	493 TO 529 ABOVE	****	
****	FCR 1590 TO 1630.	SEE	517 TO 589 ABOVE	****	
****	FCR 1614 TO 1638.	SEE	121 TO 157 ABOVE	****	
****	FOR 1626 TO 1640.	SEE	145 TO 217 ABOVE	****	
****	FOR 1630 TO 1644.	SEE	49 TO 121 ABOVE	****	
****	FCR 1638 TO 1646.	SEE	121 TO 157 ABOVE	****	
****	FCR 1640 TO 1648.	SEE	145 TO 217 ABOVE	****	
****	FCR 1644 TO 1650.	SEE	493 TO 529 ABOVE	****	
****	FOR 1646 TO 1662.	SEE	517 TO 589 ABOVE	****	
****	FCR 1648 TO 1666.	SEE	121 TO 157 ABOVE	****	
****	FCR 1650 TO 1674.	SEE	145 TO 217 ABOVE	****	
****	FCR 1662 TO 1682.	SEE	49 TO 121 ABOVE	****	
****	FCR 1666 TO 1686.	SEE	121 TO 157 ABOVE	****	
****	FCR 1674 TO 1690.	SEE	145 TO 217 ABOVE	****	
****	FCR 1682 TO 1698.	SEE	493 TO 529 ABOVE	****	

PATTERN	NCTES	RELATED TC	NOTES	TEST	LENGTH
**** FOR 1686 TO 1706.	SEE	517 TO	589 ABOVE	****	
**** FCR 1690 TO 1708.	SEE	121 TO	157 ABOVE	****	
**** FCR 1708 TO 1722.	SEE	145 TO	217 ABOVE	****	
**** FCF 1710 TO 1726.	SEE	49 TO	121 ABOVE	****	
**** FCR 1718 TO 1728.	SEE	37 TO	109 ABOVE	****	
**** FCR 1722 TO 1732.	SEE	493 TO	529 ABOVE	****	
**** FCF 1728 TO 1738.	SEE	517 TO	589 ABOVE	****	
**** FCR 1732 TO 1742.	SEE	121 TO	157 ABOVE	****	
**** FCR 1734 TO 1752.	SEE	145 TO	217 ABOVE	****	
**** FCR 1738 TO 1754.	SEE	493 TO	529 ABOVE	****	
**** FCR 1742 TO 1756.	SEE	517 TO	589 ABOVE	****	
**** FCR 1752 TO 1758.	SEE	121 TO	157 ABOVE	****	
**** FCF 1754 TO 1762.	SEE	145 TO	217 ABOVE	****	
**** FCR 1756 TO 1768.	SEE	49 TO	121 ABOVE	****	
**** FCR 1762 TO 1772.	SEE	541 TO	709 ABOVE	****	
**** FCR 1768 TO 1774.	SEE	373 TO	445 ABOVE	****	
**** FCR 1770 TO 1778.	SEE	493 TO	529 ABOVE	****	
**** FCR 1772 TO 1782.	SEE	517 TO	589 ABOVE	****	
**** FCR 1774 TO 1784.	SEE	121 TO	157 ABOVE	****	
**** FCR 1780 TO 1814.	SEE	145 TO	217 ABOVE	****	
**** FCR 1788 TO 1818.	SEE	493 TO	529 ABOVE	****	
**** FCR 1810 TO 1819.	SEE	517 TO	589 ABOVE	****	
**** FCR 1814 TO 1820.	SEE	37 TO	109 ABOVE	****	
**** FOF 1818 TO 1822.	SEE	493 TO	529 ABOVE	****	
**** FOF 1819 TO 1824.	SEE	517 TO	589 ABOVE	****	
**** FCR 1820 TO 1827.	SEE	121 TO	157 ABOVE	****	
**** FCR 1822 TO 1828.	SEE	145 TO	217 ABOVE	****	
**** FCR 1824 TO 1830.	SEE	493 TO	529 ABOVE	****	
**** FCR 1828 TO 1847.	SEE	517 TO	589 ABOVE	****	
**** FCR 1830 TO 1855.	SEE	37 TO	109 ABOVE	****	
**** FCR 1846 TO 1863.	SEE	493 TO	529 ABOVE	****	
**** FCR 1855 TO 1875.	SEE	517 TO	589 ABOVE	****	
**** FCR 1863 TO 1881.	SEE	121 TO	157 ABOVE	****	
**** FCR 1875 TO 1885.	SEE	145 TO	217 ABOVE	****	
**** FCR 1881 TO 1887.	SEE	49 TO	121 ABOVE	****	
**** FCR 1883 TO 1891.	SEE	121 TO	157 ABOVE	****	
**** FCR 1885 TO 1895.	SEE	145 TO	217 ABOVE	****	
**** FCR 1887 TO 1901.	SEE	157 TO	241 ABOVE	****	
**** FCR 1891 TO 1903.	SEE	1350 TO	1374 ABOVE	****	
**** FCR 1895 TO 1905.	SEE	1354 TO	1378 ABOVE	****	
**** FCF 1901 TO 1907.	SEE	145 TO	217 ABOVE	****	
**** FCR 1903 TO 1915.	SEE	49 TO	121 ABOVE	****	
**** FCR 1905 TO 1919.	SEE	121 TO	157 ABOVE	****	
**** FCR 1907 TO 1921.	SEE	145 TO	217 ABOVE	****	
**** FCR 1915 TO 1925.	SEE	49 TO	121 ABOVE	****	
**** FCR 1919 TO 1927.	SEE	121 TO	157 ABOVE	****	
**** FOF 1927 TO 1933.	SEE	145 TO	217 ABOVE	****	
**** FOF 1929 TO 1935.	SEE	493 TO	529 ABOVE	****	
**** FCR 1933 TO 1943.	SEE	517 TO	589 ABOVE	****	
**** FCR 1939 TO 1951.	SEE	541 TO	709 ABOVE	****	
**** FCR 1943 TO 1953.	SEE	1354 TO	1378 ABOVE	****	

PATTERN	NCTES	RELATED TC	NOTES	TEST	LENGTH
****	FCR 1949 TO 1955.	SEE	145 TO 217	ABOVE	****
****	FCR 1951 TO 1967.	SEE	493 TO 529	ABOVE	****
****	FCR 1953 TO 1973.	SEE	517 TO 589	ABOVE	****
****	FCR 1955 TO 1975.	SEE	121 TO 157	ABOVE	****
****	FCR 1967 TO 1979.	SEE	145 TO 217	ABOVE	****
****	FOR 1973 TO 1987.	SEE	493 TO 529	ABOVE	****
****	FCR 1979 TO 2001.	SEE	517 TO 589	ABOVE	****
****	FCF 1987 TO 2003.	SEE	37 TO 109	ABOVE	****
****	FCR 1995 TO 2004.	SEE	493 TO 529	ABOVE	****
****	FCR 2004 TO 2009.	SEE	517 TO 589	ABOVE	****
****	FOR 2005 TO 2011.	SEE	121 TO 157	ABOVE	****
****	FCR 2007 TO 2013.	SEE	145 TO 217	ABOVE	****
****	FCF 2009 TO 2015.	SEE	493 TO 529	ABOVE	****
****	FCR 2011 TO 2016.	SEE	517 TO 589	ABOVE	****
****	FCR 2013 TO 2017.	SEE	37 TO 109	ABOVE	****
****	FCR 2015 TO 2019.	SEE	49 TO 121	ABOVE	****
****	FCR 2016 TO 2020.	SEE	121 TO 157	ABOVE	****
****	FCR 2017 TO 2021.	SEE	145 TO 217	ABOVE	****
****	FCF 2019 TO 2023.	SEE	49 TO 121	ABOVE	****
****	FCR 2020 TO 2024.	SEE	37 TO 109	ABOVE	****
****	FCR 2021 TO 2025.	SEE	49 TO 121	ABOVE	****
****	FCR 2023 TO 2027.	SEE	37 TO 109	ABOVE	****
****	FOR 2024 TO 2051.	SEE	493 TO 529	ABOVE	****
****	FOR 2025 TO 2055.	SEE	1446 TO 1466	ABOVE	****
****	FCR 2027 TO 2059.	SEE	1350 TO 1374	ABOVE	****
****	FCF 2051 TO 2063.	SEE	1354 TO 1378	ABOVE	****
****	FCR 2059 TO 2075.	SEE	145 TO 217	ABOVE	****
****	FCR 2063 TO 2081.	SEE	49 TO 121	ABOVE	****
****	FCR 2071 TO 2083.	SEE	121 TO 157	ABOVE	****
****	FCR 2075 TO 2089.	SEE	145 TO 217	ABOVE	****
****	FCR 2081 TO 2093.	SEE	49 TO 121	ABOVE	****
****	FCR 2089 TO 2099.	SEE	1146 TO 1170	ABOVE	****
****	FCR 2099 TO 2109.	SEE	517 TO 589	ABOVE	****
****	FCR 2103 TO 2111.	SEE	121 TO 157	ABOVE	****
****	FCR 2105 TO 2113.	SEE	145 TO 217	ABOVE	****
****	FCR 2109 TO 2117.	SEE	49 TO 121	ABOVE	****
****	FOR 2111 TO 2119.	SEE	121 TO 157	ABOVE	****
****	FCR 2117 TO 2123.	SEE	145 TO 217	ABOVE	****
****	FCF 2119 TO 2135.	SEE	493 TO 529	ABOVE	****
****	FOR 2121 TO 2139.	SEE	1446 TO 1466	ABOVE	****
****	FCR 2123 TO 2143.	SEE	169 TO 373	ABOVE	****
****	FCF 2135 TO 2145.	SEE	241 TO 421	ABOVE	****
****	FCR 2139 TO 2147.	SEE	1354 TO 1378	ABOVE	****
****	FCR 2145 TO 2155.	SEE	145 TO 217	ABOVE	****
****	FOR 2147 TO 2157.	SEE	493 TO 529	ABOVE	****

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 5 NOTES IN LENGTH --
 TONAL RETROGRADE
 WAS BEGUN AT 2056 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
671	1 TO 109		1140 TO 1166	5	5
672	1 TO 109		1756 TO 1770	5	5
673	1 TO 109		2081 TO 2095	5	5
674	1 TO 109		2769 TO 2783	5	5
675	37 TO 121		421 TO 505	5	5
676	37 TO 121		781 TO 821	5	5
677	37 TO 121		797 TO 853	5	5
678	37 TO 121		934 TO 952	5	5
679	37 TO 121		956 TO 970	5	5
680	37 TO 121		978 TO 1026	5	5
681	37 TO 121		1014 TO 1042	5	5
682	37 TO 121		1026 TO 1070	5	5
683	37 TO 121		1104 TO 1126	5	5
684	37 TO 121		1110 TO 1134	5	5
685	37 TO 121		1126 TO 1142	5	5
686	37 TO 121		1134 TO 1158	5	5
687	37 TO 121		1218 TO 1274	5	5
688	37 TO 121		1328 TO 1342	5	5
689	37 TO 121		1394 TO 1438	5	5
690	37 TO 121		1542 TO 1580	5	5
691	37 TO 121		2013 TO 2019	5	5
692	37 TO 121		2020 TO 2025	5	5
693	37 TO 121		2365 TO 2391	5	5
694	37 TO 121		2399 TO 2415	5	5
695	37 TO 121		2509 TO 2517	5	5
696	37 TO 121		2515 TO 2527	5	5
697	37 TO 121		2517 TO 2533	5	5
698	37 TO 121		2563 TO 2591	5	5
699	37 TO 121		2566 TO 2603	5	5
700	37 TO 121		2659 TO 2679	5	5
701	37 TO 121		2761 TO 2769	5	5
702	37 TO 121		2799 TO 2806	5	5
703	49 TO 133		409 TO 493	5	5
704	49 TO 133		445 TO 517	5	5
705	49 TO 133		789 TO 837	5	5
706	49 TO 133		930 TO 948	5	5
707	49 TO 133		970 TO 1022	5	5
708	49 TO 133		1002 TO 1034	5	5
709	49 TO 133		1022 TO 1050	5	5
710	49 TO 133		1106 TO 1130	5	5
711	49 TO 133		1118 TO 1140	5	5
712	49 TO 133		1130 TO 1146	5	5
713	49 TO 133		1210 TO 1270	5	5
714	49 TO 133		1242 TO 1282	5	5

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
715	49 TO 133		1306 TO 1324	5	5
716	49 TO 133		1392 TO 1430	5	5
717	49 TO 133		1534 TO 1578	5	5
718	49 TO 133		1710 TO 1728	5	5
719	49 TO 133		2019 TO 2024	5	5
720	49 TO 133		2021 TO 2027	5	5
721	49 TO 133		2175 TO 2185	5	5
722	49 TO 133		2253 TO 2263	5	5
723	49 TO 133		2291 TO 2301	5	5
724	49 TO 133		2351 TO 2363	5	5
725	49 TO 133		2391 TO 2411	5	5
726	49 TO 133		2403 TO 2419	5	5
727	49 TO 133		2439 TO 2448	5	5
728	49 TO 133		2453 TO 2459	5	5
729	49 TO 133		2503 TO 2516	5	5
730	49 TO 133		2513 TO 2519	5	5
731	49 TO 133		2516 TO 2531	5	5
732	49 TO 133		2533 TO 2543	5	5
733	49 TO 133		2561 TO 2567	5	5
734	49 TO 133		2565 TO 2599	5	5
735	49 TO 133		2567 TO 2607	5	5
736	49 TO 133		2657 TO 2663	5	5
737	49 TO 133		2661 TO 2683	5	5
738	49 TO 133		2757 TO 2805	5	5
739	49 TO 133		2801 TO 2807	5	5
**** FOR	73 TO 145.	SEE	37 TO 121	ABOVE ****	
740	109 TO 157		773 TO 805	5	5
741	109 TO 157		954 TO 966	5	5
742	109 TO 157		1102 TO 1118	5	5
743	109 TO 157		1326 TO 1338	5	5
744	109 TO 157		1810 TO 1820	5	5
745	109 TO 157		1979 TO 2003	5	5
746	109 TO 157		2011 TO 2017	5	5
747	109 TO 157		2363 TO 2375	5	5
748	109 TO 157		2483 TO 2495	5	5
749	109 TO 157		2549 TO 2559	5	5
750	109 TO 157		2679 TO 2695	5	5
751	109 TO 157		2715 TO 2733	5	5
752	109 TO 157		2743 TO 2761	5	5
753	109 TO 157		2759 TO 2767	5	5
754	121 TO 169		505 TO 589	5	5
755	121 TO 169		765 TO 797	5	5
756	121 TO 169		894 TO 914	5	5
757	121 TO 169		1094 TO 1110	5	5
758	121 TO 169		1324 TO 1334	5	5
759	121 TO 169		1726 TO 1738	5	5
760	121 TO 169		1847 TO 1875	5	5
761	121 TO 169		1931 TO 1943	5	5
762	121 TO 169		1975 TO 2001	5	5
763	121 TO 169		2003 TO 2009	5	5
764	121 TO 169		2095 TO 2109	5	5

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
765	121 TO 169		2303 TO 2315	5	5
766	121 TO 169		2361 TO 2373	5	5
767	121 TO 169		2493 TO 2503	5	5
768	121 TO 169		2547 TO 2557	5	5
769	121 TO 169		2711 TO 2729	5	5
770	121 TO 169		2789 TO 2797	5	5
**** FCR	121 TO 169.	SEE	121 TO 169	ABOVE ****	
771	133 TO 217		493 TO 541	5	5
772	133 TO 217		733 TO 789	5	5
773	133 TO 217		870 TO 910	5	5
774	133 TO 217		1086 TO 1106	5	5
775	133 TO 217		1318 TO 1328	5	5
776	133 TO 217		1722 TO 1734	5	5
777	133 TO 217		1929 TO 1939	5	5
778	133 TO 217		1973 TO 1995	5	5
779	133 TO 217		1995 TO 2005	5	5
780	133 TO 217		2191 TO 2219	5	5
781	133 TO 217		2297 TO 2305	5	5
782	133 TO 217		2359 TO 2367	5	5
783	133 TO 217		2489 TO 2499	5	5
784	133 TO 217		2707 TO 2719	5	5
785	133 TO 217		2785 TO 2795	5	5
786	145 TO 241		709 TO 781	5	5
787	145 TO 241		1768 TO 1778	5	5
788	145 TO 241		2625 TO 2633	5	5
**** FCR	145 TO 241.	SEE	145 TO 241	ABOVE ****	
789	157 TO 373		2327 TO 2347	5	5
790	157 TO 373		2607 TO 2619	5	5
**** FOR	157 TO 373.	SEE	157 TO 373	ABOVE ****	
791	241 TO 445		2323 TO 2343	5	5
792	241 TO 445		2599 TO 2613	5	5
**** FCR	241 TO 445.	SEE	241 TO 445	ABOVE ****	
793	373 TO 481		2535 TO 2547	5	5
794	373 TO 481		2553 TO 2561	5	5
795	373 TO 481		2591 TO 2611	5	5
**** FCR	409 TO 493.	SEE	49 TO 133	ABOVE ****	
**** FCR	421 TO 505.	SEE	37 TO 121	ABOVE ****	
**** FCR	445 TO 517.	SEE	49 TO 133	ABOVE ****	
796	481 TO 529		922 TO 946	5	5
797	481 TO 529		966 TO 1014	5	5
798	481 TO 529		1050 TO 1086	5	5
799	481 TO 529		1206 TO 1266	5	5
800	481 TO 529		1388 TO 1422	5	5
801	481 TO 529		1626 TO 1644	5	5
802	481 TO 529		1650 TO 1682	5	5
803	481 TO 529		1708 TO 1726	5	5
804	481 TO 529		1754 TO 1768	5	5
805	481 TO 529		1875 TO 1887	5	5
806	481 TO 529		1901 TO 1915	5	5
807	481 TO 529		1907 TO 1925	5	5
808	481 TO 529		2017 TO 2023	5	5

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
P09	481 TO 529		2059 TO 2081	5	5
P10	481 TO 529		2075 TO 2093	5	5
P11	481 TO 529		2105 TO 2117	5	5
P12	481 TO 529		2171 TO 2183	5	5
P13	481 TO 529		2247 TO 2259	5	5
P14	481 TO 529		2287 TO 2299	5	5
P15	481 TO 529		2349 TO 2361	5	5
P16	481 TO 529		2375 TO 2409	5	5
P17	481 TO 529		2435 TO 2447	5	5
P18	481 TO 529		2499 TO 2515	5	5
P19	481 TO 529		2531 TO 2541	5	5
P20	481 TO 529		2653 TO 2662	5	5
P21	481 TO 529		2767 TO 2781	5	5
P22	481 TO 529		2795 TO 2803	5	5
P23	493 TO 541		914 TO 942	5	5
P24	493 TO 541		1370 TO 1386	5	5
P25	493 TO 541		1472 TO 1482	5	5
P26	493 TO 541		1498 TO 1526	5	5
P27	493 TO 541		1580 TO 1614	5	5
P28	493 TO 541		1706 TO 1722	5	5
P29	493 TO 541		1788 TO 1814	5	5
P30	493 TO 541		1867 TO 1885	5	5
P31	493 TO 541		1925 TO 1933	5	5
P32	493 TO 541		2055 TO 2075	5	5
P33	493 TO 541		2113 TO 2123	5	5
P34	493 TO 541		2143 TO 2155	5	5
P35	493 TO 541		2157 TO 2169	5	5
P36	493 TO 541		2187 TO 2194	5	5
P37	493 TO 541		2239 TO 2257	5	5
P38	493 TO 541		2347 TO 2359	5	5
P39	493 TO 541		2475 TO 2487	5	5
P40	493 TO 541		2651 TO 2661	5	5
P41	493 TO 541		2701 TO 2711	5	5
**** FCR	493 TO 541.	SEE	493 TO 541	ABOVE ****	
P42	505 TO 589		502 TO 930	5	5
P43	505 TO 589		1470 TO 1480	5	5
P44	505 TO 589		1482 TO 1506	5	5
P45	505 TO 589		1554 TO 1586	5	5
P46	505 TO 589		1690 TO 1710	5	5
P47	505 TO 589		1774 TO 1788	5	5
P48	505 TO 589		1863 TO 1883	5	5
P49	505 TO 589		1919 TO 1929	5	5
P50	505 TO 589		2111 TO 2121	5	5
P51	505 TO 589		2155 TO 2167	5	5
P52	505 TO 589		2185 TO 2193	5	5
P53	505 TO 589		2345 TO 2355	5	5
P54	505 TO 589		2695 TO 2705	5	5
P55	613 TO 773		2537 TO 2549	5	5
P56	709 TO 781		1338 TO 1370	5	5
P57	709 TO 781		1506 TO 1534	5	5
P58	709 TO 781		1885 TO 1901	5	5

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
F59	709 TO	781	2321 TO 2339	5	5
F60	709 TO	781	2633 TO 2647	5	5
**** FCR	733 TO	789.	SEE 493 TO 541	ABOVE ****	
**** FCR	765 TO	797.	SEE 505 TO 589	ABOVE ****	
F61	773 TO	805	942 TO 954	5	5
F62	773 TO	805	958 TO 978	5	5
F63	773 TO	805	1034 TO 1074	5	5
F64	773 TO	805	1070 TO 1094	5	5
F65	773 TO	805	1198 TO 1218	5	5
F66	773 TO	805	1330 TO 1350	5	5
F67	773 TO	805	1398 TO 1446	5	5
F68	773 TO	805	1466 TO 1476	5	5
F69	773 TO	805	1546 TO 1582	5	5
F70	773 TO	805	1630 TO 1646	5	5
F71	773 TO	805	1662 TO 1686	5	5
F72	773 TO	805	1881 TO 1891	5	5
F73	773 TO	805	1903 TO 1919	5	5
F74	773 TO	805	1915 TO 1927	5	5
F75	773 TO	805	2015 TO 2020	5	5
F76	773 TO	805	2063 TO 2083	5	5
F77	773 TO	805	2109 TO 2119	5	5
F78	773 TO	805	2343 TO 2351	5	5
F79	773 TO	805	2367 TO 2399	5	5
F80	773 TO	805	2519 TO 2535	5	5
F81	773 TO	805	2763 TO 2773	5	5
**** FCR	781 TO	821.	SEE 37 TO 121	ABOVE ****	
**** FCR	789 TO	837.	SEE 49 TO 133	ABOVE ****	
**** FCR	797 TO	853.	SEE 37 TO 121	ABOVE ****	
**** FCR	805 TO	869.	SEE 49 TO 133	ABOVE ****	
**** FCR	821 TO	870.	SEE 37 TO 121	ABOVE ****	
**** FCR	837 TO	894.	SEE 109 TO 157	ABOVE ****	
**** FCR	870 TO	910.	SEE 493 TO 541	ABOVE ****	
**** FCR	894 TO	914.	SEE 505 TO 589	ABOVE ****	
F82	858 TO	922	1274 TO 1302	5	5
F83	858 TO	922	1382 TO 1394	5	5
F84	858 TO	922	1480 TO 1498	5	5
F85	858 TO	922	1590 TO 1638	5	5
F86	858 TO	922	1646 TO 1666	5	5
F87	858 TO	922	1686 TO 1708	5	5
F88	858 TO	922	1728 TO 1742	5	5
F89	858 TO	922	1742 TO 1758	5	5
F90	858 TO	922	1772 TO 1784	5	5
F91	858 TO	922	1819 TO 1827	5	5
F92	858 TO	922	1855 TO 1881	5	5
F93	858 TO	922	1953 TO 1975	5	5
F94	858 TO	922	2004 TO 2011	5	5
F95	858 TO	922	2099 TO 2111	5	5
F96	858 TO	922	2151 TO 2165	5	5
F97	858 TO	922	2167 TO 2177	5	5
F98	858 TO	922	2183 TO 2191	5	5
F99	858 TO	922	2277 TO 2293	5	5

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
900	898 TO 922		2495 TO 2509	5	5
901	898 TO 922		2629 TO 2639	5	5
902	898 TO 922		2693 TO 2701	5	5
903	898 TO 922		2729 TO 2743	5	5
904	898 TO 922		2791 TO 2799	5	5
**** FOR	902 TO 930.	SEE	121 TO 169 ABOVE ****		
**** FOR	914 TO 942.	SEE	133 TO 217 ABOVE ****		
905	922 TO 946		1266 TO 1286	5	5
906	922 TO 946		1314 TO 1326	5	5
907	922 TO 946		1718 TO 1732	5	5
908	922 TO 946		1814 TO 1822	5	5
909	922 TO 946		1987 TO 2004	5	5
910	922 TO 946		2023 TO 2051	5	5
911	922 TO 946		2177 TO 2187	5	5
912	922 TO 946		2255 TO 2267	5	5
913	922 TO 946		2293 TO 2303	5	5
914	922 TO 946		2355 TO 2365	5	5
915	922 TO 946		2409 TO 2423	5	5
916	922 TO 946		2441 TO 2449	5	5
917	922 TO 946		2455 TO 2467	5	5
918	922 TO 946		2487 TO 2497	5	5
919	922 TO 946		2662 TO 2687	5	5
920	922 TO 946		2683 TO 2697	5	5
921	922 TO 946		2719 TO 2735	5	5
922	922 TO 946		2751 TO 2763	5	5
**** FOR	930 TO 948.	SEE	49 TO 133 ABOVE ****		
**** FOR	934 TO 952.	SEE	37 TO 121 ABOVE ****		
**** FOR	942 TO 954.	SEE	109 TO 157 ABOVE ****		
**** FOR	946 TO 956.	SEE	853 TO 898 ABOVE ****		
**** FOR	948 TO 958.	SEE	869 TO 902 ABOVE ****		
923	952 TO 962		962 TO 1002	5	5
924	952 TO 962		1042 TO 1082	5	5
925	952 TO 962		1074 TO 1102	5	5
926	952 TO 962		1202 TO 1242	5	5
927	952 TO 962		1334 TO 1354	5	5
928	952 TO 962		1386 TO 1398	5	5
929	952 TO 962		1422 TO 1454	5	5
930	952 TO 962		1614 TO 1640	5	5
931	952 TO 962		1638 TO 1648	5	5
932	952 TO 962		1648 TO 1674	5	5
933	952 TO 962		1666 TO 1690	5	5
934	952 TO 962		1732 TO 1752	5	5
935	952 TO 962		1752 TO 1762	5	5
936	952 TO 962		1820 TO 1828	5	5
937	952 TO 962		1883 TO 1895	5	5
938	952 TO 962		1905 TO 1921	5	5
939	952 TO 962		1955 TO 1979	5	5
940	952 TO 962		2005 TO 2013	5	5
941	952 TO 962		2016 TO 2021	5	5
942	952 TO 962		2071 TO 2089	5	5
943	952 TO 962		2103 TO 2113	5	5

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
944	952 TO 962		2169 TO 2181	5	5
945	952 TO 962		2279 TO 2297	5	5
946	952 TO 962		2373 TO 2403	5	5
947	952 TO 962		2497 TO 2513	5	5
948	952 TO 962		2527 TO 2537	5	5
949	952 TO 962		2631 TO 2645	5	5
950	952 TO 962		2733 TO 2751	5	5
951	952 TO 962		2765 TO 2775	5	5
952	952 TO 962		2793 TO 2801	5	5
**** FCR	954 TO 966.	SEF	773 TO 805 ABOVE	****	
**** FCR	956 TO 970.	SEF	37 TO 121 ABOVE	****	
**** FCR	958 TO 978.	SEF	109 TO 157 ABOVE	****	
**** FCR	962 TO 1002.	SEE	853 TO 898 ABOVE	****	
**** FCR	966 TO 1014.	SEE	922 TO 946 ABOVE	****	
**** FCR	970 TO 1022.	SEE	49 TO 133 ABOVE	****	
**** FCR	978 TO 1026.	SEE	37 TO 121 ABOVE	****	
**** FCR	1002 TO 1034.	SEE	49 TO 133 ABOVE	****	
**** FCR	1014 TO 1042.	SEF	37 TO 121 ABOVE	****	
**** FCR	1022 TO 1050.	SEF	49 TO 133 ABOVE	****	
**** FCR	1026 TO 1070.	SEF	37 TO 121 ABOVE	****	
**** FCR	1034 TO 1074.	SEF	109 TO 157 ABOVE	****	
**** FCR	1042 TO 1082.	SEE	853 TO 898 ABOVE	****	
**** FCR	1050 TO 1086.	SEF	922 TO 946 ABOVE	****	
**** FCR	1070 TO 1094.	SEF	109 TO 157 ABOVE	****	
**** FCR	1074 TO 1102.	SEF	853 TO 898 ABOVE	****	
**** FCR	1082 TO 1104.	SEF	869 TO 902 ABOVE	****	
**** FCR	1086 TO 1106.	SEE	493 TO 541 ABOVE	****	
**** FCR	1094 TO 1110.	SEE	505 TO 589 ABOVE	****	
**** FCR	1102 TO 1118.	SEF	773 TO 805 ABOVE	****	
**** FCR	1104 TO 1126.	SEE	37 TO 121 ABOVE	****	
**** FCR	1106 TO 1130.	SEE	49 TO 133 ABOVE	****	
**** FCR	1110 TO 1134.	SEF	37 TO 121 ABOVE	****	
**** FCR	1118 TO 1140.	SEE	49 TO 133 ABOVE	****	
**** FCR	1126 TO 1142.	SEF	37 TO 121 ABOVE	****	
**** FCR	1130 TO 1146.	SEF	49 TO 133 ABOVE	****	
**** FCR	1134 TO 1158.	SEE	37 TO 121 ABOVE	****	
953	1166 TO 1190		2123 TO 2145	5	5
954	1166 TO 1190		2325 TO 2345	5	5
955	1166 TO 1190		2403 TO 2615	5	5
**** FCR	1182 TO 1206.	SEF	613 TO 773 ABOVE	****	
**** FCR	1190 TO 1210.	SEE	373 TO 481 ABOVE	****	
**** FCR	1198 TO 1218.	SEF	109 TO 157 ABOVE	****	
**** FCR	1202 TO 1242.	SEF	853 TO 898 ABOVE	****	
**** FCR	1206 TO 1266.	SEF	922 TO 946 ABOVE	****	
**** FCR	1210 TO 1270.	SEE	49 TO 133 ABOVE	****	
**** FCR	1218 TO 1274.	SEF	37 TO 121 ABOVE	****	
**** FCR	1242 TO 1282.	SEF	49 TO 133 ABOVE	****	
**** FCR	1266 TO 1286.	SEE	481 TO 529 ABOVE	****	
**** FCR	1270 TO 1294.	SEF	952 TO 962 ABOVE	****	
**** FCR	1274 TO 1302.	SEE	898 TO 922 ABOVE	****	
956	1286 TO 1314		2541 TO 2553	5	5

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FCR 1286 TO 1314.	SEE 1286 TO 1314 ABOVE ****				
**** FCR 1294 TO 1318.	SEE 613 TO 773 ABOVE ****				
**** FCR 1302 TO 1320.	SEE 373 TO 481 ABOVE ****				
**** FCR 1306 TO 1324.	SEE 49 TO 133 ABOVE ****				
**** FCR 1314 TO 1326.	SEE 481 TO 529 ABOVE ****				
**** FCR 1318 TO 1328.	SEE 493 TO 541 ABOVE ****				
**** FCR 1324 TO 1334.	SEE 505 TO 589 ABOVE ****				
**** FCR 1326 TO 1338.	SEE 773 TO 805 ABOVE ****				
**** FCR 1328 TO 1342.	SEE 37 TO 121 ABOVE ****				
**** FCR 1330 TO 1350.	SEE 109 TO 157 ABOVE ****				
**** FCR 1334 TO 1354.	SEE 853 TO 898 ABOVE ****				
**** FCR 1338 TO 1370.	SEE 145 TO 241 ABOVE ****				
957 1342 TO 1374	1454 TO 1472		5	5	
958 1342 TO 1374	1518 TO 1546		5	5	
959 1342 TO 1374	2557 TO 2565		5	5	
960 1350 TO 1378	1446 TO 1470		5	5	
961 1350 TO 1378	2025 TO 2059		5	5	
962 1350 TO 1378	2195 TO 2237		5	5	
963 1350 TO 1378	2259 TO 2275		5	5	
964 1350 TO 1378	2458 TO 2477		5	5	
**** FCR 1350 TO 1378.	SEE 1350 TO 1378 ABOVE ****				
965 1354 TO 1382	2194 TO 2235		5	5	
**** FCR 1354 TO 1382.	SEE 1354 TO 1382 ABOVE ****				
**** FCR 1370 TO 1386.	SEE 133 TO 217 ABOVE ****				
**** FCR 1374 TO 1388.	SEE 869 TO 902 ABOVE ****				
**** FCR 1378 TO 1392.	SEE 952 TO 962 ABOVE ****				
**** FCR 1382 TO 1394.	SEE 898 TO 922 ABOVE ****				
**** FCR 1386 TO 1398.	SEE 853 TO 898 ABOVE ****				
**** FCR 1388 TO 1422.	SEE 922 TO 946 ABOVE ****				
**** FCR 1392 TO 1430.	SEE 49 TO 133 ABOVE ****				
**** FCR 1394 TO 1438.	SEE 37 TO 121 ABOVE ****				
**** FCR 1398 TO 1446.	SEE 109 TO 157 ABOVE ****				
**** FCR 1422 TO 1454.	SEE 853 TO 898 ABOVE ****				
**** FCR 1430 TO 1458.	SEE 869 TO 902 ABOVE ****				
966 1438 TO 1466	1895 TO 1907		5	5	
967 1438 TO 1466	1943 TO 1955		5	5	
968 1438 TO 1466	2267 TO 2279		5	5	
969 1438 TO 1466	2315 TO 2327		5	5	
970 1438 TO 1466	2434 TO 2445		5	5	
971 1438 TO 1466	2781 TO 2791		5	5	
972 1446 TO 1470	1891 TO 1905		5	5	
973 1446 TO 1470	2027 TO 2063		5	5	
974 1446 TO 1470	2219 TO 2239		5	5	
975 1446 TO 1470	2263 TO 2277		5	5	
976 1446 TO 1470	2455 TO 2475		5	5	
977 1446 TO 1470	2639 TO 2653		5	5	
**** FCR 1446 TO 1470.	SEE 1446 TO 1470 ABOVE ****				
978 1454 TO 1472	1510 TO 1542		5	5	
979 1454 TO 1472	1887 TO 1903		5	5	
980 1454 TO 1472	2555 TO 2563		5	5	
981 1454 TO 1472	2613 TO 2625		5	5	

PATTERN	NCTES	RELATED TC	NOTES	TEST	LENGTH
982	1454 TO 1472		2635 TO 2651	5	5
**** FCR	1458 TO 1474.	SEE	373 TO 481 ABOVE	****	
**** FCR	1466 TO 1476.	SEE	109 TO 157 ABOVE	****	
**** FCR	1470 TO 1480.	SEE	121 TO 169 ABOVE	****	
**** FCR	1472 TO 1482.	SEE	133 TO 217 ABOVE	****	
**** FCR	1474 TO 1486.	SEE	869 TO 902 ABOVE	****	
**** FCR	1476 TO 1494.	SEE	552 TO 962 ABOVE	****	
**** FCR	1480 TO 1498.	SEE	898 TO 922 ABOVE	****	
**** FCR	1482 TO 1506.	SEE	121 TO 169 ABOVE	****	
**** FCR	1498 TO 1526.	SEE	133 TO 217 ABOVE	****	
**** FCR	1506 TO 1534.	SEE	145 TO 241 ABOVE	****	
**** FCR	1510 TO 1542.	SEE	1342 TO 1374 ABOVE	****	
**** FCR	1518 TO 1546.	SEE	1454 TO 1472 ABOVE	****	
**** FCR	1526 TO 1554.	SEE	373 TO 481 ABOVE	****	
**** FCR	1534 TO 1578.	SEE	49 TO 133 ABOVE	****	
**** FCR	1542 TO 1580.	SEE	37 TO 121 ABOVE	****	
**** FCR	1546 TO 1582.	SEE	109 TO 157 ABOVE	****	
**** FCR	1554 TO 1586.	SEE	121 TO 169 ABOVE	****	
**** FCR	1580 TO 1614.	SEE	133 TO 217 ABOVE	****	
**** FCR	1582 TO 1626.	SEE	869 TO 902 ABOVE	****	
**** FCR	1586 TO 1630.	SEE	552 TO 962 ABOVE	****	
**** FCR	1590 TO 1638.	SEE	898 TO 922 ABOVE	****	
**** FCR	1614 TO 1640.	SEE	853 TO 898 ABOVE	****	
**** FCR	1626 TO 1644.	SEE	922 TO 946 ABOVE	****	
**** FCR	1630 TO 1646.	SEE	109 TO 157 ABOVE	****	
**** FCR	1638 TO 1648.	SEE	853 TO 898 ABOVE	****	
**** FCR	1640 TO 1650.	SEE	869 TO 902 ABOVE	****	
**** FCR	1644 TO 1662.	SEE	552 TO 962 ABOVE	****	
**** FCR	1646 TO 1666.	SEE	898 TO 922 ABOVE	****	
**** FCR	1648 TO 1674.	SEE	853 TO 898 ABOVE	****	
**** FCR	1650 TO 1682.	SEE	922 TO 946 ABOVE	****	
**** FCR	1662 TO 1686.	SEE	109 TO 157 ABOVE	****	
**** FCR	1666 TO 1690.	SEE	853 TO 898 ABOVE	****	
**** FCR	1674 TO 1698.	SEE	869 TO 902 ABOVE	****	
**** FCR	1682 TO 1706.	SEE	552 TO 962 ABOVE	****	
**** FCR	1686 TO 1708.	SEE	898 TO 922 ABOVE	****	
**** FCR	1690 TO 1710.	SEE	121 TO 169 ABOVE	****	
**** FCR	1706 TO 1722.	SEE	133 TO 217 ABOVE	****	
**** FCR	1708 TO 1726.	SEE	922 TO 946 ABOVE	****	
**** FCR	1710 TO 1728.	SEE	49 TO 133 ABOVE	****	
**** FCR	1718 TO 1732.	SEE	481 TO 529 ABOVE	****	
**** FCR	1722 TO 1734.	SEE	493 TO 541 ABOVE	****	
**** FCR	1726 TO 1738.	SEE	505 TO 589 ABOVE	****	
**** FCR	1728 TO 1742.	SEE	898 TO 922 ABOVE	****	
**** FCR	1732 TO 1752.	SEE	853 TO 898 ABOVE	****	
**** FCR	1734 TO 1754.	SEE	869 TO 902 ABOVE	****	
**** FCR	1738 TO 1756.	SEE	552 TO 962 ABOVE	****	
**** FCR	1742 TO 1758.	SEE	898 TO 922 ABOVE	****	
**** FCR	1752 TO 1762.	SEE	853 TO 898 ABOVE	****	
**** FCR	1754 TO 1768.	SEE	922 TO 946 ABOVE	****	
**** FCR	1762 TO 1774.	SEE	613 TO 773 ABOVE	****	

PATTERN	NCIES	RELATFC TC	NOTES	TEST	LENGTH
**** FCR 1768 TO 1778.	SEE	709 TO 781	ABOVE	****	
**** FCR 1770 TO 1782.	SEE	952 TO 962	ABOVE	****	
**** FCR 1772 TO 1784.	SEE	898 TO 922	ABOVE	****	
**** FCR 1774 TO 1788.	SEE	121 TO 169	ABOVE	****	
**** FCR 1788 TO 1814.	SEE	133 TO 217	ABOVE	****	
**** FCF 1790 TO 1818.	SEE	869 TO 902	ABOVE	****	
**** FCR 1798 TO 1819.	SEE	952 TO 962	ABOVE	****	
**** FCR 1810 TO 1820.	SEE	773 TO 805	ABOVE	****	
**** FCR 1814 TO 1822.	SEE	481 TO 529	ABOVE	****	
**** FCR 1818 TO 1824.	SEE	952 TO 962	ABOVE	****	
**** FCF 1819 TO 1827.	SEE	898 TO 922	ABOVE	****	
**** FCR 1820 TO 1828.	SEE	853 TO 898	ABOVE	****	
**** FCR 1822 TO 1830.	SEE	869 TO 902	ABOVE	****	
**** FCR 1824 TO 1846.	SEE	493 TO 541	ABOVE	****	
**** FCR 1827 TO 1847.	SEE	505 TO 589	ABOVE	****	
**** FCR 1828 TO 1855.	SEE	773 TO 805	ABOVE	****	
**** FCF 1830 TO 1863.	SEE	481 TO 529	ABOVE	****	
**** FCR 1846 TO 1867.	SEE	493 TO 541	ABOVE	****	
**** FCR 1847 TO 1875.	SEE	505 TO 589	ABOVE	****	
**** FCR 1855 TO 1881.	SEE	898 TO 922	ABOVE	****	
**** FOR 1863 TO 1883.	SEE	121 TO 169	ABOVE	****	
**** FCR 1867 TO 1885.	SEE	133 TO 217	ABOVE	****	
**** FCR 1875 TO 1887.	SEE	922 TO 946	ABOVE	****	
**** FCR 1881 TO 1891.	SEE	109 TO 157	ABOVE	****	
**** FCR 1883 TO 1895.	SEE	853 TO 898	ABOVE	****	
**** FCR 1885 TO 1901.	SEE	145 TO 241	ABOVE	****	
**** FCR 1887 TO 1903.	SEE	1342 TO 1374	ABOVE	****	
**** FCR 1891 TO 1905.	SEE	1350 TO 1378	ABOVE	****	
983 1895 TO 1907		2024 TO 2055		5	5
984 1895 TO 1907		2119 TO 2139		5	5
985 1895 TO 1907		2257 TO 2273		5	5
986 1895 TO 1907		2457 TO 2475		5	5
**** FCR 1901 TO 1915.	SEE	922 TO 946	ABOVE	****	
**** FCR 1903 TO 1919.	SEE	109 TO 157	ABOVE	****	
**** FOR 1905 TO 1921.	SEE	853 TO 898	ABOVE	****	
**** FCR 1907 TO 1925.	SEE	922 TO 946	ABOVE	****	
**** FCR 1915 TO 1927.	SEE	109 TO 157	ABOVE	****	
**** FCR 1919 TO 1929.	SEE	121 TO 169	ABOVE	****	
**** FOR 1925 TO 1933.	SEE	133 TO 217	ABOVE	****	
**** FCF 1927 TO 1935.	SEE	869 TO 902	ABOVE	****	
**** FCR 1929 TO 1939.	SEE	493 TO 541	ABOVE	****	
**** FCR 1931 TO 1943.	SEE	505 TO 589	ABOVE	****	
**** FCR 1943 TO 1955.	SEE	1895 TO 1907	ABOVE	****	
**** FCR 1949 TO 1967.	SEE	869 TO 902	ABOVE	****	
**** FCR 1951 TO 1973.	SEE	952 TO 962	ABOVE	****	
**** FCF 1953 TO 1975.	SEE	898 TO 922	ABOVE	****	
**** FCR 1955 TO 1979.	SEE	853 TO 898	ABOVE	****	
**** FCR 1967 TO 1987.	SEE	869 TO 902	ABOVE	****	
**** FCR 1973 TO 1995.	SEE	493 TO 541	ABOVE	****	
**** FCF 1975 TO 2001.	SEE	505 TO 589	ABOVE	****	
**** FOR 1979 TO 2003.	SEE	773 TO 805	ABOVE	****	

PATTERN	NCES	RELATED TC	NOTES	TEST	LENGTH
**** FCR 1987 TO 2004.	SEE	481 TO 529	ABOVE	****	
**** FCR 1995 TO 2005.	SEE	493 TO 541	ABOVE	****	
**** FCR 2003 TO 2009.	SEE	505 TO 589	ABOVE	****	
**** FCR 2004 TO 2011.	SEE	898 TO 922	ABOVE	****	
**** FCR 2005 TO 2013.	SEE	853 TO 898	ABOVE	****	
**** FCR 2007 TO 2015.	SEE	869 TO 902	ABOVE	****	
**** FCR 2009 TO 2016.	SEE	952 TO 962	ABOVE	****	
**** FCR 2011 TO 2017.	SEE	773 TO 805	ABOVE	****	
**** FOR 2015 TO 2020.	SEE	109 TO 157	ABOVE	****	
**** FCR 2016 TO 2021.	SEE	853 TO 898	ABOVE	****	
**** FCR 2017 TO 2023.	SEE	922 TO 946	ABOVE	****	
**** FOR 2019 TO 2024.	SEE	49 TO 133	ABOVE	****	
**** FCR 2020 TO 2025.	SEE	37 TO 121	ABOVE	****	
**** FCR 2021 TO 2027.	SEE	49 TO 133	ABOVE	****	
**** FOR 2023 TO 2051.	SEE	481 TO 529	ABOVE	****	
**** FCR 2024 TO 2055.	SEE	1438 TO 1466	ABOVE	****	
**** FCR 2025 TO 2059.	SEE	1446 TO 1470	ABOVE	****	
**** FCR 2027 TO 2063.	SEE	1350 TO 1378	ABOVE	****	
**** FCR 2051 TO 2071.	SEE	1354 TO 1382	ABOVE	****	
**** FCR 2055 TO 2075.	SEE	133 TO 217	ABOVE	****	
**** FCR 2059 TO 2081.	SEE	922 TO 946	ABOVE	****	
**** FCR 2063 TO 2083.	SEE	109 TO 157	ABOVE	****	
**** FCR 2071 TO 2089.	SEE	853 TO 898	ABOVE	****	
**** FOR 2075 TO 2093.	SEE	922 TO 946	ABOVE	****	
**** FCR 2095 TO 2109.	SEE	505 TO 589	ABOVE	****	
**** FOR 2099 TO 2111.	SEE	898 TO 922	ABOVE	****	
**** FCR 2103 TO 2113.	SEE	853 TO 898	ABOVE	****	
**** FOR 2105 TO 2117.	SEE	922 TO 946	ABOVE	****	
**** FOR 2109 TO 2119.	SEE	109 TO 157	ABOVE	****	
**** FCR 2111 TO 2121.	SEE	121 TO 169	ABOVE	****	
**** FCR 2113 TO 2123.	SEE	133 TO 217	ABOVE	****	
**** FCR 2117 TO 2135.	SEE	869 TO 902	ABOVE	****	
**** FCR 2119 TO 2139.	SEE	1438 TO 1466	ABOVE	****	
**** FCR 2123 TO 2145.	SEE	1166 TO 1190	ABOVE	****	
**** FCR 2139 TO 2151.	SEE	1354 TO 1382	ABOVE	****	
**** FCR 2143 TO 2155.	SEE	133 TO 217	ABOVE	****	
**** FCR 2145 TO 2157.	SEE	869 TO 902	ABOVE	****	
**** FCR 2147 TO 2159.	SEE	952 TO 962	ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 6 NOTES IN LENGTH --
 TCNAL RETROGRADE
 WAS BEGUN AT 3065 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
987	1 TC 121		1134 TO 1166	5	6
988	37 TO 133		409 TO 505	5	6
989	37 TO 133		789 TO 853	5	6
990	37 TO 133		930 TO 952	5	6
991	37 TO 133		970 TO 1026	5	6
992	37 TO 133		1002 TO 1042	5	6
993	37 TO 133		1022 TO 1070	5	6
994	37 TO 133		1106 TO 1134	5	6
995	37 TO 133		1118 TO 1142	5	6
996	37 TC 133		1130 TO 1158	5	6
997	37 TO 133		1210 TO 1274	5	6
998	37 TO 133		1392 TO 1438	5	6
999	37 TO 133		1534 TO 1580	5	6
1000	37 TO 133		2019 TO 2025	5	6
1001	37 TO 133		2391 TO 2415	5	6
1002	37 TO 133		2503 TO 2517	5	6
1003	37 TO 133		2513 TO 2527	5	6
1004	37 TO 133		2516 TO 2533	5	6
1005	37 TO 133		2561 TO 2591	5	6
1006	37 TO 133		2565 TO 2603	5	6
1007	37 TO 133		2657 TO 2679	5	6
1008	37 TC 133		2797 TO 2806	5	6
1009	49 TO 145		421 TO 517	5	6
1010	49 TO 145		781 TO 837	5	6
1011	49 TO 145		978 TO 1034	5	6
1012	49 TO 145		1014 TO 1050	5	6
1013	49 TO 145		1104 TO 1130	5	6
1014	49 TO 145		1110 TO 1140	5	6
1015	49 TO 145		1126 TO 1146	5	6
1016	49 TO 145		1218 TO 1282	5	6
1017	49 TO 145		2020 TO 2027	5	6
1018	49 TO 145		2399 TO 2419	5	6
1019	49 TO 145		2509 TO 2519	5	6
1020	49 TO 145		2515 TO 2531	5	6
1021	49 TO 145		2563 TO 2599	5	6
1022	49 TO 145		2566 TO 2607	5	6
1023	49 TO 145		2659 TO 2683	5	6
1024	49 TC 145		2799 TO 2807	5	6
1025	73 TO 157		773 TO 821	5	6
1026	73 TO 157		954 TO 970	5	6
1027	73 TO 157		1102 TO 1126	5	6
1028	73 TO 157		1326 TO 1342	5	6
1029	73 TO 157		2011 TO 2019	5	6
1030	73 TC 157		2363 TO 2391	5	6

PATTERN	ACTES	RELATED TC	NOTES	TEST	LENGTH
1031	73 TO 157		2759 TO 2769	5	6
1032	109 TO 169		765 TO 805	5	6
1033	109 TO 169		1094 TO 1118	5	6
1034	109 TO 169		1324 TO 1338	5	6
1035	109 TO 169		1575 TO 2003	5	6
1036	109 TO 169		2361 TO 2375	5	6
1037	109 TO 169		2547 TO 2559	5	6
1038	109 TO 169		2711 TO 2733	5	6
**** FCR	109 TO 169.	SEF	109 TO 169	ABOVE ****	
1039	121 TO 217		493 TO 589	5	6
1040	121 TO 217		733 TO 797	5	6
1041	121 TO 217		870 TO 914	5	6
1042	121 TO 217		1086 TO 1110	5	6
1043	121 TO 217		1722 TO 1738	5	6
1044	121 TO 217		1929 TO 1943	5	6
1045	121 TO 217		1973 TO 2001	5	6
1046	121 TO 217		2359 TO 2373	5	6
1047	121 TO 217		2489 TO 2503	5	6
1048	121 TO 217		2785 TO 2797	5	6
1049	123 TO 241		709 TO 789	5	6
1050	241 TO 481		2591 TO 2613	5	6
1051	373 TO 493		2533 TO 2547	5	6
1052	373 TO 493		2567 TO 2611	5	6
**** FCR	409 TO 505.	SEE	49 TO 145	ABOVE ****	
**** FOR	421 TO 517.	SEE	37 TO 133	ABOVE ****	
1053	445 TO 529		922 TO 948	5	6
1054	445 TO 529		966 TO 1022	5	6
1055	445 TO 529		1206 TO 1270	5	6
1056	445 TO 529		1388 TO 1430	5	6
1057	445 TO 529		1708 TO 1728	5	6
1058	445 TO 529		2017 TO 2024	5	6
1059	445 TO 529		2171 TO 2185	5	6
1060	445 TO 529		2247 TO 2263	5	6
1061	445 TO 529		2287 TO 2301	5	6
1062	445 TO 529		2349 TO 2363	5	6
1063	445 TO 529		2375 TO 2411	5	6
1064	445 TO 529		2435 TO 2448	5	6
1065	445 TO 529		2499 TO 2516	5	6
1066	445 TO 529		2531 TO 2543	5	6
1067	445 TO 529		2653 TO 2663	5	6
1068	445 TO 529		2795 TO 2805	5	6
1069	481 TO 541		914 TO 946	5	6
1070	481 TO 541		1706 TO 1726	5	6
1071	481 TO 541		1867 TO 1887	5	6
1072	481 TO 541		2055 TO 2081	5	6
1073	481 TO 541		2235 TO 2259	5	6
1074	481 TO 541		2347 TO 2361	5	6
1075	481 TO 541		2651 TO 2662	5	6
**** FCR	481 TO 541.	SEF	481 TO 541	ABOVE ****	
1076	493 TO 589		1470 TO 1482	5	6
1077	493 TO 589		1863 TO 1885	5	6

PATTERN	NCES	RELATED TC	NOTES	TEST	LENGTH
1C78	493 TO 589		2111 TO 2123	5	6
1C79	493 TO 589		2155 TO 2169	5	6
1C80	493 TO 589		2185 TO 2194	5	6
1C81	493 TO 589		2345 TO 2359	5	6
1C82	709 TO 789		1498 TO 1534	5	6
**** FCR	709 TO 789.	SEE	709 TO 789 ABOVE ****		
**** FCR	733 TO 797.	SEE	493 TO 589 ABOVE ****		
1C83	765 TO 805		1466 TO 1480	5	6
1C84	765 TO 805		1546 TO 1586	5	6
1C85	765 TO 805		1915 TO 1929	5	6
1C86	765 TO 805		2109 TO 2121	5	6
1C87	765 TO 805		2343 TO 2355	5	6
1C88	773 TO 821		934 TO 954	5	6
1C89	773 TO 821		956 TO 978	5	6
1C90	773 TO 821		1026 TO 1074	5	6
1C91	773 TO 821		1328 TO 1350	5	6
1C92	773 TO 821		1394 TO 1446	5	6
1C93	773 TO 821		1542 TO 1582	5	6
1C94	773 TO 821		2013 TO 2020	5	6
1C95	773 TO 821		2365 TO 2399	5	6
1C96	773 TO 821		2517 TO 2535	5	6
1C97	773 TO 821		2761 TO 2773	5	6
**** FCR	773 TO 821.	SEE	773 TO 821 ABOVE ****		
**** FCR	781 TO 837.	SEE	37 TO 133 ABOVE ****		
**** FCR	789 TO 853.	SEE	49 TO 145 ABOVE ****		
**** FCR	797 TO 869.	SEE	37 TO 133 ABOVE ****		
**** FCR	805 TO 870.	SEE	49 TO 145 ABOVE ****		
**** FCR	821 TO 894.	SEE	73 TO 157 ABOVE ****		
**** FCR	853 TO 902.	SEE	853 TO 902 ABOVE ****		
**** FCR	869 TO 910.	SEE	869 TO 910 ABOVE ****		
**** FCR	870 TO 914.	SEE	493 TO 589 ABOVE ****		
1C98	894 TO 922		1480 TO 1506	5	6
1C99	894 TO 922		1686 TO 1710	5	6
1100	894 TO 922		1772 TO 1788	5	6
1101	894 TO 922		1855 TO 1883	5	6
1102	894 TO 922		2151 TO 2167	5	6
1103	894 TO 922		2183 TO 2193	5	6
1104	894 TO 922		2693 TO 2705	5	6
1105	898 TO 930		1726 TO 1742	5	6
1106	898 TO 930		1847 TO 1881	5	6
1107	898 TO 930		2003 TO 2011	5	6
1108	898 TO 930		2095 TO 2111	5	6
1109	898 TO 930		2493 TO 2509	5	6
1110	898 TO 930		2789 TO 2799	5	6
**** FCR	898 TO 930.	SEE	898 TO 930 ABOVE ****		
1111	902 TO 934		1320 TO 1334	5	6
1112	902 TO 934		2001 TO 2009	5	6
1113	902 TO 934		2301 TO 2315	5	6
1114	902 TO 934		2709 TO 2729	5	6
1115	910 TO 942		1318 TO 1330	5	6
1116	910 TO 942		1995 TO 2007	5	6

PATTERN	NCES	RELATED TC	NOTES	TEST	LENGTH
1117	910 TO 942		2191 TO 2227	5	6
1118	910 TO 942		2297 TO 2307	5	6
1119	910 TO 942		2707 TO 2727	5	6
**** FCR	910 TO 942.	SEF	910 TO 942 ABOVE ****		
1120	914 TO 946		1314 TO 1328	5	6
1121	914 TO 946		1718 TO 1734	5	6
1122	914 TO 946		1987 TO 2005	5	6
1123	914 TO 946		2293 TO 2305	5	6
1124	914 TO 946		2355 TO 2367	5	6
1125	914 TO 946		2487 TO 2499	5	6
1126	922 TO 948		1242 TO 1286	5	6
1127	922 TO 948		1306 TO 1326	5	6
1128	922 TO 948		1710 TO 1732	5	6
1129	922 TO 948		2021 TO 2051	5	6
1130	922 TO 948		2175 TO 2187	5	6
1131	922 TO 948		2253 TO 2267	5	6
1132	922 TO 948		2291 TO 2303	5	6
1133	922 TO 948		2351 TO 2365	5	6
1134	922 TO 948		2403 TO 2423	5	6
1135	922 TO 948		2439 TO 2449	5	6
1136	922 TO 948		2453 TO 2467	5	6
1137	922 TO 948		2661 TO 2687	5	6
**** FCR	922 TO 948.	SEF	922 TO 948 ABOVE ****		
**** FCR	930 TO 952.	SEF	49 TO 145 ABOVE ****		
**** FCR	934 TO 954.	SEE	73 TO 157 ABOVE ****		
**** FCR	942 TO 956.	SEF	837 TO 898 ABOVE ****		
**** FCR	946 TO 958.	SEF	853 TO 902 ABOVE ****		
1138	948 TO 962		1074 TO 1104	5	6
1139	948 TO 962		1422 TO 1458	5	6
1140	948 TO 962		1638 TO 1650	5	6
1141	948 TO 962		1666 TO 1698	5	6
1142	948 TO 962		1732 TO 1754	5	6
1143	948 TO 962		1820 TO 1830	5	6
1144	948 TO 962		1955 TO 1987	5	6
1145	948 TO 962		2005 TO 2015	5	6
1146	948 TO 962		2733 TO 2755	5	6
1147	952 TO 966		1034 TO 1082	5	6
1148	952 TO 966		1070 TO 1102	5	6
1149	952 TO 966		1198 TO 1242	5	6
1150	952 TO 966		1330 TO 1354	5	6
1151	952 TO 966		1398 TO 1454	5	6
1152	952 TO 966		1630 TO 1648	5	6
1153	952 TO 966		1662 TO 1690	5	6
1154	952 TO 966		1881 TO 1895	5	6
1155	952 TO 966		1903 TO 1921	5	6
1156	952 TO 966		2015 TO 2021	5	6
1157	952 TO 966		2063 TO 2089	5	6
1158	952 TO 966		2367 TO 2403	5	6
1159	952 TO 966		2519 TO 2537	5	6
1160	952 TO 966		2763 TO 2775	5	6
**** FCR	952 TO 966.	SEE	952 TO 966 ABOVE ****		

PATTERN	NOTES	RELATED TC	NOTES	TEST	LENGTH
**** FCF	954 TO 970.	SEE	773 TO 821 ABOVE	****	
**** FCR	956 TO 978.	SEE	73 TO 157 ABOVE	****	
**** FCR	958 TO 1002.	SEE	837 TO 898 ABOVE	****	
1161	962 TO 1014		1266 TO 1294	5	6
1162	962 TO 1014		1814 TO 1824	5	6
1163	962 TO 1014		2177 TO 2189	5	6
1164	962 TO 1014		2409 TO 2429	5	6
1165	962 TO 1014		2441 TO 2452	5	6
1166	962 TO 1014		2662 TO 2693	5	6
1167	962 TO 1014		2683 TO 2699	5	6
1168	962 TO 1014		2719 TO 2739	5	6
1169	962 TO 1014		2751 TO 2765	5	6
**** FCR	966 TO 1022.	SEE	922 TO 948 ABOVE	****	
**** FCR	970 TO 1026.	SEE	49 TO 145 ABOVE	****	
**** FCR	978 TO 1034.	SEE	37 TO 133 ABOVE	****	
**** FCF	1002 TO 1042.	SEE	49 TO 145 ABOVE	****	
**** FOR	1014 TO 1050.	SEE	37 TO 133 ABOVE	****	
**** FCR	1022 TO 1070.	SEE	49 TO 145 ABOVE	****	
**** FGR	1026 TO 1074.	SEE	73 TO 157 ABOVE	****	
**** FCR	1034 TO 1082.	SEE	837 TO 898 ABOVE	****	
**** FCR	1042 TO 1086.	SEE	962 TO 1014 ABOVE	****	
1170	1050 TO 1094		1810 TO 1822	5	6
1171	1050 TO 1094		1979 TO 2004	5	6
1172	1050 TO 1094		2483 TO 2497	5	6
1173	1050 TO 1094		2679 TO 2697	5	6
1174	1050 TO 1094		2715 TO 2735	5	6
1175	1050 TO 1094		2743 TO 2763	5	6
**** FOR	1070 TO 1102.	SEE	837 TO 898 ABOVE	****	
**** FCR	1074 TO 1104.	SEE	853 TO 902 ABOVE	****	
**** FCF	1082 TO 1106.	SEE	869 TO 910 ABOVE	****	
**** FCR	1086 TO 1110.	SEE	493 TO 589 ABOVE	****	
**** FCR	1094 TO 1118.	SEE	765 TO 805 ABOVE	****	
**** FOR	1102 TO 1126.	SEE	773 TO 821 ABOVE	****	
**** FCR	1104 TO 1130.	SEE	37 TO 133 ABOVE	****	
**** FOR	1106 TO 1134.	SEE	49 TO 145 ABOVE	****	
**** FCR	1110 TO 1140.	SEE	37 TO 133 ABOVE	****	
**** FCR	1118 TO 1142.	SEE	49 TO 145 ABOVE	****	
**** FCR	1126 TO 1146.	SEE	37 TO 133 ABOVE	****	
**** FCR	1130 TO 1158.	SEE	49 TO 145 ABOVE	****	
1176	1182 TO 1210		2535 TO 2549	5	6
1177	1190 TO 1218		2549 TO 2561	5	6
**** FCR	1198 TO 1242.	SEE	837 TO 898 ABOVE	****	
**** FOR	1202 TO 1266.	SEE	962 TO 1014 ABOVE	****	
**** FCR	1206 TO 1270.	SEE	922 TO 948 ABOVE	****	
**** FOR	1210 TO 1274.	SEE	49 TO 145 ABOVE	****	
**** FCR	1218 TO 1282.	SEE	37 TO 133 ABOVE	****	
**** FCF	1242 TO 1286.	SEE	445 TO 529 ABOVE	****	
1178	1266 TO 1294		1386 TO 1422	5	6
1179	1266 TO 1294		1614 TO 1644	5	6
1180	1266 TO 1294		1648 TO 1682	5	6
1181	1266 TO 1294		1752 TO 1768	5	6

PATTERN	NCTES	RELATED TC	NOTES	TEST	LENGTH
1182	1266 TC 1294		1905 TO 1925	5	6
1183	1266 TO 1294		2016 TO 2023	5	6
1184	1266 TO 1294		2071 TO 2093	5	6
1185	1266 TO 1294		2103 TO 2117	5	6
1186	1266 TO 1294		2169 TO 2183	5	6
1187	1266 TO 1294		2279 TO 2299	5	6
1188	1266 TO 1294		2373 TO 2409	5	6
1189	1266 TO 1294		2497 TO 2515	5	6
1190	1266 TO 1294		2527 TO 2541	5	6
1191	1266 TO 1294		2765 TO 2781	5	6
1192	1266 TO 1294		2793 TO 2803	5	6
1193	1270 TO 1302		1382 TO 1398	5	6
1194	1270 TO 1302		1590 TO 1640	5	6
1195	1270 TO 1302		1646 TO 1674	5	6
1196	1270 TO 1302		1728 TO 1752	5	6
1197	1270 TO 1302		1742 TO 1762	5	6
1198	1270 TO 1302		1819 TO 1828	5	6
1199	1270 TO 1302		1953 TO 1979	5	6
1200	1270 TO 1302		2004 TO 2013	5	6
1201	1270 TO 1302		2099 TO 2113	5	6
1202	1270 TO 1302		2167 TO 2181	5	6
1203	1270 TO 1302		2277 TO 2297	5	6
1204	1270 TO 1302		2495 TO 2513	5	6
1205	1270 TO 1302		2629 TO 2645	5	6
1206	1270 TO 1302		2729 TO 2751	5	6
1207	1270 TO 1302		2791 TO 2801	5	6
1208	1266 TO 1318		2537 TO 2553	5	6
**** FOR	1294 TO 1320.	SEE	1182 TO 1210	ABOVE ****	
**** FCR	1302 TO 1324.	SEE	373 TO 493	ABOVE ****	
**** FCR	1306 TO 1326.	SEE	445 TO 529	ABOVE ****	
**** FCR	1314 TO 1328.	SEE	481 TO 541	ABOVE ****	
1209	1318 TO 1330		1494 TO 1526	5	6
1210	1318 TO 1330		1578 TO 1614	5	6
1211	1318 TO 1330		1698 TO 1722	5	6
1212	1318 TO 1330		1784 TO 1814	5	6
1213	1318 TO 1330		1921 TO 1933	5	6
1214	1318 TO 1330		2237 TO 2257	5	6
1215	1318 TO 1330		2647 TO 2661	5	6
1216	1318 TO 1330		2699 TO 2711	5	6
1217	1320 TO 1334		1482 TO 1510	5	6
1218	1320 TO 1334		1554 TO 1590	5	6
1219	1320 TO 1334		1690 TO 1718	5	6
1220	1320 TO 1334		1774 TO 1790	5	6
1221	1320 TO 1334		1919 TO 1931	5	6
1222	1320 TO 1334		2695 TO 2707	5	6
**** FCR	1320 TO 1334.	SFE	1320 TO 1334	ABOVE ****	
**** FCR	1324 TO 1338.	SEE	765 TO 805	ABOVE ****	
**** FCR	1326 TO 1342.	SEE	773 TO 821	ABOVE ****	
**** FOR	1328 TO 1350.	SEE	73 TO 157	ABOVE ****	
**** FCR	1330 TO 1354.	SEE	837 TO 898	ABOVE ****	
1223	1334 TO 1370		1768 TO 1782	5	6

PATTERN	NOTES	RELATED TC	NOTES	TEST	LENGTH
1224	1334 TO 1370		2625 TO 2635	5	6
1225	1342 TO 1378		1446 TO 1472	5	6
**** FCR	1342 TO 1378.	SEF	1342 TO 1378 ABOVE	****	
1226	1350 TO 1382		2194 TO 2237	5	6
1227	1370 TO 1388		1527 TO 1939	5	6
1228	1370 TO 1388		1567 TO 1995	5	6
1229	1370 TO 1388		2189 TO 2219	5	6
1230	1370 TO 1388		2705 TO 2719	5	6
1231	1370 TO 1388		2783 TO 2795	5	6
**** FCR	1374 TO 1392.	SEF	948 TO 962 ABOVE	****	
**** FCR	1378 TO 1394.	SEF	1270 TO 1302 ABOVE	****	
1232	1382 TO 1398		1476 TO 1498	5	6
1233	1382 TO 1398		1586 TO 1638	5	6
1234	1382 TO 1398		1644 TO 1666	5	6
1235	1382 TO 1398		1682 TO 1708	5	6
1236	1382 TO 1398		1738 TO 1758	5	6
1237	1382 TO 1398		1770 TO 1784	5	6
1238	1382 TO 1398		1818 TO 1827	5	6
1239	1382 TO 1398		1951 TO 1975	5	6
1240	1382 TO 1398		2147 TO 2165	5	6
1241	1382 TO 1398		2165 TO 2177	5	6
1242	1382 TO 1398		2181 TO 2191	5	6
1243	1382 TO 1398		2275 TO 2293	5	6
1244	1382 TO 1398		2627 TO 2639	5	6
1245	1382 TO 1398		2687 TO 2701	5	6
1246	1382 TO 1398		2727 TO 2743	5	6
**** FCR	1386 TO 1422.	SEF	962 TO 1014 ABOVE	****	
**** FCR	1388 TO 1430.	SEF	922 TO 948 ABOVE	****	
**** FCR	1392 TO 1438.	SEE	49 TO 145 ABOVE	****	
**** FCR	1394 TO 1446.	SEE	73 TO 157 ABOVE	****	
**** FCR	1398 TO 1454.	SEF	837 TO 898 ABOVE	****	
**** FCR	1422 TO 1458.	SEF	853 TO 902 ABOVE	****	
1247	1430 TO 1466		1943 TO 1967	5	6
1248	1430 TO 1466		2267 TO 2287	5	6
1249	1430 TO 1466		2781 TO 2793	5	6
1250	1438 TO 1470		1891 TO 1907	5	6
1251	1438 TO 1470		2263 TO 2279	5	6
**** FCR	1438 TO 1470.	SEF	1438 TO 1470 ABOVE	****	
1252	1446 TO 1472		1887 TO 1905	5	6
1253	1446 TO 1472		2635 TO 2653	5	6
1254	1454 TO 1474		2553 TO 2563	5	6
**** FCR	1454 TO 1474.	SEF	1454 TO 1474 ABOVE	****	
**** FCR	1458 TO 1476.	SEE	1190 TO 1218 ABOVE	****	
**** FCR	1466 TO 1480.	SEE	109 TO 169 ABOVE	****	
**** FCR	1470 TO 1482.	SEE	121 TO 217 ABOVE	****	
**** FCR	1472 TO 1486.	SEE	1370 TO 1388 ABOVE	****	
**** FCR	1474 TO 1494.	SEF	948 TO 962 ABOVE	****	
**** FCR	1476 TO 1498.	SEF	1270 TO 1302 ABOVE	****	
**** FCR	1480 TO 1506.	SEE	898 TO 930 ABOVE	****	
**** FCR	1482 TO 1510.	SEF	902 TO 934 ABOVE	****	
**** FCR	1494 TO 1526.	SEF	910 TO 942 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FCR 1498 TO 1534. 1255 1510 TO 1546	SEE 133 TO 241 ABOVE	****	2555 TO 2565	5	6
**** FCR 1518 TO 1554.	SEE 1454 TO 1474 ABOVE	****			
**** FCR 1526 TO 1578.	SEE 373 TO 493 ABOVE	****			
**** FCR 1534 TO 1580.	SEE 49 TO 145 ABOVE	****			
**** FCR 1542 TO 1582.	SEE 73 TO 157 ABOVE	****			
**** FCR 1546 TO 1586.	SEE 109 TO 169 ABOVE	****			
**** FCR 1554 TO 1590.	SEE 902 TO 934 ABOVE	****			
**** FCR 1578 TO 1614.	SEE 910 TO 942 ABOVE	****			
**** FCR 1580 TO 1626.	SEE 1370 TO 1388 ABOVE	****			
**** FCR 1582 TO 1630.	SEE 948 TO 962 ABOVE	****			
**** FCR 1586 TO 1638.	SEE 1270 TO 1302 ABOVE	****			
**** FCR 1590 TO 1640.	SEE 1382 TO 1398 ABOVE	****			
**** FCR 1614 TO 1644.	SEE 962 TO 1014 ABOVE	****			
**** FCR 1626 TO 1646.	SEE 1050 TO 1094 ABOVE	****			
**** FCR 1630 TO 1648.	SEE 837 TO 898 ABOVE	****			
**** FCR 1638 TO 1650.	SEE 853 TO 902 ABOVE	****			
**** FCR 1640 TO 1662.	SEE 948 TO 962 ABOVE	****			
**** FCR 1644 TO 1666.	SEE 1270 TO 1302 ABOVE	****			
**** FCR 1646 TO 1674.	SEE 1382 TO 1398 ABOVE	****			
**** FCR 1648 TO 1682.	SEE 962 TO 1014 ABOVE	****			
**** FCR 1650 TO 1686.	SEE 1050 TO 1094 ABOVE	****			
**** FCR 1662 TO 1690.	SEE 837 TO 898 ABOVE	****			
**** FCR 1666 TO 1698.	SEE 853 TO 902 ABOVE	****			
**** FCR 1674 TO 1706.	SEE 948 TO 962 ABOVE	****			
**** FCR 1682 TO 1708.	SEE 1270 TO 1302 ABOVE	****			
**** FCR 1686 TO 1710.	SEE 898 TO 930 ABOVE	****			
**** FCR 1690 TO 1718.	SEE 902 TO 934 ABOVE	****			
**** FCR 1698 TO 1722.	SEE 910 TO 942 ABOVE	****			
**** FCR 1706 TO 1726.	SEE 914 TO 946 ABOVE	****			
**** FCR 1708 TO 1728.	SEE 922 TO 948 ABOVE	****			
**** FCR 1710 TO 1732.	SEE 445 TO 529 ABOVE	****			
**** FCR 1718 TO 1734.	SEE 481 TO 541 ABOVE	****			
**** FCR 1722 TO 1738.	SEE 493 TO 589 ABOVE	****			
**** FCR 1726 TO 1742.	SEE 894 TO 922 ABOVE	****			
**** FCR 1728 TO 1752.	SEE 1382 TO 1398 ABOVE	****			
**** FCR 1732 TO 1754.	SEE 853 TO 902 ABOVE	****			
**** FCR 1734 TO 1756.	SEE 948 TO 962 ABOVE	****			
**** FCR 1738 TO 1758.	SEE 1270 TO 1302 ABOVE	****			
**** FCR 1742 TO 1762.	SEE 1382 TO 1398 ABOVE	****			
**** FCR 1752 TO 1768.	SEE 962 TO 1014 ABOVE	****			
1256 1768 TO 1782	1883 TO 1901	5			6
1257 1768 TO 1782	2631 TO 2647	5			6
**** FCR 1770 TO 1784.	SEE 1270 TO 1302 ABOVE	****			
**** FCR 1772 TO 1788.	SEE 898 TO 930 ABOVE	****			
**** FCR 1774 TO 1790.	SEE 502 TO 934 ABOVE	****			
**** FCR 1784 TO 1814.	SEE 910 TO 942 ABOVE	****			
**** FCR 1788 TO 1818.	SEE 1370 TO 1388 ABOVE	****			
**** FCR 1790 TO 1819.	SEE 948 TO 962 ABOVE	****			
**** FCR 1798 TO 1820.	SEE 552 TO 966 ABOVE	****			
1258 1810 TO 1822	1875 TO 1891	5			6

PATTERN	NCTES	RELATED TC	NOTES	TEST	LENGTH
1259	1810 TO 1822		1901 TO 1919	5	6
1260	1810 TO 1822		1907 TO 1927	5	6
1261	1810 TO 1822		2059 TO 2083	5	6
1262	1810 TO 1822		2105 TO 2119	5	6
**** FCR	1814 TO 1824.	SEE	1266 TO 1294 ABOVE	****	
**** FCR	1818 TO 1827.	SEE	1270 TO 1302 ABOVE	****	
**** FCR	1819 TO 1828.	SEE	1382 TO 1398 ABOVE	****	
**** FCR	1820 TO 1830.	SEE	853 TO 902 ABOVE	****	
**** FCR	1822 TO 1846.	SEE	869 TO 910 ABOVE	****	
**** FCR	1824 TO 1847.	SEE	493 TO 589 ABOVE	****	
**** FCR	1827 TO 1855.	SEE	765 TO 805 ABOVE	****	
**** FCR	1828 TO 1863.	SEE	1810 TO 1822 ABOVE	****	
**** FCR	1830 TO 1867.	SEE	481 TO 541 ABOVE	****	
**** FCR	1846 TO 1875.	SEE	493 TO 589 ABOVE	****	
**** FCR	1847 TO 1881.	SEE	894 TO 922 ABOVE	****	
**** FCR	1855 TO 1883.	SEE	898 TO 930 ABOVE	****	
**** FCR	1863 TO 1885.	SEE	121 TO 217 ABOVE	****	
**** FCR	1867 TO 1887.	SEE	914 TO 946 ABOVE	****	
**** FCR	1875 TO 1891.	SEE	1050 TO 1094 ABOVE	****	
**** FCR	1881 TO 1895.	SEE	837 TO 898 ABOVE	****	
**** FCR	1883 TO 1901.	SEE	1334 TO 1370 ABOVE	****	
**** FCR	1887 TO 1905.	SEE	1342 TO 1378 ABOVE	****	
1263	1891 TO 1907		2024 TO 2055	5	6
1264	1891 TO 1907		2257 TO 2275	5	6
1265	1891 TO 1907		2457 TO 2477	5	6
1266	1895 TO 1915		2023 TO 2055	5	6
1267	1895 TO 1915		2255 TO 2273	5	6
1268	1895 TO 1915		2455 TO 2475	5	6
**** FCR	1895 TO 1915.	SEE	1895 TO 1915 ABOVE	****	
**** FCR	1901 TO 1919.	SEE	1050 TO 1094 ABOVE	****	
**** FCR	1903 TO 1921.	SEE	837 TO 898 ABOVE	****	
**** FCR	1905 TO 1925.	SEE	962 TO 1014 ABOVE	****	
**** FCR	1907 TO 1927.	SEE	1050 TO 1094 ABOVE	****	
**** FCR	1915 TO 1929.	SEE	109 TO 169 ABOVE	****	
**** FCR	1919 TO 1931.	SEE	902 TO 934 ABOVE	****	
**** FCR	1921 TO 1933.	SEE	910 TO 942 ABOVE	****	
**** FCR	1925 TO 1935.	SEE	1370 TO 1388 ABOVE	****	
**** FCR	1927 TO 1939.	SEE	869 TO 910 ABOVE	****	
**** FCR	1929 TO 1943.	SEE	493 TO 589 ABOVE	****	
1269	1943 TO 1967		2117 TO 2135	5	6
**** FCR	1949 TO 1973.	SEE	948 TO 962 ABOVE	****	
**** FCR	1951 TO 1975.	SEE	1270 TO 1302 ABOVE	****	
**** FCR	1953 TO 1979.	SEE	1382 TO 1398 ABOVE	****	
**** FCR	1955 TO 1987.	SEE	853 TO 902 ABOVE	****	
**** FCR	1967 TO 1995.	SEE	869 TO 910 ABOVE	****	
**** FCR	1973 TO 2001.	SEE	493 TO 589 ABOVE	****	
**** FCR	1975 TO 2003.	SEE	765 TO 805 ABOVE	****	
**** FCR	1979 TO 2004.	SEE	1810 TO 1822 ABOVE	****	
**** FCR	1987 TO 2005.	SEE	481 TO 541 ABOVE	****	
**** FCR	1995 TO 2007.	SEE	1318 TO 1330 ABOVE	****	
**** FCR	2001 TO 2009.	SEE	1320 TO 1334 ABOVE	****	

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
**** FCR 2003 TO 2011.	SEE	894 TO 922	ABOVE	****	
**** FCR 2004 TO 2013.	SEE	1382 TO 1398	ABOVE	****	
**** FCR 2005 TO 2015.	SEE	853 TO 902	ABOVE	****	
**** FCR 2007 TO 2016.	SEE	948 TO 962	ABOVE	****	
**** FCR 2009 TO 2017.	SEE	952 TO 966	ABOVE	****	
**** FCR 2011 TO 2019.	SEE	773 TO 821	ABOVE	****	
**** FCR 2013 TO 2020.	SEE	73 TO 157	ABOVE	****	
**** FCR 2015 TO 2021.	SEE	837 TO 898	ABOVE	****	
**** FCR 2016 TO 2023.	SEE	962 TO 1014	ABOVE	****	
**** FCR 2017 TO 2024.	SEE	922 TO 948	ABOVE	****	
**** FCR 2019 TO 2025.	SEE	49 TO 145	ABOVE	****	
**** FCR 2020 TO 2027.	SEE	37 TO 133	ABOVE	****	
**** FCR 2021 TO 2051.	SEE	445 TO 529	ABOVE	****	
1270 2023 TO 2055		2434 TO 2447		5	6
**** FCR 2024 TO 2059.	SEE	1438 TO 1470	ABOVE	****	
1271 2025 TO 2063		2195 TO 2239		5	6
1272 2025 TO 2063		2259 TO 2277		5	6
1273 2025 TO 2063		2458 TO 2479		5	6
**** FCR 2027 TO 2071.	SEE	1350 TO 1382	ABOVE	****	
**** FCR 2055 TO 2081.	SEE	914 TO 946	ABOVE	****	
**** FCR 2059 TO 2083.	SEE	1050 TO 1094	ABOVE	****	
**** FCR 2063 TO 2089.	SEE	837 TO 898	ABOVE	****	
**** FCR 2071 TO 2093.	SEE	962 TO 1014	ABOVE	****	
**** FCR 2095 TO 2111.	SEE	894 TO 922	ABOVE	****	
**** FCR 2099 TO 2113.	SEE	1382 TO 1398	ABOVE	****	
**** FCR 2103 TO 2117.	SEE	962 TO 1014	ABOVE	****	
**** FCR 2105 TO 2119.	SEE	1050 TO 1094	ABOVE	****	
**** FCR 2109 TO 2121.	SEE	109 TO 169	ABOVE	****	
**** FCR 2111 TO 2123.	SEE	121 TO 217	ABOVE	****	
**** FCR 2113 TO 2135.	SEE	1370 TO 1388	ABOVE	****	
**** FCR 2117 TO 2139.	SEE	1430 TO 1466	ABOVE	****	
**** FCR 2143 TO 2157.	SEE	1370 TO 1388	ABOVE	****	
**** FCR 2145 TO 2159.	SEE	948 TO 962	ABOVE	****	
**** FCR 2147 TO 2165.	SEE	1270 TO 1302	ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 7 NOTES IN LENGTH --
 TCNAL RETROGRADE
 WAS BEGUN AT 4107 SECCNDS INTO EXECUTION.

PATTERN	NOTES	RELATED TC	NOTES	TEST	LENGTH
1274	1 TC	133	1130 TO 1166	5	7
1275	37 TO	145	781 TO 853	5	7
1276	37 TO	145	578 TO 1042	5	7
1277	37 TO	145	1014 TO 1070	5	7
1278	37 TO	145	1104 TO 1134	5	7
1279	37 TO	145	1110 TO 1142	5	7
1280	37 TO	145	1126 TO 1158	5	7
1281	37 TO	145	2509 TO 2527	5	7
1282	37 TO	145	2515 TO 2533	5	7
1283	37 TO	145	2563 TO 2603	5	7
1284	49 TO	157	773 TO 837	5	7
1285	49 TO	157	1102 TO 1130	5	7
1286	73 TO	169	765 TO 821	5	7
1287	73 TO	169	1094 TO 1126	5	7
1288	73 TO	169	1324 TO 1342	5	7
1289	73 TO	169	2361 TO 2391	5	7
1290	109 TO	217	733 TO 805	5	7
1291	109 TO	217	1086 TO 1118	5	7
1292	109 TO	217	1573 TO 2003	5	7
1293	109 TO	217	2359 TO 2375	5	7
1294	121 TO	241	709 TO 797	5	7
1295	241 TO	493	2567 TO 2613	5	7
1296	273 TO	505	2566 TO 2611	5	7
1297	445 TO	541	514 TO 948	5	7
1298	445 TO	541	1706 TO 1728	5	7
1299	445 TO	541	2239 TO 2263	5	7
1300	445 TO	541	2347 TO 2363	5	7
1301	445 TO	541	2651 TO 2663	5	7
1302	481 TO	589	1863 TO 1887	5	7
1303	481 TO	589	2345 TO 2361	5	7
1304	765 TO	821	1542 TO 1586	5	7
1305	773 TO	837	930 TO 954	5	7
1306	773 TO	837	1022 TO 1074	5	7
1307	773 TO	837	1392 TO 1446	5	7
1308	773 TO	837	1534 TO 1582	5	7
1309	773 TO	837	2516 TO 2535	5	7
1310	854 TO	930	1847 TO 1883	5	7
1311	858 TO	934	2001 TO 2011	5	7
1312	902 TO	942	1318 TO 1334	5	7
1313	902 TO	942	1995 TO 2009	5	7
1314	902 TO	942	2707 TO 2729	5	7
1315	910 TO	946	1314 TO 1330	5	7
1316	910 TO	946	1987 TO 2007	5	7
1317	910 TO	946	2293 TO 2307	5	7

PATTERN	NCTES	RELATED TC	NOTES	TEST	LENGTH
1218	914 TO 948		1306 TO 1328	5	7
1319	914 TO 948		1710 TO 1734	5	7
1320	914 TO 948		2291 TO 2305	5	7
1321	914 TO 948		2351 TO 2367	5	7
1322	922 TO 952		1218 TO 1286	5	7
1323	922 TO 952		2020 TO 2051	5	7
1324	922 TO 952		2399 TO 2423	5	7
1325	922 TO 952		2659 TO 2687	5	7
1326	948 TO 966		1070 TO 1104	5	7
1327	948 TO 966		1398 TO 1458	5	7
1328	948 TO 966		1630 TO 1650	5	7
1329	948 TO 966		1662 TO 1698	5	7
1330	952 TO 970		1026 TO 1082	5	7
1331	952 TO 970		1328 TO 1354	5	7
1332	952 TO 970		1394 TO 1454	5	7
1333	952 TO 970		2013 TO 2021	5	7
1334	952 TO 970		2365 TO 2403	5	7
1335	952 TO 970		2517 TO 2537	5	7
1336	952 TO 970		2761 TO 2775	5	7
1337	962 TO 1022		1242 TO 1294	5	7
1338	962 TO 1022		2175 TO 2189	5	7
1339	962 TO 1022		2403 TO 2429	5	7
1340	962 TO 1022		2439 TO 2452	5	7
1341	962 TO 1022		2661 TO 2693	5	7
1342	1050 TO 1102		1798 TO 1822	5	7
1343	1050 TO 1102		2479 TO 2497	5	7
1344	1050 TO 1102		2663 TO 2697	5	7
1345	1050 TO 1102		2739 TO 2763	5	7
1346	1266 TO 1302		1382 TO 1422	5	7
1347	1266 TO 1302		1590 TO 1644	5	7
1348	1266 TO 1302		1646 TO 1682	5	7
1349	1266 TO 1302		1742 TO 1768	5	7
1350	1266 TO 1302		2099 TO 2117	5	7
1351	1266 TO 1302		2167 TO 2183	5	7
1352	1266 TO 1302		2277 TO 2299	5	7
1353	1266 TO 1302		2495 TO 2515	5	7
1354	1266 TO 1302		2791 TO 2803	5	7
1355	1286 TO 1320		2535 TO 2553	5	7
1356	1318 TO 1334		1554 TO 1614	5	7
1357	1318 TO 1334		1690 TO 1722	5	7
1358	1318 TO 1334		1919 TO 1933	5	7
1359	1320 TO 1338		1546 TO 1590	5	7
1360	1320 TO 1338		1915 TO 1931	5	7
1361	1370 TO 1392		1955 TO 1995	5	7
1362	1382 TO 1422		1814 TO 1827	5	7
1363	1382 TO 1422		2177 TO 2191	5	7
1364	1382 TO 1422		2683 TO 2701	5	7
1365	1382 TO 1422		2719 TO 2743	5	7
1366	1430 TO 1470		2263 TO 2287	5	7
1367	1438 TO 1472		1887 TO 1907	5	7
1368	1454 TO 1476		2549 TO 2563	5	7

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1369	1486 TO 1526		2297 TO 2311	5	7
1370	1510 TO 1554		2553 TO 2565	5	7
1371	1768 TO 1784		2429 TO 2647	5	7
1372	1810 TO 1824		1905 TO 1927	5	7
1373	1810 TO 1824		2103 TO 2119	5	7
1374	1891 TO 1915		2023 TO 2059	5	7
1375	1891 TO 1915		2255 TO 2275	5	7
1376	1891 TO 1915		2455 TO 2477	5	7
1377	2025 TO 2071		2194 TO 2239	5	7

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 8 NOTES IN LENGTH --
TGNAL RETROGRADE
WAS BEGUN AT 4133 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1378	1 TO 145		1126 TO 1166	5	8
1379	37 TO 157		773 TO 853	5	8
1380	37 TO 157		1102 TO 1134	5	8
1381	49 TO 169		765 TO 837	5	8
1382	49 TO 169		1094 TO 1130	5	8
1383	73 TO 217		733 TO 821	5	8
1384	73 TO 217		1086 TO 1126	5	8
1385	73 TO 217		2359 TO 2391	5	8
1386	109 TO 241		709 TO 805	5	8
1387	241 TO 505		2566 TO 2613	5	8
1388	373 TO 517		2565 TO 2611	5	8
1389	445 TO 589		2345 TO 2363	5	8
1390	765 TO 837		1534 TO 1586	5	8
1391	773 TO 853		1014 TO 1074	5	8
1392	773 TO 853		2515 TO 2535	5	8
1393	858 TO 942		1995 TO 2011	5	8
1394	902 TO 946		1314 TO 1334	5	8
1395	902 TO 946		1987 TO 2009	5	8
1396	910 TO 948		1306 TO 1330	5	8
1397	910 TO 948		2291 TO 2307	5	8
1398	948 TO 970		1394 TO 1458	5	8
1399	952 TO 978		1326 TO 1354	5	8
1400	952 TO 978		2011 TO 2021	5	8
1401	952 TO 978		2363 TO 2403	5	8
1402	952 TO 978		2759 TO 2775	5	8
1403	962 TO 1026		1218 TO 1294	5	8
1404	962 TO 1026		2399 TO 2429	5	8
1405	962 TO 1026		2659 TO 2693	5	8
1406	1050 TO 1104		1790 TO 1822	5	8
1407	1050 TO 1104		2477 TO 2497	5	8
1408	1050 TO 1104		2735 TO 2763	5	8
1409	1286 TO 1324		2533 TO 2553	5	8
1410	1318 TO 1338		1546 TO 1614	5	8
1411	1318 TO 1338		1515 TO 1933	5	8
1412	1320 TO 1342		1542 TO 1590	5	8
1413	1370 TO 1394		1953 TO 1995	5	8
1414	1382 TO 1430		2175 TO 2191	5	8
1415	1454 TO 1480		2547 TO 2563	5	8
1416	1810 TO 1827		2099 TO 2119	5	8

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 9 NOTES IN LENGTH --
 TCNAL RETROGRADE
 WAS BEGUN AT 4155 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TC	NOTES	TEST	LENGTH
1417	37 TO 169		765 TO 853	5	9
1418	37 TO 169		1094 TO 1134	5	9
1419	49 TO 217		733 TO 837	5	9
1420	49 TO 217		1086 TO 1130	5	9
1421	73 TO 241		709 TO 821	5	9
1422	241 TO 517		2565 TO 2613	5	9
1423	898 TO 946		1587 TO 2011	5	9
1424	902 TO 948		1306 TO 1334	5	9
1425	552 TO 1002		2009 TO 2021	5	9
1426	552 TO 1002		2755 TO 2775	5	9
1427	562 TO 1034		1210 TO 1294	5	9
1428	562 TO 1034		2391 TO 2429	5	9
1429	562 TO 1034		2657 TO 2693	5	9
1430	1050 TO 1106		1788 TO 1822	5	9
1431	1050 TO 1106		2475 TO 2497	5	9
1432	1286 TO 1326		2531 TO 2553	5	9
1433	1318 TO 1342		1542 TO 1614	5	9
1434	1370 TO 1398		1951 TO 1995	5	9

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 10 NOTES IN LENGTH --
 TONAL RETROGRADE
 WAS BEGUN AT 4173 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1425	37 TC 217		733 TO 853	5	10
1426	37 TO 217		1086 TO 1134	5	10
1437	49 TO 241		709 TO 837	5	10
1438	552 TC 1014		2751 TO 2775	5	10

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 11 NOTES IN LENGTH --
TGNAL RETROGRADE
WAS BEGUN AT 4189 SECCNDS INTO EXECUTION.

PATTERN	NCES	RELATED TC	NOTES	TEST	LENGTH
1429	37 TO 241		709 TO 853	5	11

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 12 NOTES IN LENGTH --
TUNAL RETROGRADE
WAS BEGUN AT 4205 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
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END OF TYPE I LISTING. TOTAL OF 1439 PATTERNS LOCATED.

*** TYPE II LISTING ***

JOHN DUNSTABLE ISORHYTHMIC MCTET VENI SANCTE SPIRITUS
TCNAL RETROGRADE

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	37 TC 241	2	11
SLEBPATTERN	73 TO 217	4	8
SLEBPATTERN	109 TO 217	5	7
SLEBPATTERN	73 TO 169	5	7
SLEBPATTERN	37 TC 145	10	7
SLEBPATTERN	121 TC 217	11	6
SLEBPATTERN	109 TC 169	8	6
SLEBPATTERN	73 TO 157	8	6
SLEBPATTERN	49 TC 145	17	6
SLEBPATTERN	37 TC 133	22	6
SLEBPATTERN	145 TC 241	4	5
SLEBPATTERN	133 TO 217	16	5
SLEBPATTERN	121 TC 169	18	5
SLEBPATTERN	109 TO 157	15	5
SLEBPATTERN	49 TC 133	38	5
SLEBPATTERN	37 TC 121	29	5
SLEBPATTERN	157 TO 241	13	4
SLEBPATTERN	145 TC 217	48	4
SLEBPATTERN	121 TC 157	44	4
SLEBPATTERN	49 TC 121	52	4
SLEBPATTERN	37 TC 109	65	4
SLEBPATTERN	169 TO 241	29	3
SLEBPATTERN	49 TO 109	123	3
SLEBPATTERN	37 TO 73	109	3

**** TEST 5 COMPLETED AT 4476 SECONDS INTO EXECUTION ****

***** MUSIC MELODIC PATTERN ANALYSIS *****

JCHN CUNSTABLE ISORHYTHMIC MOTET VENI SANCTE SPIRITUS

TEST REQUESTED 13
 UNITS OF DATA PER CARD 12

COMPLTER REFERENCE NUMBER ASSIGNMENT

NOTES	1	THROUGH	12								
45	C	C	C	0	C	C	C	C	0	C	0
NOTES	13	THROUGH	24								
C	C	C	C	C	C	C	C	C	0	0	0
NOTES	25	THROUGH	36								
-1	C	C	C	C	C	C	C	C	0	C	0
NOTES	37	THROUGH	48								
45	C	C	0	C	C	0	0	C	0	0	0
NOTES	49	THROUGH	60								
47	C	C	0	C	C	C	C	C	0	C	0
NOTES	61	THROUGH	72								
C	C	C	C	0	C	0	0	C	0	0	0
NOTES	73	THROUGH	84								
45	C	C	0	0	C	0	C	C	0	C	0
NOTES	85	THROUGH	96								
C	0	C	C	C	C	0	C	C	0	0	C
NOTES	97	THROUGH	108								
-1	C	C	0	C	C	0	C	C	0	C	0
NOTES	109	THROUGH	120								
50	C	0	C	0	C	0	0	C	0	C	C
NOTES	121	THROUGH	132								
49	C	0	0	0	C	0	C	C	0	C	C
NOTES	133	THROUGH	144								
50	C	0	0	0	C	0	C	C	0	0	0
NOTES	145	THROUGH	156								
47	C	C	C	0	C	0	C	C	0	C	0

The remaining portion of the list of input data for Test 13 of the Dunstable motet is identical to that shown for Test 5. In order to reduce the size of this appendix, these pages have been omitted.

The interval tables appearing with Tests 13 and 12 are also similar to the tables shown with Test 5. In order to reduce the size of this appendix, these interval tables have also been omitted.

*** TYPE I LISTING ***

JOHN DUNSTABLE ISORHYTHMIC MOTET VENI SANCTE SPIRITUS

SEARCH FOR PATTERNS OF 3 NOTES IN LENGTH --
 EXACT RHYTHM WITH TONAL INVERSION
 WAS BEGUN AT 47 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO 45		373 TO 421	13	3
2	37 TO 73		409 TO 445	13	3
3	49 TO 109		421 TO 481	13	3
4	73 TO 121		445 TO 493	13	3
5	109 TO 133		481 TO 505	13	3
6	121 TO 145		493 TO 517	13	3
7	157 TO 217		529 TO 589	13	3
8	169 TO 241		541 TO 613	13	3
**** FOR	481 TO 505.	SEE	121 TO 145	ABOVE ****	
**** FOR	493 TO 517.	SEE	109 TO 133	ABOVE ****	
9	781 TO 797		1510 TO 1526	13	3
10	789 TO 805		1026 TO 1042	13	3
11	789 TO 805		1422 TO 1438	13	3
12	902 TO 914		1534 TO 1546	13	3
13	930 TO 942		1482 TO 1494	13	3
14	934 TO 946		1306 TO 1318	13	3
15	934 TO 946		2519 TO 2531	13	3
16	942 TO 948		1314 TO 1320	13	3
17	946 TO 952		1318 TO 1324	13	3
18	946 TO 952		2175 TO 2181	13	3
19	946 TO 952		2291 TO 2297	13	3
20	946 TO 952		2435 TO 2445	13	3
21	946 TO 952		2613 TO 2619	13	3
22	946 TO 952		2727 TO 2733	13	3
23	952 TO 956		1470 TO 1474	13	3
24	952 TO 956		1752 TO 1756	13	3
25	952 TO 956		2005 TO 2009	13	3
26	952 TO 956		2185 TO 2189	13	3
27	952 TO 956		2345 TO 2349	13	3
28	952 TO 956		2553 TO 2557	13	3
29	952 TO 956		2695 TO 2699	13	3
30	952 TO 956		2761 TO 2765	13	3
31	952 TO 956		2793 TO 2797	13	3
32	952 TO 956		2799 TO 2803	13	3
33	956 TO 962		1756 TO 1762	13	3
34	956 TO 962		2257 TO 2263	13	3
35	958 TO 966		1126 TO 1134	13	3
36	962 TO 970		1682 TO 1690	13	3
**** FOR	1014 TO 1026.	SEE	902 TO 914	ABOVE ****	
37	1022 TO 1034		1282 TO 1294	13	3
**** FOR	1026 TO 1042.	SEE	781 TO 797	ABOVE ****	
**** FOR	1070 TO 1082.	SEE	930 TO 942	ABOVE ****	

	NCTES	RELATED TO	NOTES	TEST	LENGTH
OR	1074 TO 1086.	SEE	902 TO 914 ABOVE ****		
	1086 TO 1102		1690 TO 1706 13		3
	1104 TO 1110		1973 TO 1979 13		3
OR	1106 TO 1118.	SEE	1022 TO 1034 ABOVE ****		
	1110 TO 1126		1438 TO 1454 13		3
	1118 TO 1130		2591 TO 2603 13		3
	1126 TO 1134		1198 TO 1206 13		3
	1126 TO 1134		1330 TO 1338 13		3
	1126 TO 1134		2411 TO 2419 13		3
	1126 TO 1134		2599 TO 2607 13		3
	1130 TO 1140		1758 TO 1768 13		3
	1130 TO 1140		2071 TO 2081 13		3
	1130 TO 1140		2395 TO 2409 13		3
	1130 TO 1140		2419 TO 2429 13		3
	1130 TO 1140		2483 TO 2693 13		3
	1134 TO 1142		2403 TO 2411 13		3
OR	1198 TO 1206.	SEE	958 TO 966 ABOVE ****		
OR	1202 TO 1210.	SEE	562 TO 970 ABOVE ****		
OR	1266 TO 1274.	SEE	562 TO 970 ABOVE ****		
OR	1270 TO 1282.	SEE	930 TO 942 ABOVE ****		
	1282 TO 1294		1662 TO 1674 13		3
	1306 TO 1318		2279 TO 2291 13		3
	1314 TO 1320		1476 TO 1482 13		3
	1314 TO 1320		1722 TO 1728 13		3
	1314 TO 1320		1915 TO 1921 13		3
	1314 TO 1320		2537 TO 2543 13		3
	1314 TO 1320		2769 TO 2775 13		3
	1318 TO 1324		1386 TO 1392 13		3
	1318 TO 1324		1638 TO 1644 13		3
	1318 TO 1324		1919 TO 1925 13		3
	1318 TO 1324		2103 TO 2109 13		3
	1318 TO 1324		2111 TO 2117 13		3
	1318 TO 1324		2165 TO 2175 13		3
	1318 TO 1324		2487 TO 2493 13		3
	1318 TO 1324		2535 TO 2541 13		3
OR	1328 TO 1334.	SEE	556 TO 962 ABOVE ****		
OR	1330 TO 1338.	SEE	558 TO 966 ABOVE ****		
OR	1334 TO 1342.	SEE	962 TO 970 ABOVE ****		
	1378 TO 1386		1718 TO 1726 13		3
	1378 TO 1386		1774 TO 1782 13		3
	1378 TO 1386		2751 TO 2759 13		3
OR	1386 TO 1392.	SEE	946 TO 952 ABOVE ****		
OR	1422 TO 1438.	SEE	781 TO 797 ABOVE ****		
	1438 TO 1454		1666 TO 1682 13		3
	1466 TO 1472		2177 TO 2183 13		3
	1466 TO 1472		2293 TO 2299 13		3
	1466 TO 1472		2355 TO 2361 13		3
	1466 TO 1472		2527 TO 2533 13		3
	1470 TO 1474		1644 TO 1648 13		3
	1470 TO 1474		1881 TO 1885 13		3
	1470 TO 1474		1929 TO 1933 13		3

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
78	1470 TO 1474		2009 TO 2013	13	3
79	1470 TO 1474		2165 TO 2169	13	3
80	1470 TO 1474		2181 TO 2185	13	3
81	1470 TO 1474		2253 TO 2257	13	3
82	1470 TO 1474		2297 TO 2301	13	3
83	1470 TO 1474		2343 TO 2347	13	3
84	1470 TO 1474		2355 TO 2363	13	3
85	1470 TO 1474		2555 TO 2559	13	3
86	1470 TO 1474		2627 TO 2631	13	3
87	1470 TO 1474		2763 TO 2767	13	3
88	1470 TO 1474		2797 TO 2801	13	3
**** FOR	1476 TO 1482.	SEE	942 TO 948 ABOVE ****		
89	1482 TO 1494		2739 TO 2751	13	3
**** FCR	1510 TO 1526.	SEE	789 TO 805 ABOVE ****		
90	1630 TO 1640		2719 TO 2729	13	3
**** FCR	1638 TO 1644.	SEE	946 TO 952 ABOVE ****		
**** FOR	1644 TO 1648.	SEE	952 TO 956 ABOVE ****		
**** FCR	1662 TO 1674.	SEE	1022 TO 1034 ABOVE ****		
**** FCR	1666 TO 1682.	SEE	1110 TO 1126 ABOVE ****		
**** FOR	1710 TO 1722.	SEE	1118 TO 1130 ABOVE ****		
91	1718 TO 1726		2147 TO 2155	13	3
92	1718 TO 1726		2351 TO 2359	13	3
93	1718 TO 1726		2479 TO 2487	13	3
**** FOR	1722 TO 1728.	SEE	942 TO 948 ABOVE ****		
**** FOR	1732 TO 1738.	SEE	956 TO 962 ABOVE ****		
**** FCR	1752 TO 1756.	SEE	1470 TO 1474 ABOVE ****		
94	1756 TO 1762		2409 TO 2415	13	3
95	1756 TO 1762		2733 TO 2739	13	3
96	1758 TO 1768		2635 TO 2645	13	3
97	1770 TO 1774		1883 TO 1887	13	3
98	1770 TO 1774		2255 TO 2259	13	3
99	1770 TO 1774		2631 TO 2635	13	3
100	1770 TO 1774		2765 TO 2769	13	3
**** FOR	1774 TO 1782.	SEE	1718 TO 1726 ABOVE ****		
101	1818 TO 1820		2023 TO 2025	13	3
102	1818 TO 1820		2515 TO 2517	13	3
**** FOR	1881 TO 1885.	SEE	952 TO 956 ABOVE ****		
103	1883 TO 1887		1903 TO 1907	13	3
104	1883 TO 1887		1951 TO 1955	13	3
105	1883 TO 1887		2109 TO 2113	13	3
106	1883 TO 1887		2115 TO 2123	13	3
107	1883 TO 1887		2275 TO 2279	13	3
108	1883 TO 1887		2323 TO 2327	13	3
109	1883 TO 1887		2533 TO 2537	13	3
110	1883 TO 1887		2707 TO 2711	13	3
111	1887 TO 1895		1935 TO 1943	13	3
112	1887 TO 1895		2307 TO 2315	13	3
113	1891 TO 1901		1939 TO 1949	13	3
114	1891 TO 1901		2311 TO 2321	13	3
**** FCR	1903 TO 1907.	SEE	1770 TO 1774 ABOVE ****		
**** FOR	1915 TO 1921.	SEE	942 TO 948 ABOVE ****		

PATTERN	NCES	RELATED TO	NCES	TEST	LENGTH
**** FOR 1919 TO 1925.		SEE	946 TO 952 ABOVE ****		
**** FOR 1929 TO 1933.		SEE	952 TO 956 ABOVE ****		
115 1939 TO 1949			2263 TO 2273 13		3
**** FOR 1951 TO 1955.		SEE	1770 TO 1774 ABOVE ****		
**** FOR 2005 TO 2009.		SEE	1470 TO 1474 ABOVE ****		
**** FOR 2009 TO 2013.		SEE	952 TO 956 ABOVE ****		
116 2013 TO 2016			2021 TO 2024 13		3
117 2013 TO 2016			2191 TO 2194 13		3
118 2013 TO 2016			2445 TO 2448 13		3
119 2013 TO 2016			2513 TO 2516 13		3
**** FOR 2015 TO 2017.		SEE	1818 TO 1820 ABOVE ****		
**** FOR 2019 TO 2021.		SEE	1818 TO 1820 ABOVE ****		
120 2021 TO 2024			2455 TO 2458 13		3
121 2021 TO 2024			2563 TO 2566 13		3
122 2021 TO 2024			2659 TO 2662 13		3
123 2021 TO 2024			2803 TO 2806 13		3
**** FOR 2071 TO 2081.		SEE	1758 TO 1768 ABOVE ****		
124 2083 TO 2093			2503 TO 2513 13		3
125 2089 TO 2095			2615 TO 2621 13		3
**** FOR 2103 TO 2109.		SEE	946 TO 952 ABOVE ****		
**** FOR 2109 TO 2113.		SEE	1770 TO 1774 ABOVE ****		
**** FOR 2111 TO 2117.		SEE	946 TO 952 ABOVE ****		
**** FOR 2119 TO 2123.		SEE	1770 TO 1774 ABOVE ****		
**** FOR 2147 TO 2155.		SEE	1378 TO 1386 ABOVE ****		
**** FOR 2165 TO 2169.		SEE	952 TO 956 ABOVE ****		
**** FOR 2169 TO 2175.		SEE	946 TO 952 ABOVE ****		
**** FOR 2175 TO 2181.		SEE	1318 TO 1324 ABOVE ****		
**** FOR 2181 TO 2185.		SEE	952 TO 956 ABOVE ****		
**** FOR 2185 TO 2189.		SEE	1470 TO 1474 ABOVE ****		
**** FOR 2191 TO 2194.		SEE	2021 TO 2024 ABOVE ****		
**** FOR 2253 TO 2257.		SEE	952 TO 956 ABOVE ****		
**** FOR 2255 TO 2259.		SEE	1883 TO 1887 ABOVE ****		
**** FOR 2257 TO 2263.		SEE	1756 TO 1762 ABOVE ****		
**** FOR 2263 TO 2273.		SEE	1891 TO 1901 ABOVE ****		
**** FOR 2275 TO 2279.		SEE	1770 TO 1774 ABOVE ****		
**** FOR 2279 TO 2291.		SEE	934 TO 946 ABOVE ****		
**** FOR 2291 TO 2297.		SEE	1318 TO 1324 ABOVE ****		
**** FOR 2297 TO 2301.		SEE	952 TO 956 ABOVE ****		
**** FOR 2311 TO 2321.		SEE	1939 TO 1949 ABOVE ****		
**** FOR 2323 TO 2327.		SEE	1770 TO 1774 ABOVE ****		
**** FOR 2343 TO 2347.		SEE	952 TO 956 ABOVE ****		
**** FOR 2345 TO 2349.		SEE	1470 TO 1474 ABOVE ****		
**** FOR 2351 TO 2355.		SEE	1378 TO 1386 ABOVE ****		
**** FOR 2359 TO 2363.		SEE	952 TO 956 ABOVE ****		
**** FOR 2359 TO 2409.		SEE	1758 TO 1768 ABOVE ****		
**** FOR 2409 TO 2415.		SEE	956 TO 962 ABOVE ****		
**** FOR 2411 TO 2419.		SEE	958 TO 966 ABOVE ****		
**** FOR 2419 TO 2429.		SEE	1758 TO 1768 ABOVE ****		
**** FOR 2439 TO 2445.		SEE	1318 TO 1324 ABOVE ****		
**** FOR 2445 TO 2448.		SEE	2021 TO 2024 ABOVE ****		
**** FOR 2453 TO 2457.		SEE	2109 TO 2448 ABOVE ****		

PATTERN	NOTES	RELATED TC	NOTES	TEST LENGTH
**** FCR 2455 TO 2458.		SEE 2013 TO 2016 ABOVE	****	
**** FCR 2457 TO 2459.		SEE 2015 TO 2355 ABOVE	****	
**** FOR 2479 TO 2487.		SEE 1378 TO 1386 ABOVE	****	
**** FCR 2487 TO 2493.		SEE 946 TO 952 ABOVE	****	
**** FOR 2489 TO 2495.		SEE 1466 TO 1472 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 4 NOTES IN LENGTH --
 EXACT RHYTHM WITH TCNAL INVERSION
 WAS BEGUN AT 1052 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TC	NOTES	TEST	LENGTH
126	1 TO 73		373 TO 445	13	4
127	37 TO 109		409 TO 481	13	4
128	49 TO 121		421 TO 493	13	4
129	73 TO 133		445 TO 505	13	4
130	109 TO 145		481 TO 517	13	4
131	121 TO 157		493 TO 529	13	4
132	145 TO 217		517 TO 589	13	4
133	157 TO 241		529 TO 613	13	4
134	534 TO 548		1306 TO 1320	13	4
135	534 TO 548		1306 TO 1320	13	4
136	542 TO 552		1314 TO 1324	13	4
137	546 TO 554		1318 TO 1326	13	4
138	548 TO 556		2549 TO 2557	13	4
139	552 TO 558		1470 TO 1476	13	4
140	552 TO 558		1752 TO 1758	13	4
141	552 TO 558		2345 TO 2351	13	4
142	552 TO 558		2695 TO 2701	13	4
143	554 TO 562		1754 TO 1762	13	4
144	1082 TO 1102		1686 TO 1706	13	4
145	1086 TO 1104		1690 TO 1708	13	4
146	1086 TO 1104		1690 TO 1708	13	4
147	1118 TO 1134		2591 TO 2607	13	4
148	1130 TO 1142		2399 TO 2411	13	4
149	1314 TO 1324		1915 TO 1925	13	4
150	1318 TO 1326		1638 TO 1646	13	4
151	1218 TO 1326		1919 TO 1927	13	4
152	1218 TO 1326		2103 TO 2111	13	4
153	1318 TO 1326		2111 TO 2119	13	4
**** FOR	1326 TO 1334.	SEE	954 TO 962	ABOVE ****	
154	1378 TO 1388		1774 TO 1784	13	4
155	1378 TO 1388		1774 TO 1784	13	4
156	1382 TO 1392		2171 TO 2181	13	4
157	1382 TO 1392		2287 TO 2297	13	4
158	1382 TO 1392		2435 TO 2445	13	4
159	1386 TO 1394		2727 TO 2735	13	4
160	1438 TO 1458		1666 TO 1686	13	4
161	1438 TO 1458		1666 TO 1686	13	4
162	1466 TO 1474		2177 TO 2185	13	4
163	1466 TO 1474		2293 TO 2301	13	4
164	1466 TO 1474		2355 TO 2363	13	4
165	1466 TO 1474		2177 TO 2185	13	4
166	1466 TO 1474		2293 TO 2301	13	4
167	1466 TO 1474		2355 TO 2363	13	4
168	1470 TO 1476		1929 TO 1935	13	4

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
169	1470 TO 1476		2165 TO 2171	13	4
170	1482 TO 1498		2739 TO 2755	13	4
171	1482 TO 1498		2739 TO 2755	13	4
172	1626 TO 1640		2715 TO 2729	13	4
173	1630 TO 1644		2719 TO 2733	13	4
**** FOR	1638 TO 1646.	SEE	946 TO 954 ABOVE ****		
**** FCR	1640 TO 1648.	SEE	948 TO 956 ABOVE ****		
**** FCR	1752 TO 1758.	SEE	1470 TO 1476 ABOVE ****		
174	1770 TO 1778		1883 TO 1891	13	4
175	1770 TO 1778		2631 TO 2639	13	4
176	1770 TO 1778		1883 TO 1891	13	4
177	1770 TO 1778		2631 TO 2639	13	4
178	1772 TO 1782		2145 TO 2155	13	4
179	1772 TO 1782		2349 TO 2359	13	4
180	1772 TO 1782		2477 TO 2487	13	4
181	1774 TO 1784		2479 TO 2489	13	4
182	1883 TO 1891		2707 TO 2715	13	4
183	1883 TO 1891		2707 TO 2715	13	4
184	1885 TO 1895		1933 TO 1943	13	4
185	1885 TO 1895		2305 TO 2315	13	4
186	1887 TO 1901		1935 TO 1949	13	4
187	1887 TO 1901		2307 TO 2321	13	4
188	1887 TO 1901		1935 TO 1949	13	4
189	1887 TO 1901		2307 TO 2321	13	4
190	1901 TO 1907		2629 TO 2635	13	4
**** FOR	1915 TO 1925.	SEE	942 TO 952 ABOVE ****		
**** FOR	1919 TO 1927.	SEE	946 TO 954 ABOVE ****		
191	1927 TO 1933		2183 TO 2189	13	4
192	1927 TO 1933		2693 TO 2699	13	4
193	1927 TO 1933		2759 TO 2765	13	4
194	1927 TO 1933		2791 TO 2797	13	4
**** FCR	1929 TO 1935.	SEE	952 TO 958 ABOVE ****		
**** FOR	1949 TO 1955.	SEE	1901 TO 1907 ABOVE ****		
195	2005 TO 2011		2181 TO 2187	13	4
196	2005 TO 2011		2297 TO 2303	13	4
197	2005 TO 2011		2359 TO 2365	13	4
198	2005 TO 2011		2627 TO 2633	13	4
**** FCR	2007 TO 2013.	SEE	1927 TO 1933 ABOVE ****		
199	2011 TO 2016		2189 TO 2194	13	4
200	2013 TO 2017		2021 TO 2025	13	4
201	2013 TO 2017		2513 TO 2517	13	4
**** FCR	2099 TO 2109.	SEE	1382 TO 1392 ABOVE ****		
**** FOR	2103 TO 2111.	SEE	946 TO 954 ABOVE ****		
**** FOR	2111 TO 2119.	SEE	946 TO 954 ABOVE ****		
**** FCR	2117 TO 2123.	SEE	1901 TO 1907 ABOVE ****		

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 5 NOTES IN LENGTH --
 EXACT RHYTHM WITH TCNAL INVERSION
 WAS BEGUN AT 1467 SECONDS INTO EXECUTION.

PATTERN	NCES	RELATED TC	NOTES	TEST	LENGTH
202	1 TO 109		373 TO 481	13	5
203	37 TO 121		409 TO 493	13	5
204	49 TO 133		421 TO 505	13	5
205	73 TO 145		445 TO 517	13	5
206	109 TO 157		481 TO 529	13	5
207	121 TO 169		493 TO 541	13	5
208	133 TO 217		505 TO 589	13	5
209	145 TO 241		517 TO 613	13	5
210	934 TO 952		1306 TO 1324	13	5
211	934 TO 952		1306 TO 1324	13	5
212	942 TO 954		1314 TO 1326	13	5
213	952 TO 962		1752 TO 1762	13	5
214	1082 TO 1104		1686 TO 1708	13	5
215	1314 TO 1326		1915 TO 1927	13	5
216	1318 TO 1328		1919 TO 1929	13	5
217	1318 TO 1328		2111 TO 2121	13	5
218	1626 TO 1644		2715 TO 2733	13	5
219	1772 TO 1784		2477 TO 2489	13	5
220	1885 TO 1901		1933 TO 1949	13	5
221	1885 TO 1901		2305 TO 2321	13	5
*** FOR	1915 TO 1927.	SEE	942 TO 954 ABOVE	****	
222	1925 TO 1933		2789 TO 2797	13	5
223	1927 TO 1935		2693 TO 2701	13	5
224	1929 TO 1939		2345 TO 2355	13	5
225	2005 TO 2013		2181 TO 2189	13	5

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 6 NOTES IN LENGTH --
 EXACT RHYTHM WITH TONAL INVERSION
 WAS BEGUN AT 1836 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
226	1 TC 121		373 TO 493	13	6
227	37 TO 133		409 TO 505	13	6
228	49 TO 145		421 TO 517	13	6
229	73 TC 157		445 TO 529	13	6
230	109 TO 169		481 TO 541	13	6
231	121 TC 217		493 TO 589	13	6
232	123 TO 241		505 TO 613	13	6
233	534 TO 554		1306 TO 1326	13	6
234	534 TC 554		1306 TO 1326	13	6
235	1314 TO 1328		1915 TO 1929	13	6

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 7 NOTES IN LENGTH --
 EXACT RHYTHM WITH TCNAL INVERSION
 WAS BEGUN AT 2190 SECONDS INTO EXECUTION.

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
236	1 TO 133		373 TO 505	13	7
237	37 TO 145		409 TO 517	13	7
238	49 TO 157		421 TO 529	13	7
239	73 TO 169		445 TO 541	13	7
240	109 TO 217		481 TO 589	13	7
241	121 TO 241		493 TO 613	13	7

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 8 NOTES IN LENGTH --
 EXACT RHYTHM WITH TONAL INVERSION
 WAS BEGUN AT 2206 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
242	1 TC 145		373 TO 517	13	8
243	37 TO 157		409 TO 529	13	8
244	49 TO 169		421 TO 541	13	8
245	73 TO 217		445 TO 589	13	8
246	109 TO 241		481 TO 613	13	8

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 9 NOTES IN LENGTH --
 EXACT RHYTHM WITH TONAL INVERSION
 WAS BEGUN AT 2222 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
247	1 TO 157		373 TO 529	13	9
248	37 TO 169		409 TO 541	13	9
249	49 TO 217		421 TO 589	13	9
250	73 TO 241		445 TO 613	13	9

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 10 NOTES IN LENGTH --
 EXACT RHYTHM WITH TONAL INVERSION
 WAS BEGUN AT 2238 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
251	1 TO 169		373 TO 541	13	10
252	37 TO 217		409 TO 589	13	10
253	49 TO 241		421 TO 613	13	10

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 11 NOTES IN LENGTH --
EXACT RHYTHM WITH TCNAL INVERSION
WAS BEGUN AT 2254 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
254	1 TO 217		373 TO 589	13	11
255	37 TO 241		409 TO 613	13	11

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 12 NOTES IN LENGTH --
EXACT RHYTHM WITH TONAL INVERSION
WAS BEGUN AT 2269 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
256	1 TO 241		373 TO 613	13	12

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 13 NOTES IN LENGTH --
EXACT RHYTHM WITH TONAL INVERSION
WAS BEGUN AT 2285 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST LENGTH
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END OF TYPE I LISTING. TOTAL OF 256 PATTERNS LOCATED.

*** TYPE II LISTING ***

JOHN DUNSTABLE ISORHYTHMIC MOTET VENI SANCTE SPIRITUS
EXACT RHYTHM WITH TONAL INVERSION

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	1 TO 241	2	12

**** TEST 13 COMPLETED AT 2342 SECONDS INTO EXECUTION ****

The following score shows the computer-assigned reference numbers used for Test 12 of the Dunstable motet.

Veni Sancte Spiritus

Dunstable

1 13 25 37 49 61

Ve - ni San - cta Spi - ri - tus et
978 990 1002 1014 1026 1038

Con - so - la - tor o -

73 85 97 109 121 133

e - mit - te ce - li - tus lu - cis tu -
1050 1062 1074 1086 1098 1110

pti - me, dul

San -

145 157 169 181

e ra - di - um,
1122 1134 1146 1158 1170

cis ho - pes a

1191 1203 1217

ti Spi

205 217 229 241 253 265

20 20

Ve - ni pa - ter pa - perum, ve - ni da - tor mu - ne -
 1182 1194 1206 1218 1230 1242

- me, dul - ci - re - fri - ge - ri -
 2063 2075 2087 2099 2111

- tus as - sit no - bis

277 289 301 313 325 337

25 25

rum, ve - ni lu - men cor - di -
 1254 1266 1278 1290 1302 1314

um. In la - bo - re - qui -
 2123 2171

gra - ti

349 373 385 397 409 421

30 35

um. La - va, quod est cor - di -
 1326 1350 1362 1374 1386 1398

es, in e - stu tem po -
 2195

- a.

433 445 457 469 481 493

1410 1422 1434 1446 1458 1470

- dum, ri - gn' quod est a - ri - dum, sa - na quod

ri - es, - fie tu - so - la - ti um O - - - - -

505 517 529 541 553 565 577

1482 1494 1506 1518 1530 1542 1554

est sau - ci um. Fle - cte quod est

be - a - tis - si - ma, re - ple cor

2363 2375 2399

589 601 613 625 637

50 1566 1578 1590 1602 1614

ri - gi - dum, fo - ve quod est

dis - so - li - ma - - - - - tu

2435 2447 2459 2471 2483

649 661 673 685 697

55

fri - gi - dum, re - ge quod est de - o - rum

1626 1638 1650 1662 2549 2543

709 721 745 753 761 769

60

vi - um, De - ta - is fi - de - bus, in te fi - de - li - um, Si - me tu

1686 1698 1722 1730 1738 1746 2567

777 785 793 801 809 817

70

con - fi - den - ti - bus, sa - crum se - ple - na - ri um, o - mi - ni - bus, in te

1754 1762 1770 1778 1786 1794 2663

833 841 849 857 865

75

1802 Da 1810 vir 1818 tu tis 1826 1834 me vi 1842

hil est 2687 in lu - mi

873 881 889 897 905 913 921

80 85 #

tum, 1850 1858 1866 1874 da 1882 sa lu tis ex i 1890 1898

me, 2719 ni - 2727 hil 2735 est 2743 2751 2759

929 937 945 953 961

90

tum, 1906 da per - en - 1914 me gau - 1922 di - 1930 um, 1938

2775 in - 2791 xi - um, 2807

***** MUSIC MELODIC PATTERN ANALYSIS *****

JOHN DUNSTABLE ISORHYTHMIC MOTET VENI SANCTE SPIRITUS

TEST REQUESTED 12
 UNITS OF DATA PER CARD 12

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES	1	THROUGH	12									
50	C	C	0	0	C	0	0	54	0	0	0	
NOTES	13	THROUGH	24									
C	0	0	0	57	C	0	0	59	0	0	0	
NOTES	25	THROUGH	36									
C	C	0	0	57	C	0	0	0	0	55	C	
NOTES	37	THROUGH	48									
52	0	55	C	54	C	0	0	52	0	C	C	
NOTES	49	THROUGH	60									
57	C	0	0	0	0	57	0	56	0	54	0	
NOTES	61	THROUGH	72									
57	C	C	0	-1	0	0	0	54	0	0	0	
NOTES	73	THROUGH	84									
50	C	55	C	0	0	54	0	52	0	50	0	
NOTES	85	THROUGH	96									
49	C	50	0	52	C	0	0	54	0	0	0	
NOTES	97	THROUGH	108									
50	0	0	0	0	C	50	0	49	0	47	C	
NOTES	109	THROUGH	120									
50	C	0	0	-1	C	0	0	0	0	0	C	
NOTES	121	THROUGH	132									
54	0	0	0	0	0	52	C	50	0	C	0	
NOTES	133	THROUGH	144									
52	C	C	C	0	C	0	0	54	0	C	0	
NOTES	145	THROUGH	156									
C	0	C	0	57	C	0	C	C	0	54	0	

NOTES	157	THROUGH	168									
55	57	59	0	60	0	59	0	55	0	57	0	
NOTES	169	THROUGH	180									
55	57	59	0	57	55	57	0	56	57	54	0	
NOTES	181	THROUGH	192									
57	C	C	0	C	C	0	0	C	0	0	0	
NOTES	193	THROUGH	204									
-1	C	0	0	0	C	0	0	C	0	C	0	
NOTES	205	THROUGH	216									
59	C	C	C	59	0	0	0	57	0	C	0	
NOTES	217	THROUGH	228									
55	C	C	0	-1	0	0	0	54	0	0	0	
NOTES	229	THROUGH	240									
57	C	C	0	0	0	55	0	52	0	C	0	
NOTES	241	THROUGH	252									
-1	C	54	C	C	0	50	0	50	0	C	0	
NOTES	253	THROUGH	264									
55	C	0	0	57	0	59	0	C	0	55	C	
NOTES	265	THROUGH	276									
54	0	57	C	C	C	55	0	54	0	52	0	
NOTES	277	THROUGH	288									
55	C	C	0	-1	0	0	0	C	0	0	0	
NOTES	289	THROUGH	300									
57	C	0	0	57	C	0	0	57	0	55	0	
NOTES	301	THROUGH	312									
54	C	C	0	50	0	0	0	54	0	55	0	
NOTES	313	THROUGH	324									
54	C	0	0	C	C	50	C	49	0	50	0	
NOTES	325	THROUGH	336									
52	C	C	0	49	0	45	C	C	0	50	0	
NOTES	337	THROUGH	348									
49	C	50	0	52	0	50	0	49	0	47	49	
NOTES	349	THROUGH	360									
50	C	0	C	C	C	0	0	C	0	C	C	
NOTES	361	THROUGH	372									
-1	C	C	0	C	C	0	C	C	0	0	0	

NOTES	373	THROUGH	384								
54	C	C	0	0	C	0	0	57	0	0	0
NOTES	385	THROUGH	396								
C	C	0	0	57	C	55	0	54	0	C	0
NOTES	397	THROUGH	408								
C	C	0	0	52	C	C	0	C	0	50	0
NOTES	409	THROUGH	420								
47	C	50	0	49	0	0	0	50	0	C	0
NOTES	421	THROUGH	432								
55	C	C	0	0	0	55	0	54	0	52	0
NOTES	433	THROUGH	444								
55	C	0	0	-1	0	0	0	59	0	0	C
NOTES	445	THROUGH	456								
57	C	54	0	0	0	55	0	52	0	54	0
NOTES	457	THROUGH	468								
55	C	57	0	59	0	0	0	60	0	C	0
NOTES	469	THROUGH	480								
57	C	C	0	C	0	57	0	56	0	54	0
NOTES	481	THROUGH	492								
57	C	C	0	-1	0	0	C	C	0	0	0
NOTES	493	THROUGH	504								
57	C	0	0	57	0	52	C	57	0	55	C
NOTES	505	THROUGH	516								
54	C	C	0	52	0	0	0	54	0	50	0
NOTES	517	THROUGH	528								
54	0	55	0	57	C	C	C	C	0	55	0
NOTES	529	THROUGH	540								
59	C	C	0	0	0	0	0	C	0	0	0
NOTES	541	THROUGH	552								
C	0	C	0	55	0	0	0	C	0	0	0
NOTES	553	THROUGH	564								
52	C	C	0	57	0	0	0	C	0	55	C
NOTES	565	THROUGH	576								
57	C	C	0	52	0	0	0	54	0	C	0
NOTES	577	THROUGH	588								
55	C	C	0	0	0	54	0	54	0	0	52

NOTES	589	THROUGH	600								
52	C	C	0	50	0	47	0	0	0	52	0
NOTES	601	THROUGH	612								
50	52	54	0	0	52	52	C	51	0	52	49
NOTES	613	THROUGH	624								
52	C	C	0	-1	0	0	0	59	0	0	0
NOTES	625	THROUGH	636								
C	C	C	0	59	0	57	C	55	0	0	0
NOTES	637	THROUGH	648								
52	C	C	0	54	C	57	0	0	0	54	0
NOTES	649	THROUGH	660								
55	C	57	0	59	0	0	0	55	0	0	0
NOTES	661	THROUGH	672								
C	0	52	0	C	0	55	0	54	55	52	0
NOTES	673	THROUGH	684								
54	C	C	0	-1	0	0	0	50	0	0	0
NOTES	685	THROUGH	696								
52	C	49	0	47	C	52	0	C	0	50	0
NOTES	697	THROUGH	708								
52	C	C	0	52	C	54	0	0	0	55	0
NOTES	709	THROUGH	720								
57	C	52	0	57	C	57	0	56	0	57	54
NOTES	721	THROUGH	732								
57	0	0	0	0	0	0	0	C	0	0	0
NOTES	733	THROUGH	744								
-1	C	C	0	0	0	0	C	C	0	0	0

UNITS OF DATA PER CARD CHANGED TO 8

NOTES	745	THROUGH	752								
50	C	C	C	0	0	0	0				
NOTES	753	THROUGH	760								
54	0	0	0	52	C	0	0				
NOTES	761	THROUGH	768								
57	C	C	0	57	0	57	0				
NOTES	769	THROUGH	776								
55	C	0	0	59	0	59	0				

ACTES	777	THROUGH	784				
C	0	57	0	57	C	54	C
ACTES	785	THROUGH	792				
55	C	57	0	54	0	0	0
ACTES	793	THROUGH	800				
5C	C	0	0	-1	C	55	C
ACTES	801	THROUGH	808				
55	C	0	0	54	0	52	C
ACTES	809	THROUGH	816				
C	C	5C	0	49	C	50	47
ACTES	817	THROUGH	824				
5C	C	0	0	0	C	0	0
ACTES	825	THROUGH	832				
-1	C	C	0	C	C	0	0
ACTES	833	THROUGH	840				
47	C	C	0	52	C	0	0
ACTES	841	THROUGH	848				
54	C	C	0	0	0	50	0
ACTES	849	THROUGH	856				
55	C	57	0	54	C	52	0
ACTES	857	THROUGH	864				
C	C	5C	0	49	0	47	C
ACTES	865	THROUGH	872				
49	C	C	0	50	0	0	0
ACTES	873	THROUGH	880				
52	C	C	0	C	C	0	0
ACTES	881	THROUGH	888				
54	C	5C	C	0	0	54	0
ACTES	889	THROUGH	896				
55	C	C	0	52	C	C	0
ACTES	897	THROUGH	904				
5C	C	C	0	-1	C	0	0
ACTES	905	THROUGH	912				
54	0	C	0	57	C	0	C
ACTES	913	THROUGH	920				
55	C	57	0	59	C	55	0

NOTES 921 THROUGH 928
57 C 56 0 0 0 54 0

NOTES 929 THROUGH 936
57 C C 0 -1 0 54 0

NOTES 937 THROUGH 944
54 C 5C 0 0 0 47 0

NOTES 945 THROUGH 952
49 C 5C 0 52 0 49 0

NOTES 953 THROUGH 960
47 C 5C 0 49 C 50 47

NOTES 961 THROUGH 968
5C C 0 0 0 C 0 0

NOTES 969 THROUGH 976
C C C 0 0 C 0 0

UNITS OF DATA PER CARD CHANGED TO 1
ACTE 977 9999

UNITS OF DATA PER CARD CHANGED TO 12

NOTES 978 THROUGH 985
5C 0 0 0 C C 0 C C 0 0 0

NOTES 990 THROUGH 1001
C C C 0 C C 0 0 0 0 0 0

NOTES 1002 THROUGH 1013
43 C C 0 45 C 0 C 48 0 C 0

NOTES 1014 THROUGH 1025
C C C 0 5C C 0 0 48 0 0 0

NOTES 1026 THROUGH 1037
C C C 0 47 C 0 0 C 0 0 0

NOTES 1038 THROUGH 1049
45 C C 0 38 C 0 0 0 0 C 0

NOTES 1050 THROUGH 1061
43 C C 0 40 C 45 C C 0 42 0

NOTES 1062 THROUGH 1073
4C C 42 0 43 C C 0 38 0 C 0

NC	TES	1074	THROUGH	1085								
42	C	C	0	4C	C	0	0	0	0	0	0	0
NC	TES	1086	THROUGH	1097								
38	C	C	0	0	C	0	0	C	0	0	0	0
NC	TES	1098	THROUGH	1109								
C	C	C	0	C	C	0	0	0	0	0	0	0
NC	TES	1110	THROUGH	1121								
45	C	C	0	C	C	0	0	0	0	C	C	C
NC	TES	1122	THROUGH	1133								
38	C	C	0	C	C	0	0	42	0	0	0	0
NC	TES	1134	THROUGH	1145								
4C	C	C	0	0	C	0	0	43	0	C	C	C
NC	TES	1146	THROUGH	1157								
C	C	C	0	4C	C	0	0	0	0	C	C	C
NC	TES	1158	THROUGH	1169								
52	C	C	0	0	C	0	0	C	0	C	C	C
NC	TES	1170	THROUGH	1181								
C	C	C	C	0	0	C	0	48	0	0	0	0
NC	TES	1182	THROUGH	1193								
47	C	C	C	0	C	0	0	48	0	C	C	C
NC	TES	1194	THROUGH	1205								
43	C	C	C	C	C	0	0	38	0	0	0	0
NC	TES	1206	THROUGH	1217								
-1	C	C	0	42	0	43	0	45	0	C	C	C
NC	TES	1218	THROUGH	1229								
38	C	C	0	C	C	0	0	43	0	C	C	C
NC	TES	1230	THROUGH	1241								
C	C	0	C	4C	C	0	C	43	0	C	C	C
NC	TES	1242	THROUGH	1253								
38	C	C	0	-1	0	50	0	49	0	C	C	C
NC	TES	1254	THROUGH	1265								
5C	C	C	0	0	C	0	C	0	0	C	C	C
NC	TES	1266	THROUGH	1277								
45	C	C	C	C	C	0	0	45	0	C	C	C
NC	TES	1278	THROUGH	1289								
47	C	0	C	C	C	0	C	47	0	0	0	0

NOTES 1290 THROUGH 1301											
47	C	C	C	C	C	0	0	45	0	C	0
NOTES 1302 THROUGH 1313											
-1	C	C	0	45	C	0	C	38	0	C	0
NOTES 1314 THROUGH 1325											
42	C	C	0	40	C	0	0	C	0	0	0
NOTES 1326 THROUGH 1337											
38	C	C	0	C	C	0	C	C	0	C	0
NOTES 1338 THROUGH 1349											
0	C	C	0	C	C	0	C	C	0	0	0
NOTES 1350 THROUGH 1361											
50	C	C	C	C	C	0	0	C	0	C	0
NOTES 1362 THROUGH 1373											
C	C	C	0	C	C	0	0	C	0	0	0
NOTES 1374 THROUGH 1385											
47	C	C	0	48	C	0	0	43	0	C	0
NOTES 1386 THROUGH 1397											
C	C	C	C	45	C	0	0	47	0	0	0
NOTES 1398 THROUGH 1409											
C	C	C	0	45	C	0	0	C	0	C	0
NOTES 1410 THROUGH 1421											
43	C	C	0	43	C	0	0	C	0	0	0
NOTES 1422 THROUGH 1433											
38	C	C	0	42	0	40	0	0	0	45	C
NOTES 1434 THROUGH 1445											
47	C	48	C	50	0	0	0	45	0	C	0
NOTES 1446 THROUGH 1457											
48	C	C	0	47	C	0	C	C	0	C	0
NOTES 1458 THROUGH 1469											
45	C	C	0	52	C	0	C	C	0	C	0
NOTES 1470 THROUGH 1481											
C	0	0	0	0	C	0	0	52	0	C	0
NOTES 1482 THROUGH 1493											
50	C	C	0	48	C	0	0	47	0	C	0
NOTES 1494 THROUGH 1505											
48	C	52	C	C	C	50	0	49	0	C	0

NOTES 1506 THROUGH 1517											
50	C	C	C	C	C	0	0	C	0	C	0
NOTES 1518 THROUGH 1529											
C	C	C	0	C	0	0	0	0	0	0	0
NOTES 1530 THROUGH 1541											
48	C	C	0	0	0	0	C	52	0	C	0
NOTES 1542 THROUGH 1553											
C	C	C	0	48	C	0	0	0	0	0	0
NOTES 1554 THROUGH 1565											
43	C	C	0	C	C	C	0	45	0	0	0
NOTES 1566 THROUGH 1577											
47	C	C	0	-1	0	C	C	47	0	0	0
NOTES 1578 THROUGH 1589											
45	C	50	0	49	C	47	0	0	0	45	0
NOTES 1590 THROUGH 1601											
47	C	0	0	52	C	0	0	0	0	C	0
NOTES 1602 THROUGH 1613											
50	C	0	0	47	C	0	0	-1	0	C	0
NOTES 1614 THROUGH 1625											
45	C	C	0	42	C	C	0	0	0	0	0
NOTES 1626 THROUGH 1637											
40	C	C	C	0	0	0	0	43	0	0	0
NOTES 1638 THROUGH 1649											
C	0	C	0	43	C	0	0	C	0	0	0
NOTES 1650 THROUGH 1661											
38	C	C	C	42	C	0	0	C	0	0	0
NOTES 1662 THROUGH 1673											
40	C	C	0	0	C	0	C	0	0	0	0
NOTES 1674 THROUGH 1685											
-1	C	C	0	C	0	0	0	0	0	C	0
NOTES 1686 THROUGH 1697											
45	C	43	0	42	0	0	0	40	0	0	0
NOTES 1698 THROUGH 1709											
38	C	C	0	0	C	0	0	0	0	0	0
NOTES 1710 THROUGH 1721											
C	0	C	C	C	C	0	0	C	0	0	0

UNITS OF DATA PER CARD CHANGED TO 8

NCIES 1722 THROUGH 1729
 5C C C 0 C 0 0 0

NOTES 1730 THROUGH 1737
 C C C 0 52 0 0 C

NCIES 1738 THROUGH 1745
 48 C C 0 0 0 0 0

NCIES 1746 THROUGH 1753
 47 C 52 0 C 0 50 0

NCIES 1754 THROUGH 1761
 47 C 48 C 50 C 0 0

NCIES 1762 THROUGH 1769
 C C C 0 -1 0 0 0

NCIES 1770 THROUGH 1777
 47 C C 0 43 0 0 0

NCIES 1778 THROUGH 1785
 C C C 0 45 0 0 C

NCIES 1786 THROUGH 1793
 C C C 0 40 0 0 0

NCIES 1794 THROUGH 1801
 38 C C 0 45 0 0 0

NCIES 1802 THROUGH 1809
 C C C 0 50 C 0 0

NCIES 1810 THROUGH 1817
 C C 0 0 48 0 47 0

NCIES 1818 THROUGH 1825
 45 C C 0 0 C 0 C

NCIES 1826 THROUGH 1833
 43 C C 0 45 C 0 C

NCIES 1834 THROUGH 1841
 4C C 42 C C 0 43 0

NCIES 1842 THROUGH 1849
 45 C C 0 42 C 0 C

NCIES 1850 THROUGH 1857
 4C C C C C C C 0

ACTES 1858 THROUGH 1865
 -1 C 45 C 50 C 48 C

ACTES 1866 THROUGH 1873
 47 C 0 0 48 0 0 C

ACTES 1874 THROUGH 1881
 -1 C 47 C 47 C 45 C

ACTES 1882 THROUGH 1889
 49 C 0 0 54 0 0 C

ACTES 1890 THROUGH 1897
 52 C 50 0 0 0 48 0

ACTES 1898 THROUGH 1905
 47 C 0 0 0 C 0 0

ACTES 1906 THROUGH 1913
 45 C C 0 0 0 0 0

ACTES 1914 THROUGH 1921
 0 C C 0 42 C 0 0

ACTES 1922 THROUGH 1929
 44 C 0 0 45 44 45 0

ACTES 1930 THROUGH 1937
 47 C 44 C 0 42 44 C

ACTES 1938 THROUGH 1945
 45 C 0 0 0 0 0 0

ACTES 1946 THROUGH 1953
 C C 0 0 0 0 0 0

UNITS OF DATA PER CARD CHANGED TO 1
 ACTE 1954 99999

UNITS OF DATA PER CARD CHANGED TO 12

ACTES 1955 THROUGH 1966
 45 C C C 0 C 0 0 C 0 C 0

ACTES 1967 THROUGH 1978
 C C C C C C 0 0 C C C 0

ACTES 1979 THROUGH 1990
 -1 C C 0 C C 0 C C 0 C 0

NCIES 1991 THROUGH 2002												
45	C	C	0	0	C	0	0	0	0	0	0	0
NCIES 2003 THROUGH 2014												
47	C	0	0	0	C	0	0	C	0	0	0	0
NCIES 2015 THROUGH 2026												
C	C	C	0	C	C	0	0	C	0	C	0	0
NCIES 2027 THROUGH 2038												
45	C	C	0	0	C	0	0	C	0	C	0	0
NCIES 2039 THROUGH 2050												
C	C	C	0	0	C	0	0	0	0	C	0	0
NCIES 2051 THROUGH 2062												
-1	C	C	0	C	C	0	C	C	0	0	0	0
NCIES 2063 THROUGH 2074												
50	C	C	0	C	C	0	C	C	0	0	0	0
NCIES 2075 THROUGH 2086												
45	C	0	C	0	C	0	C	C	0	C	0	0
NCIES 2087 THROUGH 2098												
50	C	C	0	0	C	0	0	C	0	C	0	0
NCIES 2099 THROUGH 2110												
47	C	C	0	0	C	0	0	0	0	0	0	0
NCIES 2111 THROUGH 2122												
45	C	C	0	0	C	0	C	0	0	0	0	0
NCIES 2123 THROUGH 2134												
43	C	0	0	C	C	0	C	C	0	0	0	0
NCIES 2135 THROUGH 2146												
-1	C	C	0	0	C	0	C	0	0	C	C	0
NCIES 2147 THROUGH 2158												
C	0	C	C	0	C	0	C	C	0	0	0	0
NCIES 2159 THROUGH 2170												
C	C	C	0	0	0	0	C	C	0	0	0	0
NCIES 2171 THROUGH 2182												
45	C	0	0	0	C	0	0	C	0	C	C	0
NCIES 2183 THROUGH 2194												
-1	C	C	C	0	C	0	0	C	0	C	0	0
NCIES 2195 THROUGH 2206												
45	C	C	0	C	C	0	C	C	0	0	0	0

NCIES	2207	THROUGH	2218								
C	0	C	0	0	C	0	0	C	0	C	C
NCIES	2219	THROUGH	2230								
-1	C	C	C	0	0	0	C	C	0	C	0
NCIES	2231	THROUGH	2242								
C	C	0	C	0	C	0	C	C	0	C	0
NCIES	2243	THROUGH	2254								
C	C	C	C	C	C	0	C	C	0	C	0
NCIES	2255	THROUGH	2266								
C	C	C	0	C	C	0	0	C	0	C	0
NCIES	2267	THROUGH	2278								
C	C	0	C	0	0	0	0	0	0	0	0
NCIES	2279	THROUGH	2290								
C	C	C	C	C	C	0	C	C	0	C	0
NCIES	2291	THROUGH	2302								
C	C	C	0	C	C	0	0	C	0	C	0
NCIES	2303	THROUGH	2314								
C	C	0	C	0	C	0	C	C	0	0	0
NCIES	2315	THROUGH	2326								
C	C	0	C	0	C	0	0	C	0	C	0
NCIES	2327	THROUGH	2338								
45	C	0	C	0	C	0	0	C	0	C	0
NCIES	2339	THROUGH	2350								
C	0	C	0	C	0	0	C	0	0	C	C
NCIES	2351	THROUGH	2362								
-1	0	C	C	0	C	0	C	C	0	C	0
NCIES	2363	THROUGH	2374								
45	C	C	C	C	C	0	0	0	0	C	C
NCIES	2375	THROUGH	2386								
43	C	C	0	0	C	0	0	0	0	C	C
NCIES	2387	THROUGH	2398								
C	C	C	C	0	C	C	C	C	0	C	C
NCIES	2399	THROUGH	2410								
45	C	C	0	C	C	0	C	0	0	C	C
NCIES	2411	THROUGH	2422								
C	C	C	C	C	C	0	C	0	0	C	C

ACTES	2423	THROUGH	2434								
-1	C	C	0	C	C	0	0	C	0	0	0
ACTES	2435	THROUGH	2446								
40	C	C	C	0	C	0	C	C	0	C	0
ACTES	2447	THROUGH	2458								
42	C	C	0	C	C	0	0	C	0	C	0
ACTES	2459	THROUGH	2470								
40	C	0	0	0	C	0	0	C	0	C	C
ACTES	2471	THROUGH	2482								
43	C	C	C	C	C	0	0	0	0	0	0
ACTES	2483	THROUGH	2494								
45	C	C	C	0	C	0	0	0	0	C	0
ACTES	2495	THROUGH	2506								
47	C	C	C	0	C	0	C	C	0	C	C
ACTES	2507	THROUGH	2518								
-1	C	C	C	0	C	0	0	C	0	C	0
ACTES	2519	THROUGH	2530								
C	C	C	0	0	C	0	0	C	0	0	0
ACTES	2531	THROUGH	2542								
C	C	0	0	0	C	0	C	C	0	C	C
ACTES	2543	THROUGH	2554								
45	C	0	0	0	C	0	C	0	0	C	0
ACTES	2555	THROUGH	2566								
-1	C	C	C	0	C	0	C	C	0	C	0
ACTES	2567	THROUGH	2578								
45	C	C	C	C	C	0	C	C	0	0	C
ACTES	2579	THROUGH	2590								
C	C	C	0	0	C	0	0	C	0	C	0

UNITS OF DATA PER CARD CHANGED TO 8

ACTES	2591	THROUGH	2598				
-1	0	C	C	C	C	C	C
ACTES	2599	THROUGH	2606				
C	C	C	0	C	C	C	C
ACTES	2607	THROUGH	2614				
C	C	0	0	0	C	C	C

NOTES	2615	THROUGH	2622				
C	C	C	0	0	C	0	C
NOTES	2623	THROUGH	2630				
C	C	C	0	0	C	0	0
NOTES	2631	THROUGH	2638				
C	C	C	0	0	0	0	C
NOTES	2639	THROUGH	2646				
C	C	C	C	0	C	0	C
NOTES	2647	THROUGH	2654				
C	C	0	0	C	C	0	C
NOTES	2655	THROUGH	2662				
C	C	C	C	0	C	0	0
NOTES	2663	THROUGH	2670				
38	C	C	C	0	C	0	0
NOTES	2671	THROUGH	2678				
C	C	C	0	C	C	0	0
NOTES	2679	THROUGH	2686				
-1	C	C	C	C	C	0	0
NOTES	2687	THROUGH	2694				
38	C	C	C	C	C	0	0
NOTES	2695	THROUGH	2702				
-1	C	0	C	0	C	C	C
NOTES	2703	THROUGH	2710				
C	C	0	C	C	C	0	C
NOTES	2711	THROUGH	2718				
C	C	0	0	0	C	0	0
NOTES	2719	THROUGH	2726				
37	C	C	C	C	C	0	0
NOTES	2727	THROUGH	2734				
38	C	C	0	C	C	0	0
NOTES	2735	THROUGH	2742				
40	C	C	0	0	C	0	0
NOTES	2743	THROUGH	2750				
43	C	C	0	0	C	0	0
NOTES	2751	THROUGH	2758				
42	C	C	0	0	C	0	0

NOTES 2759 THROUGH 2766
 43 C C 0 0 0 0 0

NOTES 2767 THROUGH 2774
 -1 C C 0 0 C 0 0

NOTES 2775 THROUGH 2782
 38 C C 0 C C 0 0

NOTES 2783 THROUGH 2790
 C C 0 C 0 C 0 0

NOTES 2791 THROUGH 2798
 40 C 0 0 0 C 0 0

NOTES 2799 THROUGH 2806
 C C C C C 0 0 0

NOTES 2807 THROUGH 2814
 38 C C 0 C C 0 0

NOTES 2815 THROUGH 2822
 C C C 0 0 C 0 0

NOTES 2823 THROUGH 2824
 -1 -99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
 FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
 FOUR NOTES-IN-LENGTH

*** TYPE I LISTING ***

JOHN DUNSTABLE ISORHYTHMIC MOTET VENI SANCTE SPIRITUS

SEARCH FOR PATTERNS OF 3 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 51 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	21 TO 35		393 TO 407	12	3
2	29 TO 37		401 TO 409	12	3
3	35 TO 39		407 TO 411	12	3
4	37 TO 41		409 TO 413	12	3
5	39 TO 45		503 TO 509	12	3
6	39 TO 45		1688 TO 1694	12	3
7	45 TO 55		417 TO 427	12	3
8	49 TO 57		97 TO 105	12	3
9	49 TO 57		421 TO 429	12	3
10	49 TO 57		469 TO 477	12	3
11	55 TO 59		103 TO 107	12	3
12	55 TO 59		271 TO 275	12	3
13	55 TO 59		427 TO 431	12	3
14	55 TO 59		475 TO 479	12	3
15	55 TO 59		859 TO 863	12	3
16	57 TO 61		105 TO 109	12	3
17	57 TO 61		273 TO 277	12	3
18	57 TO 61		429 TO 433	12	3
19	57 TO 61		477 TO 481	12	3
20	81 TO 85		341 TO 345	12	3
21	83 TO 87		319 TO 323	12	3
22	83 TO 87		335 TO 339	12	3
23	85 TO 89		321 TO 325	12	3
24	85 TO 89		1210 TO 1214	12	3
25	85 TO 89		1434 TO 1438	12	3
**** FOR	57 TO 105.	SEE	49 TO 57 ABOVE	****	
**** FOR	103 TO 107.	SEE	55 TO 59 ABOVE	****	
**** FOR	105 TO 109.	SEE	57 TO 61 ABOVE	****	
26	163 TO 167		917 TO 921	12	3
27	169 TO 171		173 TO 175	12	3
**** FOR	173 TO 175.	SEE	169 TO 171 ABOVE	****	
28	175 TO 178		667 TO 670	12	3
29	177 TO 179		669 TO 671	12	3
30	209 TO 217		1478 TO 1486	12	3
31	267 TO 273		807 TO 813	12	3
32	267 TO 273		855 TO 861	12	3
**** FOR	271 TO 275.	SEE	55 TO 59 ABOVE	****	
**** FOR	273 TO 277.	SEE	57 TO 61 ABOVE	****	
33	297 TO 301		501 TO 505	12	3
34	297 TO 301		1686 TO 1690	12	3
35	297 TO 301		1862 TO 1866	12	3
**** FOR	319 TO 323.	SEE	83 TO 87 ABOVE	****	

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
**** FCR	321 TC	325.	SEE 85 TO 89 ABOVE	****	
**** FCR	335 TC	339.	SEE 83 TO 87 ABOVE	****	
36	337 TO	341	455 TO 459	12	3
37	337 TO	341	647 TO 651	12	3
38	337 TO	341	783 TO 787	12	3
39	337 TC	341	945 TO 949	12	3
**** FOR	341 TO	345.	SEE 81 TO 85 ABOVE	****	
40	345 TO	348	599 TO 602	12	3
41	341 TO	351	621 TO 631	12	3
**** FCR	393 TC	407.	SEE 21 TO 35 ABOVE	****	
**** FCR	401 TO	409.	SEE 29 TO 37 ABOVE	****	
**** FOR	407 TC	411.	SEE 35 TO 39 ABOVE	****	
**** FOR	409 TO	413.	SEE 37 TO 41 ABOVE	****	
42	411 TC	417	1864 TO 1870	12	3
**** FOR	417 TO	427.	SEE 45 TO 55 ABOVE	****	
**** FOR	421 TO	429.	SEE 49 TO 57 ABOVE	****	
**** FOR	427 TO	431.	SEE 55 TO 59 ABOVE	****	
**** FCR	429 TO	433.	SEE 57 TO 61 ABOVE	****	
43	441 TO	447	589 TO 595	12	3
44	453 TO	457	943 TO 947	12	3
45	453 TO	457	1432 TO 1436	12	3
**** FCR	455 TO	459.	SEE 337 TO 341 ABOVE	****	
46	457 TO	461	649 TO 653	12	3
47	459 TO	465	863 TO 869	12	3
**** FOR	469 TC	477.	SEE 49 TO 57 ABOVE	****	
**** FCR	475 TO	479.	SEE 55 TO 59 ABOVE	****	
**** FCR	477 TO	481.	SEE 57 TO 61 ABOVE	****	
48	497 TC	501	709 TO 713	12	3
49	459 TO	503	1860 TO 1864	12	3
**** FCR	501 TO	505.	SEE 297 TO 301 ABOVE	****	
**** FCR	503 TO	509.	SEE 39 TO 45 ABOVE	****	
50	563 TC	569	1436 TO 1442	12	3
51	573 TO	583	1866 TO 1876	12	3
**** FOR	589 TO	595.	SEE 441 TO 447 ABOVE	****	
**** FOR	599 TO	602.	SEE 345 TO 348 ABOVE	****	
52	607 TO	611	715 TO 719	12	3
53	607 TO	611	811 TO 815	12	3
54	607 TO	611	955 TO 959	12	3
55	609 TO	612	717 TO 720	12	3
56	609 TO	612	813 TO 816	12	3
57	609 TC	612	957 TO 960	12	3
**** FCR	621 TO	631.	SEE 381 TO 391 ABOVE	****	
**** FOR	647 TC	651.	SEE 337 TO 341 ABOVE	****	
**** FCR	649 TO	653.	SEE 457 TO 461 ABOVE	****	
**** FCR	667 TC	670.	SEE 175 TO 178 ABOVE	****	
**** FCR	669 TO	671.	SEE 177 TO 179 ABOVE	****	
58	685 TO	689	949 TO 953	12	3
59	689 TC	695	1746 TO 1752	12	3
60	691 TC	697	1584 TO 1590	12	3
61	701 TO	707	1834 TO 1840	12	3
**** FOR	709 TO	713.	SEE 497 TO 501 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 715 TO 719.	SEE 607 TO 611 ABOVE ****				
**** FOR 717 TO 720.	SEE 609 TO 612 ABOVE ****				
62 781 TO 785	1752 TO 1756 12				3
**** FOR 783 TO 787.	SEE 337 TO 341 ABOVE ****				
63 805 TO 811	853 TO 859 12				3
64 805 TO 811	1582 TO 1588 12				3
65 805 TO 811	1890 TO 1896 12				3
**** FOR 807 TO 813.	SEE 267 TO 273 ABOVE ****				
**** FOR 811 TO 815.	SEE 607 TO 611 ABOVE ****				
**** FOR 813 TO 816.	SEE 609 TO 612 ABOVE ****				
66 849 TO 853	947 TO 951 12				3
**** FOR 853 TO 859.	SEE 805 TO 811 ABOVE ****				
**** FOR 855 TO 861.	SEE 267 TO 273 ABOVE ****				
**** FOR 859 TO 863.	SEE 55 TO 59 ABOVE ****				
**** FOR 863 TO 869.	SEE 459 TO 465 ABOVE ****				
**** FOR 917 TO 921.	SEE 163 TO 167 ABOVE ****				
**** FOR 943 TO 947.	SEE 453 TO 457 ABOVE ****				
**** FOR 945 TO 949.	SEE 337 TO 341 ABOVE ****				
**** FOR 947 TO 951.	SEE 849 TO 853 ABOVE ****				
**** FOR 949 TO 953.	SEE 685 TO 689 ABOVE ****				
**** FOR 955 TO 959.	SEE 607 TO 611 ABOVE ****				
**** FOR 957 TO 960.	SEE 609 TO 612 ABOVE ****				
67 1070 TO 1078	1310 TO 1318 12				3
68 1074 TO 1086	1314 TO 1326 12				3
**** FOR 1210 TO 1214.	SEE 85 TO 89 ABOVE ****				
69 1274 TO 1286	1562 TO 1574 12				3
**** FOR 1310 TO 1318.	SEE 1070 TO 1078 ABOVE ****				
**** FOR 1314 TO 1326.	SEE 1074 TO 1086 ABOVE ****				
**** FOR 1432 TO 1436.	SEE 453 TO 457 ABOVE ****				
**** FOR 1434 TO 1438.	SEE 85 TO 89 ABOVE ****				
**** FOR 1436 TO 1442.	SEE 563 TO 569 ABOVE ****				
**** FOR 1478 TO 1486.	SEE 209 TO 217 ABOVE ****				
**** FOR 1562 TO 1574.	SEE 1274 TO 1286 ABOVE ****				
**** FOR 1582 TO 1588.	SEE 805 TO 811 ABOVE ****				
**** FOR 1584 TO 1590.	SEE 691 TO 697 ABOVE ****				
**** FOR 1686 TO 1690.	SEE 297 TO 301 ABOVE ****				
**** FOR 1688 TO 1694.	SEE 39 TO 45 ABOVE ****				
**** FOR 1746 TO 1752.	SEE 689 TO 695 ABOVE ****				
**** FOR 1752 TO 1756.	SEE 781 TO 785 ABOVE ****				
**** FOR 1834 TO 1840.	SEE 701 TO 707 ABOVE ****				
**** FOR 1860 TO 1864.	SEE 499 TO 503 ABOVE ****				
**** FOR 1862 TO 1866.	SEE 297 TO 301 ABOVE ****				
**** FOR 1864 TO 1870.	SEE 411 TO 417 ABOVE ****				
**** FOR 1866 TO 1876.	SEE 573 TO 583 ABOVE ****				
**** FOR 1890 TO 1896.	SEE 805 TO 811 ABOVE ****				

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 4 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 1068 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
70	21 TC 37		393 TO 409	12	4
71	29 TO 39		401 TO 411	12	4
72	35 TO 41		407 TO 413	12	4
73	45 TO 57		417 TO 429	12	4
74	49 TC 59		97 TO 107	12	4
75	49 TC 59		421 TO 431	12	4
76	49 TO 59		469 TO 479	12	4
77	55 TO 61		103 TO 109	12	4
78	55 TO 61		271 TO 277	12	4
79	55 TC 61		427 TO 433	12	4
80	55 TC 61		475 TO 481	12	4
81	83 TO 89		319 TO 325	12	4
**** FOR	97 TO 107.	SEE	49 TO 59 ABOVE	****	
**** FOR	103 TO 109.	SEE	55 TO 61 ABOVE	****	
82	175 TO 179		667 TO 671	12	4
83	267 TC 275		855 TO 863	12	4
**** FOR	271 TC 277.	SEE	55 TO 61 ABOVE	****	
**** FOR	319 TO 325.	SEE	83 TO 89 ABOVE	****	
**** FOR	393 TO 409.	SEE	21 TO 37 ABOVE	****	
**** FOR	401 TO 411.	SEE	29 TO 39 ABOVE	****	
**** FOR	407 TC 413.	SEE	35 TO 41 ABOVE	****	
**** FOR	417 TO 429.	SEE	45 TO 57 ABOVE	****	
**** FOR	421 TC 431.	SEE	49 TO 59 ABOVE	****	
**** FOR	427 TC 433.	SEE	55 TO 61 ABOVE	****	
84	453 TC 459		943 TO 949	12	4
85	455 TO 461		647 TO 653	12	4
**** FOR	469 TO 479.	SEE	49 TO 59 ABOVE	****	
**** FOR	475 TO 481.	SEE	55 TO 61 ABOVE	****	
86	499 TO 505		1860 TO 1866	12	4
87	501 TC 509		1686 TO 1694	12	4
88	607 TO 612		715 TO 720	12	4
89	607 TO 612		811 TO 816	12	4
90	607 TC 612		955 TO 960	12	4
91	607 TO 612		715 TO 720	12	4
92	607 TO 612		811 TO 816	12	4
93	607 TO 612		955 TO 960	12	4
**** FOR	647 TO 653.	SEE	455 TO 461 ABOVE	****	
**** FOR	647 TO 653.	SEE	455 TO 461 ABOVE	****	
**** FOR	667 TO 671.	SEE	175 TO 179 ABOVE	****	
**** FOR	715 TC 720.	SEE	607 TO 612 ABOVE	****	
**** FOR	715 TO 720.	SEE	607 TO 612 ABOVE	****	
94	805 TC 813		853 TC 861	12	4
**** FOR	811 TO 816.	SEE	607 TO 612 ABOVE	****	
**** FOR	811 TO 816.	SEE	607 TO 612 ABOVE	****	

PATTERN	NCES	RELATED TO	NCES	TEST	LENGTH
**** FCR 853 TO 861.		SEE 805 TO 813 ABOVE	****		
**** FOR 855 TO 863.		SEE 267 TO 275 ABOVE	****		
**** FCR 943 TC 949.		SEE 453 TO 459 ABOVE	****		
**** FCR 555 TO 960.		SEE 607 TO 612 ABOVE	****		
**** FCR 555 TO 560.		SEE 607 TO 612 ABOVE	****		
55 1070 TO 1086		1310 TO 1326	12		4
**** FCR 1310 TC 1326.		SEE 1070 TO 1086 ABOVE	****		
**** FCR 1686 TO 1694.		SEE 501 TO 509 ABOVE	****		
**** FOR 1686 TC 1694.		SEE 501 TO 509 ABOVE	****		
**** FCR 1860 TO 1866.		SEE 499 TO 505 ABOVE	****		

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 5 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT CCNTOUR (ORIGINAL)
 WAS BEGUN AT 1251 SECONDS INTO EXECUTION.

PATTERN	NCOTES	RELATED TO	NOTES	TFST	LENGTH
96	21 TC 39		393 TO 411	12	5
97	29 TO 41		401 TO 413	12	5
98	45 TO 59		417 TO 431	12	5
99	49 TO 61		97 TO 109	12	5
100	49 TC 61		421 TO 433	12	5
101	49 TO 61		469 TO 481	12	5
**** FOR	97 TO 109.	SEE	49 TO 61 ABOVE	****	
**** FOR	393 TO 411.	SEE	21 TO 39 ABOVE	****	
**** FOR	401 TO 413.	SEE	29 TO 41 ABOVE	****	
**** FOR	417 TC 431.	SEE	45 TO 59 ABOVE	****	
**** FOR	421 TO 433.	SEE	49 TO 61 ABOVE	****	
**** FOR	469 TO 481.	SEE	49 TO 61 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 6 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 1474 SECONDS INTO EXECUTION.

PATTERN	NCES	RELATED TC	NOTES	TEST	LENGTH
102	21 TC	41	393 TO 413	12	6
103	45 TC	61	417 TO 433	12	6
**** FOR	393 TC	413.	SEE 21 TO 41	ABOVE ****	
**** FCR	417 TC	433.	SEE 45 TO 61	ABOVE ****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 7 NOTES IN LENGTH --
EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)
WAS BEGUN AT 1683 SECCNDS INTO EXECUTION.

PATTERN	NCES	RELATED TC	NOTES	TEST LENGTH
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END OF TYPE I LISTING. TOTAL CF 103 PATTERNS LOCATED.

*** TYPE II LISTING ***

JOHN DUNSTABLE ISORHYTHMIC MOTET VENI SANCTE SPIRITUS
 EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	45 TO 61	2	6
SLEPATTERN	45 TO 61	4	5
SLPPATTERN	55 TO 61	5	4
SLEPATTERN	45 TO 59	4	4
SLEPATTERN	57 TO 61	5	3
SLPPATTERN	55 TO 59	6	3
SLEPATTERN	45 TO 57	4	3
ORIGINAL PATTERN	21 TO 41	2	6

**** TEST 12 COMPLETED AT 1720 SECONDS INTO EXECUTION ****

For the Test-0 analysis of the Hindemith fugue, the rhythm of the top voice was altered slightly in measures 11 and 76 to allow for a limitation in the encoding process. Since rhythm was not analyzed in Test 0, this alteration did not affect the results of the analysis. In order to reduce the size of this appendix, the list showing the computer-assigned reference numbers for Test 0 has been omitted.

HINDEMITH LUDIS TONALIS FUGA VNA IN B-FLAT, COMPLETE

ASCENDING AND DESCENDING INTERVALS*
(INCLUDING ENHARMONIC EQUIVALENTS)

	TOTAL OCCURRENCES	PERCENTAGE OF OCCURRENCE
MINOR 2	193	22.44
MAJOR 2	238	27.67
MINOR 3	129	15.00
MAJOR 3	43	5.00
PERF. 4	69	8.02
TRITONE	7	0.81
PERF. 5	14	1.63
MINOR 6	6	0.70
MAJOR 6	7	0.81
MINOR 7	25	2.91
MAJOR 7	7	0.81
OCTAVE	17	1.98
MINOR 9	3	0.35
MAJOR 9	2	0.23
MINOR 10	4	0.47
MAJOR 10	2	0.23
PERF. 11	2	0.23
CCMP. TT	0	0.0
PERF. 12	3	0.35
MINOR 13	1	0.12
MAJOR 13	0	0.0
MINOR 14	7	0.81
MAJOR 14	1	0.12
TWO OCT.	5	0.58
UNISON	69	8.02
INTERVALS EXCEEDING TWO OCTAVES	6	0.70

860 INTERVALS COUNTED

*INCLUDING UNISONS

HINDEMITH LUDIS TONALIS FUGA NONA IN B-FLAT, COMPLETE

ASCENDING INTERVALS
(INCLUDING ENHARMONIC EQUIVALENTS)

	TOTAL OCCURRENCES	PERCENTAGE OF OCCURRENCE
MINOR 2	80	21.45
MAJOR 2	120	32.17
MINOR 3	60	16.09
MAJOR 3	15	4.02
PERF. 4	40	10.72
TRITONE	5	1.34
PERF. 5	4	1.07
MINOR 6	4	1.07
MAJOR 6	3	0.80
MINOR 7	12	3.22
MAJOR 7	0	0.0
OCTAVE	5	1.34
MINOR 9	2	0.54
MAJOR 9	2	0.54
MINOR 10	3	0.80
MAJOR 10	2	0.54
PERF. 11	1	0.27
UNCOMP. TT	0	0.0
PERF. 12	3	0.80
MINOR 13	1	0.27
MAJOR 13	0	0.0
MINOR 14	4	1.07
MAJOR 14	0	0.0
TWO OCT.	2	0.54
INTERVALS EXCEEDING TWO OCTAVES	5	1.34

373 ASCENDING INTERVALS COUNTED

HINDEMITH LUDIS TONALIS FUGA NO. 1 IN B-FLAT, COMPLETE

DESCENDING INTERVALS
(INCLUDING ENHARMONIC EQUIVALENTS)

	TOTAL OCCURRENCES	PERCENTAGE OF OCCURRENCE
MINOR 2	113	27.03
MAJOR 2	118	28.23
MINOR 3	69	16.51
MAJOR 3	28	6.70
PERF. 4	29	6.94
TRITONE	2	0.48
PERF. 5	10	2.39
MINOR 6	2	0.48
MAJOR 6	4	0.96
MINOR 7	13	3.11
MAJOR 7	7	1.67
OCTAVE	12	2.87
MINOR 9	1	0.24
MAJOR 9	0	0.0
MINOR 10	1	0.24
MAJOR 10	0	0.0
PERF. 11	1	0.24
COMP. TT	0	0.0
PERF. 12	0	0.0
MINOR 13	0	0.0
MAJOR 13	0	0.0
MINOR 14	3	0.72
MAJOR 14	1	0.24
TWO OCT.	3	0.72
INTERVALS EXCEEDING TWO OCTAVE	1	0.24

418 DESCENDING INTERVALS COUNTED

*** TEST 0 COMPLETED AT 61 SECONDS INTO EXECUTION ***

The following score shows the computer-assigned reference numbers for the analyses of the bottom-sounding voice of the Hindemith fugue. Although all three voices are shown in the following score, only the bottom-sounding voice was encoded and analyzed for these tests.

Ludis Tonalis

Moderato, scherzando .♩ = 80)

Hindemith

Fuga
nona
in Bb

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Musical score system 1, measures 33-47. The system consists of two staves. The left staff begins with a treble clef and a key signature of two flats (B-flat and E-flat). It contains a melodic line with various ornaments and a dynamic marking of *p* (piano) at measure 41. The right staff begins with a bass clef and contains a bass line with a dynamic marking of *f* (forte) at measure 47. Measure numbers 33, 41, 47, 65, and 81 are indicated at the bottom of the staves.

Musical score system 2, measures 113-129. The system consists of two staves. The left staff begins with a treble clef and a key signature of two sharps (F-sharp and C-sharp). It contains a melodic line with a dynamic marking of *p* (piano) at measure 113. The right staff begins with a bass clef and contains a bass line with a dynamic marking of *mf* (mezzo-forte) at measure 129. Measure numbers 113, 129, 145, and 161 are indicated at the bottom of the staves.

Musical score system 3, measures 177-209. The system consists of two staves. The left staff begins with a treble clef and a key signature of two sharps (F-sharp and C-sharp). It contains a melodic line with a dynamic marking of *ppp* (pianissimo) at measure 177. The right staff begins with a bass clef and contains a bass line with a dynamic marking of *ppp* (pianissimo) at measure 209. Measure numbers 177, 193, 209, 225, and 241 are indicated at the bottom of the staves.

257 273 289 305 321

25 *mp* *f*

This system contains measures 257 to 321. It features a piano accompaniment with a melodic line in the right hand and a bass line in the left hand. The melody is marked *mp* (mezzo-piano) and *f* (forte). The bass line has a *b* (flat) symbol. The system ends with a double bar line.

337 353 369 385 401

30 *p* *cresc.*

This system contains measures 337 to 401. It features a piano accompaniment with a melodic line in the right hand and a bass line in the left hand. The melody is marked *p* (piano) and *cresc.* (crescendo). The system ends with a double bar line.

417 433 449 465 481

35 *f*

This system contains measures 417 to 481. It features a piano accompaniment with a melodic line in the right hand and a bass line in the left hand. The melody is marked *f* (forte). The system ends with a double bar line.

45 *f* *p* *cresc.*

577 593 609 625 641

50 *f*

657 673 689 705 741

55 *mf*

753 769 785 801

Musical score for three systems of piano and organ. The first system (measures 817-865) features a piano melody with a crescendo and organ accompaniment. The second system (measures 865-945) includes a mezzo-forte organ section and piano accompaniment. The third system (measures 945-1025) continues the piano melody and organ accompaniment.

System 1 (Measures 817-865):
 Piano: 817, 833, 849, 865
 Organ: 817, 833, 849, 865
 Dynamics: *cresc.*

System 2 (Measures 865-945):
 Piano: 865, 897, 929, 945
 Organ: 865, 897, 929, 945
 Dynamics: *mf*

System 3 (Measures 945-1025):
 Piano: 945, 977, 1009, 1025
 Organ: 945, 977, 1009, 1025

Musical score for measures 1041-1069. The score is written for two staves. The first staff begins with a treble clef and a key signature of one flat (B-flat). The second staff begins with a bass clef and a key signature of one flat (B-flat). The music features a variety of note values, including eighth and sixteenth notes, and rests. A large bracket spans measures 1041 through 1069. Measure numbers 1041, 1057, 1073, and 1069 are indicated below the staves. A measure number 74 is written above the first staff at the beginning of the system.

Musical score for measures 1105-1137. The score is written for two staves. The first staff begins with a treble clef and a key signature of one flat (B-flat). The second staff begins with a bass clef and a key signature of one flat (B-flat). The music features a variety of note values, including eighth and sixteenth notes, and rests. A large bracket spans measures 1105 through 1137. Measure numbers 1105, 1121, 1137, and 1153 are indicated below the staves. A measure number 78 is written above the first staff at the beginning of the system.

***** MUSIC MELODIC PATTERN ANALYSIS *****

HINDEMITH LUDIS TONALIS FUGA NONA IN B-FLAT, BOTTOM VOICE

TEST REQUESTED 2
 UNITS OF DATA PER CARD 16

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES	1 THROUGH	16														
	36	C	0	0	38	0	-1	0	38	0	0	0	43	0	-1	0
NOTES	17 THROUGH	32														
	43	33	0	0	0	0	0	0	0	0	0	0	36	38	41	38
NOTES	33 THROUGH	48														
	36	C	0	0	32	0	0	0	31	0	0	0	29	0	0	0
NOTES	49 THROUGH	64														
	28	C	0	0	-1	0	0	0	30	0	0	0	-1	0	0	0
NOTES	65 THROUGH	80														
	33	0	0	0	-1	0	0	0	31	0	0	0	-1	0	0	0
NOTES	81 THROUGH	96														
	30	C	0	0	-1	0	0	0	29	0	0	0	-1	0	0	0
NOTES	97 THROUGH	112														
	28	0	0	0	52	51	52	51	52	0	0	0	52	0	0	0
NOTES	113 THROUGH	128														
	49	C	0	0	-1	0	0	0	49	0	0	0	47	0	-1	0
NOTES	129 THROUGH	144														
	47	C	0	0	42	0	-1	0	42	52	0	0	0	0	0	0
NOTES	145 THROUGH	160														
	0	C	0	0	49	47	44	47	49	0	0	0	53	0	0	0
NOTES	161 THROUGH	176														
	54	C	0	0	56	0	0	0	57	0	0	0	-1	0	0	0
NOTES	177 THROUGH	192														
	45	0	0	0	0	0	0	0	43	0	0	0	0	0	0	0
NOTES	193 THROUGH	208														
	41	C	0	0	0	0	0	0	40	0	0	0	0	0	0	0

NOTES 209 THROUGH 224
 38 0 0 0 -1 0 0 0 0 0 51 0 51 0 -1 0

NOTES 225 THROUGH 240
 0 0 52 0 52 0 -1 0 0 0 49 0 49 0 -1 0

NOTES 241 THROUGH 256
 0 0 50 0 50 0 -1 0 0 0 52 0 52 0 0 0

NOTES 257 THROUGH 272
 53 0 0 0 -1 0 0 0 41 0 0 0 0 0 0 0

NOTES 273 THROUGH 288
 40 0 0 0 38 0 -1 0 38 0 0 0 33 0 -1 0

NOTES 289 THROUGH 304
 33 43 0 0 0 0 0 0 0 0 0 0 40 38 35 38

NOTES 305 THROUGH 320
 40 0 0 0 44 0 0 0 45 0 0 0 47 0 0 0

NOTES 321 THROUGH 336
 49 0 0 0 37 36 37 39 41 0 0 0 42 0 0 0

NOTES 337 THROUGH 352
 43 0 0 0 -1 0 0 0 41 0 0 0 0 0 0 0

NOTES 353 THROUGH 368
 39 0 0 0 0 0 0 0 38 0 0 0 0 0 0 0

NOTES 369 THROUGH 384
 37 0 0 0 0 0 0 0 36 0 0 0 0 0 0 0

NOTES 385 THROUGH 400
 35 0 0 0 0 0 0 0 33 0 0 0 0 0 0 0

NOTES 401 THROUGH 416
 35 0 0 0 37 0 0 0 38 0 0 0 42 0 0 0

NOTES 417 THROUGH 432
 44 47 44 42 39 0 0 0 0 0 0 0 49 0 -1 0

NOTES 433 THROUGH 448
 0 0 49 0 44 0 0 0 -1 0 44 0 42 0 0 0

NOTES 449 THROUGH 464
 41 0 0 0 0 0 0 0 44 0 0 0 0 0 0 0

NOTES 465 THROUGH 480
 39 0 0 0 -1 0 0 0 28 0 0 0 30 0 0 0

NOTES 481 THROUGH 496
 31 0 0 0 35 0 0 0 37 40 37 35 32 0 0 0

NOTES 497 THROUGH 512
 0 C 0 0 42 0 -1 0 0 0 42 0 37 0 0 0

NOTES 513 THROUGH 528
 -1 0 37 0 35 0 0 0 -1 0 33 0 38 0 0 0

NOTES 529 THROUGH 544
 31 0 0 0 -1 0 0 0 33 0 0 0 -1 0 0 0

NOTES 545 THROUGH 560
 36 0 0 0 -1 0 0 0 34 0 0 0 -1 0 0 0

NOTES 561 THROUGH 576
 33 0 0 0 -1 0 0 0 32 0 0 0 -1 0 0 0

NOTES 577 THROUGH 592
 31 C 0 0 55 54 55 54 55 0 0 0 50 0 52 0

NOTES 593 THROUGH 608
 47 0 0 0 -1 0 0 0 54 0 0 0 52 0 0 0

NOTES 609 THROUGH 624
 51 0 0 0 47 0 0 0 45 42 45 47 50 0 0 0

NOTES 625 THROUGH 640
 0 0 0 0 40 0 -1 0 38 0 0 0 0 0 0 0

NOTES 641 THROUGH 656
 36 C 0 0 0 0 0 0 0 35 0 0 0 0 0 0 0

NOTES 657 THROUGH 672
 33 0 0 0 45 0 0 0 0 0 0 0 43 0 0 0

NOTES 673 THROUGH 688
 41 0 0 0 0 0 0 0 40 0 0 0 0 0 0 0

NOTES 689 THROUGH 704
 38 C 0 0 0 0 0 0 0 42 0 0 0 38 0 0 0

NOTES 705 THROUGH 720
 37 C 0 0 0 0 0 0 0 36 0 0 0 0 0 0 0

NOTES 721 THROUGH 736
 35 0 0 0 -1 0 0 0 0 0 0 0 0 0 0 0

NOTES 737 THROUGH 752
 41 0 0 0 0 0 0 0 43 0 0 0 -1 0 0 0

NOTES 753 THROUGH 768
 43 C 0 0 0 0 0 0 0 48 0 0 0 -1 0 0 0

NOTES 769 THROUGH 784
 48 38 0 0 0 0 0 0 0 0 0 0 0 0 0 0

NOTES 785 THROUGH 800
 0 0 0 0 0 0 0 0 41 0 43 0 46 0 43 0

NOTES 801 THROUGH 816
 41 0 0 0 0 0 0 0 0 37 0 0 0 0 0 0

NOTES 817 THROUGH 832
 36 0 0 0 0 0 0 0 0 34 0 0 0 0 0 0

NOTES 833 THROUGH 848
 33 0 0 0 31 0 -1 0 31 0 0 0 26 0 -1 0

NOTES 849 THROUGH 864
 26 36 0 0 0 0 0 0 0 0 0 0 33 31 28 31

NOTES 865 THROUGH 880
 33 0 0 0 37 0 0 0 38 0 0 0 40 0 0 0

NOTES 881 THROUGH 896
 41 0 0 0 53 55 57 58 60 0 56 0 54 0 49 0

NOTES 897 THROUGH 912
 46 0 42 0 39 0 35 0 -1 0 0 0 0 0 0 0

NOTES 913 THROUGH 928
 -1 0 0 0 24 26 29 26 24 0 0 0 -1 0 0 0

NOTES 929 THROUGH 944
 0 0 0 0 49 51 54 51 49 0 0 0 -1 0 0 0

NOTES 945 THROUGH 960
 0 0 0 0 23 25 28 25 23 0 0 0 -1 0 0 0

NOTES 961 THROUGH 976
 0 0 0 0 30 32 35 32 30 0 0 0 -1 0 0 0

NOTES 977 THROUGH 992
 0 0 0 0 45 47 50 47 45 0 0 0 -1 0 0 0

NOTES 993 THROUGH 1008
 0 0 0 0 22 24 27 24 22 0 0 0 -1 0 0 0

NOTES 1009 THROUGH 1024
 44 47 44 42 41 0 0 0 -1 0 0 0 36 0 37 0

NOTES 1025 THROUGH 1040
 38 0 0 0 0 0 -1 0 43 0 0 0 0 0 -1 0

NOTES 1041 THROUGH 1056
 36 0 0 0 38 0 -1 0 38 0 0 0 43 0 -1 0

NOTES 1057 THROUGH 1072
 43 33 0 0 0 0 0 0 0 0 0 0 36 38 41 38

NOTES 1073 THROUGH 1088

36 0 0 0 32 0 0 0 31 0 0 0 29 0 0 0

NOTES 1089 THROUGH 1104

27 0 0 0 0 0 0 0 25 0 0 0 0 0 0 0

NOTES 1105 THROUGH 1120

24 0 0 0 -1 0 0 0 26 0 0 0 -1 0 0 0

NOTES 1121 THROUGH 1136

29 0 0 0 -1 0 0 0 27 0 0 0 -1 0 0 0

NOTES 1137 THROUGH 1152

26 0 0 0 -1 0 0 0 25 0 0 0 -1 0 0 0

NOTES 1153 THROUGH 1168

24 0 0 0 -1 0 0 0 0 0 0 0 0 0 0 0

NOTES 1169 THROUGH 1184

0 0 0 0 0 0 0 0 55 0 0 0 0 0 0 0

NOTES 1185 THROUGH 1185

-99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

HINDEMITH LUDIS TONALIS FUGA NONA IN B-FLAT, BOTTOM VOICE

ASCENDING AND DESCENDING INTERVALS*
(INCLUDING ENHARMONIC EQUIVALENTS)

	TOTAL OCCURRENCES	PERCENTAGE OF OCCURRENCE
MINOR 2	54	20.45
MAJOR 2	79	29.92
MINOR 3	49	18.56
MAJOR 3	14	5.30
PERF. 4	15	5.68
TRITONE	1	0.38
PERF. 5	4	1.52
MINOR 6	0	0.0
MAJOR 6	0	0.0
MINOR 7	9	3.41
MAJOR 7	2	0.76
OCTAVE	5	1.89
MINOR 9	1	0.38
MAJOR 9	0	0.0
MINOR 10	1	0.38
MAJOR 10	0	0.0
PERF. 11	0	0.0
COMP. TT	0	0.0
PERF. 12	0	0.0
MINOR 13	0	0.0
MAJOR 13	0	0.0
MINOR 14	1	0.38
MAJOR 14	1	0.38
TWO OCT.	2	0.76
UNISON	23	8.71
INTERVALS EXCEEDING TWO OCTAVES	3	1.14

264 INTERVALS COUNTED

* INCLUDING UNISONS

HINDEMITH LUDIS TONALIS FUGA NONA IN B-FLAT, BOTTOM VOICE

ASCENDING INTERVALS
(INCLUDING ENHARMONIC EQUIVALENTS)

	TOTAL OCCURRENCES	PERCENTAGE OF OCCURRENCE
MINOR 2	20	18.69
MAJOR 2	35	32.71
MINOR 3	24	22.43
MAJOR 3	6	5.61
PERF. 4	5	4.67
TRITONE	1	0.93
PERF. 5	2	1.87
MINOR 6	0	0.0
MAJOR 6	0	0.0
MINOR 7	5	4.67
MAJOR 7	0	0.0
OCTAVE	2	1.87
MINOR 9	1	0.93
MAJOR 9	0	0.0
MINOR 10	1	0.93
MAJOR 10	0	0.0
PERF. 11	0	0.0
COMP. TT	0	0.0
PERF. 12	0	0.0
MINOR 13	0	0.0
MAJOR 13	0	0.0
MINOR 14	1	0.93
MAJOR 14	0	0.0
TWO OCT.	2	1.87
INTERVALS EXCEEDING TWO OCTAVES	2	1.87

107 ASCENDING INTERVALS COUNTED

HINDEMITH LUDIS TONALIS FUGA NONA IN B-FLAT, BOTTOM VOICE

DESCENDING INTERVALS
(INCLUDING ENHARMONIC EQUIVALENTS)

	TOTAL OCCURRENCES	PERCENTAGE OF OCCURRENCE
MINOR 2	34	25.37
MAJOR 2	44	32.84
MINOR 3	25	18.66
MAJOR 3	8	5.97
PERF. 4	10	7.46
TRITONE	0	0.0
PERF. 5	2	1.49
MINOR 6	0	0.0
MAJOR 6	0	0.0
MINOR 7	4	2.99
MAJOR 7	2	1.49
OCTAVE	3	2.24
MINOR 9	0	0.0
MAJOR 9	0	0.0
MINOR 10	0	0.0
MAJOR 10	0	0.0
PERF. 11	0	0.0
COMP. TT	0	0.0
PERF. 12	0	0.0
MINOR 13	0	0.0
MAJOR 13	0	0.0
MINOR 14	0	0.0
MAJOR 14	1	0.75
TWO OCT.	0	0.0
INTERVALS	1	0.75
EXCEEDING TWO OCTAVES		

134 DESCENDING INTERVALS COUNTED

*** TYPE I LISTING ***

HINDEMITH LUDIS TONALIS FUGA NONA IN B-FLAT, BOTTOM VOICE

SEARCH FOR PATTERNS OF 3 NOTES IN LENGTH --
 EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 38 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO 9		245 TO 253	2	3
2	1 TO 9		737 TO 753	2	3
3	1 TO 9		1041 TO 1049	2	3
4	5 TO 13		745 TO 761	2	3
5	5 TO 13		1045 TO 1053	2	3
6	9 TO 17		753 TO 769	2	3
7	9 TO 17		1049 TO 1057	2	3
8	13 TO 18		761 TO 770	2	3
9	13 TO 18		1053 TO 1058	2	3
10	17 TO 29		769 TO 793	2	3
11	17 TO 29		1057 TO 1069	2	3
12	18 TO 30		151 TO 153	2	3
13	18 TO 30		303 TO 305	2	3
14	18 TO 30		618 TO 620	2	3
15	18 TO 30		770 TO 795	2	3
16	18 TO 30		863 TO 865	2	3
17	18 TO 30		1058 TO 1070	2	3
18	29 TO 31		49 TO 65	2	3
19	29 TO 31		413 TO 418	2	3
20	29 TO 31		485 TO 490	2	3
21	29 TO 31		529 TO 545	2	3
22	29 TO 31		619 TO 621	2	3
23	29 TO 31		793 TO 797	2	3
24	29 TO 31		917 TO 919	2	3
25	29 TO 31		933 TO 935	2	3
26	29 TO 31		949 TO 951	2	3
27	29 TO 31		965 TO 967	2	3
28	29 TO 31		981 TO 983	2	3
29	29 TO 31		997 TO 999	2	3
30	29 TO 31		1069 TO 1071	2	3
31	29 TO 31		1105 TO 1121	2	3
32	30 TO 32		417 TO 419	2	3
33	30 TO 32		489 TO 491	2	3
34	30 TO 32		795 TO 799	2	3
35	30 TO 32		918 TO 920	2	3
36	30 TO 32		934 TO 936	2	3
37	30 TO 32		950 TO 952	2	3
38	30 TO 32		966 TO 968	2	3
39	30 TO 32		982 TO 984	2	3
40	30 TO 32		998 TO 1000	2	3
41	30 TO 32		1009 TO 1011	2	3
42	30 TO 32		1070 TO 1072	2	3

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
43	31 TO	33	138 TO 150	2	3
44	31 TO	33	290 TO 302	2	3
45	31 TO	33	418 TO 420	2	3
46	31 TO	33	490 TO 492	2	3
47	31 TO	33	797 TO 801	2	3
48	31 TO	33	850 TO 862	2	3
49	31 TO	33	919 TO 921	2	3
50	31 TO	33	935 TO 937	2	3
51	31 TO	33	951 TO 953	2	3
52	31 TO	33	967 TO 969	2	3
53	31 TO	33	983 TO 985	2	3
54	31 TO	33	999 TO 1001	2	3
55	31 TO	33	1010 TO 1012	2	3
56	31 TO	33	1071 TO 1073	2	3
57	32 TO	37	799 TO 809	2	3
58	32 TO	37	1072 TO 1077	2	3
59	33 TO	41	697 TO 705	2	3
60	33 TO	41	801 TO 817	2	3
61	33 TO	41	1073 TO 1081	2	3
62	37 TO	45	193 TO 209	2	3
63	37 TO	45	265 TO 277	2	3
64	37 TO	45	377 TO 393	2	3
65	37 TO	45	641 TO 657	2	3
66	37 TO	45	673 TO 689	2	3
67	37 TO	45	809 TO 825	2	3
68	37 TO	45	825 TO 837	2	3
69	37 TO	45	1077 TO 1085	2	3
70	41 TO	49	65 TO 81	2	3
71	41 TO	49	185 TO 201	2	3
72	41 TO	49	345 TO 361	2	3
73	41 TO	49	443 TO 449	2	3
74	41 TO	49	545 TO 561	2	3
75	41 TO	49	601 TO 609	2	3
76	41 TO	49	633 TO 649	2	3
77	41 TO	49	669 TO 681	2	3
78	41 TO	49	817 TO 833	2	3
79	41 TO	49	1011 TO 1013	2	3
80	41 TO	49	1089 TO 1105	2	3
81	41 TO	49	1121 TO 1137	2	3
82	45 TO	57	1097 TO 1113	2	3
**** FOR	49 TO	65,	SEE 29 TO 31	ABOVE ****	
83	57 TO	73	537 TO 553	2	3
84	57 TO	73	1113 TO 1129	2	3
**** FOR	65 TO	81,	SEE 41 TO 49	ABOVE ****	
85	73 TO	89	353 TO 369	2	3
86	73 TO	89	361 TO 377	2	3
87	73 TO	89	369 TO 385	2	3
88	73 TO	89	553 TO 569	2	3
89	73 TO	89	561 TO 577	2	3
90	73 TO	89	701 TO 713	2	3
91	73 TO	89	705 TO 721	2	3

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
92	73 TO 89		1129 TO 1145	2	3
93	73 TO 89		1137 TO 1153	2	3
**** FOR	81 TO 97,	SEE	73 TO 89 ABOVE ****		
94	89 TO 101		569 TO 531	2	3
95	97 TO 102		577 TO 582	2	3
96	101 TO 103		103 TO 105	2	3
97	101 TO 103		325 TO 327	2	3
98	101 TO 103		581 TO 583	2	3
99	101 TO 103		583 TO 585	2	3
100	102 TO 104		582 TO 584	2	3
**** FOR	103 TO 105,	SEE	101 TO 103 ABOVE ****		
101	104 TO 109		221 TO 229	2	3
102	104 TO 109		237 TO 245	2	3
103	105 TO 113		227 TO 235	2	3
104	109 TO 121		229 TO 237	2	3
105	113 TO 125		437 TO 445	2	3
106	113 TO 125		509 TO 517	2	3
107	121 TO 129		273 TO 281	2	3
108	121 TO 129		833 TO 841	2	3
109	125 TO 133		277 TO 285	2	3
110	125 TO 133		429 TO 437	2	3
111	125 TO 133		501 TO 509	2	3
112	125 TO 133		837 TO 845	2	3
113	129 TO 137		281 TO 289	2	3
114	129 TO 137		435 TO 443	2	3
115	129 TO 137		507 TO 515	2	3
116	129 TO 137		841 TO 849	2	3
117	133 TO 138		285 TO 290	2	3
118	133 TO 138		845 TO 850	2	3
119	137 TO 149		289 TO 301	2	3
120	137 TO 149		849 TO 861	2	3
**** FOR	138 TO 150,	SEE	31 TO 33 ABOVE ****		
121	149 TO 151		301 TO 303	2	3
122	149 TO 151		419 TO 421	2	3
123	149 TO 151		491 TO 493	2	3
124	149 TO 151		613 TO 618	2	3
125	149 TO 151		861 TO 863	2	3
126	150 TO 152		302 TO 304	2	3
127	150 TO 152		617 TO 619	2	3
128	150 TO 152		862 TO 864	2	3
**** FOR	151 TO 153,	SEE	18 TO 30 ABOVE ****		
129	152 TO 157		304 TO 309	2	3
130	152 TO 157		864 TO 869	2	3
131	153 TO 161		305 TO 313	2	3
132	153 TO 161		865 TO 873	2	3
133	157 TO 165		309 TO 317	2	3
134	157 TO 165		326 TO 328	2	3
135	157 TO 165		869 TO 877	2	3
136	157 TO 165		887 TO 889	2	3
137	161 TO 169		328 TO 333	2	3
138	161 TO 169		401 TO 409	2	3

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
139	161 TO 169		473 TO 481	2	3
140	161 TO 169		873 TO 881	2	3
141	161 TO 169		886 TO 888	2	3
142	165 TO 177		253 TO 265	2	3
143	177 TO 193		337 TO 353	2	3
144	177 TO 193		515 TO 523	2	3
145	177 TO 193		629 TO 641	2	3
146	177 TO 193		661 TO 673	2	3
147	177 TO 193		1081 TO 1089	2	3
148	177 TO 193		1085 TO 1097	2	3
**** FOR	185 TO 201,	SEE	41 TO 49 ABOVE	****	
**** FOR	193 TO 209,	SEE	37 TO 45 ABOVE	****	
149	219 TO 227		235 TO 243	2	3
150	219 TO 227		251 TO 257	2	3
**** FOR	221 TO 229,	SEE	104 TO 109 ABOVE	****	
**** FOR	227 TO 235,	SEE	105 TO 113 ABOVE	****	
**** FOR	229 TO 237,	SEE	109 TO 121 ABOVE	****	
**** FOR	235 TO 243,	SEE	219 TO 227 ABOVE	****	
**** FOR	237 TO 245,	SEE	104 TO 109 ABOVE	****	
**** FOR	245 TO 253,	SEE	1 TO 9 ABOVE	****	
**** FOR	251 TO 257,	SEE	219 TO 227 ABOVE	****	
**** FOR	253 TO 265,	SEE	165 TO 177 ABOVE	****	
151	257 TO 273		321 TO 326	2	3
**** FOR	265 TO 277,	SEE	37 TO 45 ABOVE	****	
**** FOR	273 TO 281,	SEE	121 TO 129 ABOVE	****	
**** FOR	277 TO 285,	SEE	125 TO 133 ABOVE	****	
**** FOR	281 TO 289,	SEE	129 TO 137 ABOVE	****	
**** FOR	285 TO 290,	SEE	133 TO 138 ABOVE	****	
**** FOR	289 TO 301,	SEE	137 TO 149 ABOVE	****	
**** FOR	290 TO 302,	SEE	31 TO 33 ABOVE	****	
**** FOR	301 TO 303,	SEE	149 TO 151 ABOVE	****	
**** FOR	302 TO 304,	SEE	150 TO 152 ABOVE	****	
**** FOR	303 TO 305,	SEE	18 TO 30 ABOVE	****	
**** FOR	304 TO 309,	SEE	152 TO 157 ABOVE	****	
**** FOR	305 TO 313,	SEE	153 TO 161 ABOVE	****	
**** FOR	309 TO 317,	SEE	157 TO 165 ABOVE	****	
152	313 TO 321		327 TO 329	2	3
153	313 TO 321		393 TO 405	2	3
154	313 TO 321		885 TO 887	2	3
**** FOR	321 TO 326,	SEE	257 TO 273 ABOVE	****	
**** FOR	325 TO 327,	SEE	101 TO 103 ABOVE	****	
**** FOR	326 TO 328,	SEE	157 TO 165 ABOVE	****	
**** FOR	327 TO 329,	SEE	313 TO 321 ABOVE	****	
**** FOR	328 TO 333,	SEE	161 TO 169 ABOVE	****	
155	329 TO 337		1021 TO 1025	2	3
**** FOR	337 TO 353,	SEE	177 TO 193 ABOVE	****	
**** FOR	345 TO 361,	SEE	41 TO 49 ABOVE	****	
**** FOR	353 TO 369,	SEE	73 TO 89 ABOVE	****	
**** FOR	361 TO 377,	SEE	73 TO 89 ABOVE	****	
**** FOR	369 TO 385,	SEE	73 TO 89 ABOVE	****	
**** FOR	377 TO 393,	SEE	37 TO 45 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 393 TO 405,	SEE 313 TO 321 ABOVE	****			
**** FOR 401 TO 409,	SEE 161 TO 169 ABOVE	****			
156 405 TO 413	477 TO 485	2	3		
157 409 TO 417	481 TO 489	2	3		
**** FOR 413 TO 418,	SEE 29 TO 31 ABOVE	****			
**** FOR 417 TO 419,	SEE 30 TO 32 ABOVE	****			
**** FOR 418 TO 420,	SEE 31 TO 33 ABOVE	****			
**** FOR 419 TO 421,	SEE 149 TO 151 ABOVE	****			
158 420 TO 429	492 TO 501	2	3		
159 421 TO 435	493 TO 507	2	3		
**** FOR 429 TO 437,	SEE 125 TO 133 ABOVE	****			
**** FOR 435 TO 443,	SEE 129 TO 137 ABOVE	****			
**** FOR 437 TO 445,	SEE 113 TO 125 ABOVE	****			
**** FOR 443 TO 449,	SEE 41 TO 49 ABOVE	****			
160 465 TO 477	903 TO 918	2	3		
**** FOR 473 TO 481,	SEE 161 TO 169 ABOVE	****			
**** FOR 477 TO 485,	SEE 405 TO 413 ABOVE	****			
**** FOR 481 TO 489,	SEE 409 TO 417 ABOVE	****			
**** FOR 485 TO 490,	SEE 29 TO 31 ABOVE	****			
**** FOR 489 TO 491,	SEE 30 TO 32 ABOVE	****			
**** FOR 490 TO 492,	SEE 31 TO 33 ABOVE	****			
**** FOR 491 TO 493,	SEE 149 TO 151 ABOVE	****			
**** FOR 492 TO 501,	SEE 420 TO 429 ABOVE	****			
**** FOR 493 TO 507,	SEE 421 TO 435 ABOVE	****			
**** FOR 501 TO 509,	SEE 125 TO 133 ABOVE	****			
**** FOR 507 TO 515,	SEE 129 TO 137 ABOVE	****			
**** FOR 509 TO 517,	SEE 113 TO 125 ABOVE	****			
**** FOR 515 TO 523,	SEE 177 TO 193 ABOVE	****			
161 523 TO 529	1025 TO 1041	2	3		
162 525 TO 537	1033 TO 1045	2	3		
**** FOR 529 TO 545,	SEE 29 TO 31 ABOVE	****			
**** FOR 537 TO 553,	SEE 57 TO 73 ABOVE	****			
**** FOR 545 TO 561,	SEE 41 TO 49 ABOVE	****			
**** FOR 553 TO 569,	SEE 73 TO 89 ABOVE	****			
**** FOR 561 TO 577,	SEE 73 TO 89 ABOVE	****			
**** FOR 569 TO 581,	SEE 89 TO 101 ABOVE	****			
**** FOR 577 TO 582,	SEE 97 TO 102 ABOVE	****			
**** FOR 581 TO 583,	SEE 101 TO 103 ABOVE	****			
**** FOR 582 TO 584,	SEE 102 TO 104 ABOVE	****			
**** FOR 583 TO 585,	SEE 101 TO 103 ABOVE	****			
**** FOR 601 TO 609,	SEE 41 TO 49 ABOVE	****			
163 609 TO 617	889 TO 893	2	3		
**** FOR 613 TO 618,	SEE 149 TO 151 ABOVE	****			
**** FOR 617 TO 619,	SEE 150 TO 152 ABOVE	****			
**** FOR 618 TO 620,	SEE 18 TO 30 ABOVE	****			
**** FOR 619 TO 621,	SEE 29 TO 31 ABOVE	****			
**** FOR 629 TO 641,	SEE 177 TO 193 ABOVE	****			
**** FOR 633 TO 649,	SEE 41 TO 49 ABOVE	****			
**** FOR 641 TO 657,	SEE 37 TO 45 ABOVE	****			
**** FOR 661 TO 673,	SEE 177 TO 193 ABOVE	****			
**** FOR 669 TO 681,	SEE 41 TO 49 ABOVE	****			

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
****	FOR 673 TO 689,	SEE	37 TO 45 ABOVE	****	
****	FOR 697 TO 705,	SEE	33 TO 41 ABOVE	****	
****	FOR 701 TO 713,	SEE	73 TO 89 ABOVE	****	
****	FOR 705 TO 721,	SEE	73 TO 89 ABOVE	****	
****	FOR 737 TO 753,	SEE	1 TO 9 ABOVE	****	
****	FOR 745 TO 761,	SEE	5 TO 13 ABOVE	****	
****	FOR 753 TO 769,	SEE	9 TO 17 ABOVE	****	
****	FOR 761 TO 770,	SEE	13 TO 18 ABOVE	****	
****	FOR 769 TO 793,	SEE	17 TO 29 ABOVE	****	
****	FOR 770 TO 795,	SEE	18 TO 30 ABOVE	****	
****	FOR 793 TO 797,	SEE	29 TO 31 ABOVE	****	
****	FOR 795 TO 799,	SEE	30 TO 32 ABOVE	****	
****	FOR 797 TO 801,	SEE	31 TO 33 ABOVE	****	
****	FOR 799 TO 809,	SEE	32 TO 37 ABOVE	****	
****	FOR 801 TO 817,	SEE	33 TO 41 ABOVE	****	
****	FOR 809 TO 825,	SEE	37 TO 45 ABOVE	****	
****	FOR 817 TO 833,	SEE	41 TO 49 ABOVE	****	
****	FOR 825 TO 837,	SEE	37 TO 45 ABOVE	****	
****	FOR 833 TO 841,	SEE	121 TO 129 ABOVE	****	
****	FOR 837 TO 845,	SEE	125 TO 133 ABOVE	****	
****	FOR 841 TO 849,	SEE	129 TO 137 ABOVE	****	
****	FOR 845 TO 850,	SEE	133 TO 138 ABOVE	****	
****	FOR 849 TO 861,	SEE	137 TO 149 ABOVE	****	
****	FOR 850 TO 862,	SEE	31 TO 33 ABOVE	****	
****	FOR 861 TO 863,	SEE	149 TO 151 ABOVE	****	
****	FOR 862 TO 864,	SEE	150 TO 152 ABOVE	****	
****	FOR 863 TO 865,	SEE	18 TO 30 ABOVE	****	
****	FOR 864 TO 869,	SEE	152 TO 157 ABOVE	****	
****	FOR 865 TO 873,	SEE	153 TO 161 ABOVE	****	
****	FOR 869 TO 877,	SEE	157 TO 165 ABOVE	****	
****	FOR 873 TO 881,	SEE	161 TO 169 ABOVE	****	
****	FOR 885 TO 887,	SEE	313 TO 321 ABOVE	****	
****	FOR 886 TO 888,	SEE	161 TO 169 ABOVE	****	
****	FOR 887 TO 889,	SEE	157 TO 165 ABOVE	****	
****	FOR 889 TO 893,	SEE	609 TO 617 ABOVE	****	
164	895 TO 899		899 TO 903	2	3
****	FOR 899 TO 903,	SEE	895 TO 899 ABOVE	****	
****	FOR 903 TO 918,	SEE	465 TO 477 ABOVE	****	
****	FOR 917 TO 919,	SEE	29 TO 31 ABOVE	****	
****	FOR 918 TO 920,	SEE	30 TO 32 ABOVE	****	
****	FOR 919 TO 921,	SEE	31 TO 33 ABOVE	****	
****	FOR 933 TO 935,	SEE	29 TO 31 ABOVE	****	
****	FOR 934 TO 936,	SEE	30 TO 32 ABOVE	****	
****	FOR 935 TO 937,	SEE	31 TO 33 ABOVE	****	
****	FOR 949 TO 951,	SEE	29 TO 31 ABOVE	****	
****	FOR 950 TO 952,	SEE	30 TO 32 ABOVE	****	
****	FOR 951 TO 953,	SEE	31 TO 33 ABOVE	****	
****	FOR 965 TO 967,	SEE	29 TO 31 ABOVE	****	
****	FOR 966 TO 968,	SEE	30 TO 32 ABOVE	****	
****	FOR 967 TO 969,	SEE	31 TO 33 ABOVE	****	
****	FOR 981 TO 983,	SEE	29 TO 31 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
****	FOR 982 TO 984,	SEE	30 TO	32 ABOVE	****
****	FOR 983 TO 985,	SEE	31 TO	33 ABOVE	****
****	FOR 997 TO 999,	SEE	29 TO	31 ABOVE	****
****	FOR 998 TO 1000,	SEE	30 TO	32 ABOVE	****
****	FOR 999 TO 1001,	SEE	31 TO	33 ABOVE	****
****	FOR 1009 TO 1011,	SEE	30 TO	32 ABOVE	****
****	FOR 1010 TO 1012,	SEE	31 TO	33 ABOVE	****
****	FOR 1011 TO 1013,	SEE	41 TO	49 ABOVE	****
****	FOR 1021 TO 1025,	SEE	329 TO	337 ABOVE	****
****	FOR 1025 TO 1041,	SEE	523 TO	529 ABOVE	****
****	FOR 1033 TO 1045,	SEE	525 TO	537 ABOVE	****
****	FOR 1041 TO 1049,	SEE	1 TO	9 ABOVE	****
****	FOR 1045 TO 1053,	SEE	5 TO	13 ABOVE	****
****	FOR 1049 TO 1057,	SEE	9 TO	17 ABOVE	****
****	FOR 1053 TO 1058,	SEE	13 TO	18 ABOVE	****
****	FOR 1057 TO 1069,	SEE	17 TO	29 ABOVE	****
****	FOR 1058 TO 1070,	SEE	18 TO	30 ABOVE	****
****	FOR 1069 TO 1071,	SEE	29 TO	31 ABOVE	****
****	FOR 1070 TO 1072,	SEE	30 TO	32 ABOVE	****
****	FOR 1071 TO 1073,	SEE	31 TO	33 ABOVE	****
****	FOR 1072 TO 1077,	SEE	32 TO	37 ABOVE	****
****	FOR 1073 TO 1081,	SEE	33 TO	41 ABOVE	****
****	FOR 1077 TO 1085,	SEE	37 TO	45 ABOVE	****
****	FOR 1081 TO 1089,	SEE	177 TO	193 ABOVE	****
****	FOR 1085 TO 1097,	SEE	177 TO	193 ABOVE	****
****	FOR 1089 TO 1105,	SEE	41 TO	49 ABOVE	****
****	FOR 1097 TO 1113,	SEE	45 TO	57 ABOVE	****
****	FOR 1105 TO 1121,	SEE	29 TO	31 ABOVE	****
****	FOR 1113 TO 1129,	SEE	57 TO	73 ABOVE	****
****	FOR 1121 TO 1137,	SEE	41 TO	49 ABOVE	****
****	FOR 1129 TO 1145,	SEE	73 TO	89 ABOVE	****

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 4 NOTES IN LENGTH --
 EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 325 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
165	1 TO 13		737 TO 761	2	4
166	1 TO 13		1041 TO 1053	2	4
167	5 TO 17		745 TO 769	2	4
168	5 TO 17		1045 TO 1057	2	4
169	9 TO 18		753 TO 770	2	4
170	9 TO 18		1049 TO 1058	2	4
171	13 TO 29		761 TO 793	2	4
172	13 TO 29		1053 TO 1069	2	4
173	17 TO 30		769 TO 795	2	4
174	17 TO 30		1057 TO 1070	2	4
175	18 TO 31		618 TO 621	2	4
176	18 TO 31		770 TO 797	2	4
177	18 TO 31		1058 TO 1071	2	4
178	29 TO 32		413 TO 419	2	4
179	29 TO 32		485 TO 491	2	4
180	29 TO 32		793 TO 799	2	4
181	29 TO 32		917 TO 920	2	4
182	29 TO 32		933 TO 936	2	4
183	29 TO 32		949 TO 952	2	4
184	29 TO 32		965 TO 968	2	4
185	29 TO 32		981 TO 984	2	4
186	29 TO 32		997 TO 1000	2	4
187	29 TO 32		1069 TO 1072	2	4
188	30 TO 33		417 TO 420	2	4
189	30 TO 33		489 TO 492	2	4
190	30 TO 33		795 TO 801	2	4
191	30 TO 33		918 TO 921	2	4
192	30 TO 33		934 TO 937	2	4
193	30 TO 33		950 TO 953	2	4
194	30 TO 33		966 TO 969	2	4
195	30 TO 33		982 TO 985	2	4
196	30 TO 33		998 TO 1001	2	4
197	30 TO 33		1009 TO 1012	2	4
198	30 TO 33		1070 TO 1073	2	4
199	31 TO 37		797 TO 809	2	4
200	31 TO 37		1071 TO 1077	2	4
201	32 TO 41		799 TO 817	2	4
202	32 TO 41		1072 TO 1081	2	4
203	33 TO 45		801 TO 825	2	4
204	33 TO 45		1073 TO 1085	2	4
205	37 TO 49		809 TO 833	2	4
206	41 TO 57		1089 TO 1113	2	4
207	45 TO 65		1097 TO 1121	2	4
208	49 TO 73		529 TO 553	2	4

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
209	49 TO 73		1105 TO 1129	2	4
210	57 TO 81		537 TO 561	2	4
211	57 TO 81		1113 TO 1137	2	4
212	65 TO 89		345 TO 369	2	4
213	65 TO 89		545 TO 569	2	4
214	65 TO 89		1121 TO 1145	2	4
215	73 TO 97		353 TO 377	2	4
216	73 TO 97		361 TO 385	2	4
217	73 TO 97		553 TO 577	2	4
218	73 TO 97		701 TO 721	2	4
219	73 TO 97		1129 TO 1153	2	4
220	81 TO 101		561 TO 581	2	4
221	89 TO 102		569 TO 582	2	4
222	97 TO 103		577 TO 583	2	4
223	101 TO 104		581 TO 584	2	4
224	102 TO 105		582 TO 585	2	4
225	104 TO 113		221 TO 235	2	4
226	105 TO 121		227 TO 237	2	4
227	121 TO 133		273 TO 285	2	4
228	121 TO 133		833 TO 845	2	4
229	125 TO 137		277 TO 289	2	4
230	125 TO 137		429 TO 443	2	4
231	125 TO 137		501 TO 515	2	4
232	125 TO 137		837 TO 849	2	4
233	129 TO 138		281 TO 290	2	4
234	129 TO 138		841 TO 850	2	4
235	133 TO 149		285 TO 301	2	4
236	133 TO 149		845 TO 861	2	4
237	137 TO 150		289 TO 302	2	4
238	137 TO 150		849 TO 862	2	4
239	138 TO 151		290 TO 303	2	4
240	138 TO 151		418 TO 421	2	4
241	138 TO 151		490 TO 493	2	4
242	138 TO 151		850 TO 863	2	4
243	149 TO 152		301 TO 304	2	4
244	149 TO 152		613 TO 619	2	4
245	149 TO 152		861 TO 864	2	4
246	150 TO 153		302 TO 305	2	4
247	150 TO 153		617 TO 620	2	4
248	150 TO 153		862 TO 865	2	4
249	151 TO 157		303 TO 309	2	4
250	151 TO 157		863 TO 869	2	4
251	152 TO 161		304 TO 313	2	4
252	152 TO 161		864 TO 873	2	4
253	153 TO 165		305 TO 317	2	4
254	153 TO 165		865 TO 877	2	4
255	157 TO 169		869 TO 881	2	4
256	177 TO 201		337 TO 361	2	4
257	177 TO 201		629 TO 649	2	4
258	177 TO 201		661 TO 681	2	4
259	177 TO 201		1085 TO 1105	2	4

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
260	185 TO 209		633 TO 657	2	4
261	185 TO 209		669 TO 689	2	4
262	185 TO 209		817 TO 837	2	4
263	219 TO 229		235 TO 245	2	4
**** FOR	221 TO 235,	SEE	104 TO 113 ABOVE	****	
**** FOR	227 TO 237,	SEE	105 TO 121 ABOVE	****	
**** FOR	235 TO 245,	SEE	219 TO 229 ABOVE	****	
264	265 TO 281		825 TO 841	2	4
**** FOR	273 TO 285,	SEE	121 TO 133 ABOVE	****	
**** FOR	277 TO 289,	SEE	125 TO 137 ABOVE	****	
**** FOR	281 TO 290,	SEE	129 TO 138 ABOVE	****	
**** FOR	285 TO 301,	SEE	133 TO 149 ABOVE	****	
**** FOR	289 TO 302,	SEE	137 TO 150 ABOVE	****	
**** FOR	290 TO 303,	SEE	138 TO 151 ABOVE	****	
**** FOR	301 TO 304,	SEE	149 TO 152 ABOVE	****	
**** FOR	302 TO 305,	SEE	150 TO 153 ABOVE	****	
**** FOR	303 TO 309,	SEE	151 TO 157 ABOVE	****	
**** FOR	304 TO 313,	SEE	152 TO 161 ABOVE	****	
**** FOR	305 TO 317,	SEE	153 TO 165 ABOVE	****	
265	309 TO 321		326 TO 329	2	4
**** FOR	326 TO 329,	SEE	309 TO 321 ABOVE	****	
266	327 TO 333		393 TO 409	2	4
267	327 TO 333		885 TO 888	2	4
**** FOR	337 TO 361,	SEE	177 TO 201 ABOVE	****	
**** FOR	345 TO 369,	SEE	65 TO 89 ABOVE	****	
**** FOR	353 TO 377,	SEE	73 TO 97 ABOVE	****	
**** FOR	361 TO 385,	SEE	73 TO 97 ABOVE	****	
**** FOR	393 TO 409,	SEE	327 TO 333 ABOVE	****	
268	401 TO 413		473 TO 485	2	4
269	405 TO 417		477 TO 489	2	4
270	409 TO 418		481 TO 490	2	4
**** FOR	413 TO 419,	SEE	29 TO 32 ABOVE	****	
**** FOR	417 TO 420,	SEE	30 TO 33 ABOVE	****	
**** FOR	418 TO 421,	SEE	138 TO 151 ABOVE	****	
271	419 TO 429		491 TO 501	2	4
272	420 TO 435		492 TO 507	2	4
273	421 TO 437		493 TO 509	2	4
**** FOR	429 TO 443,	SEE	125 TO 137 ABOVE	****	
274	435 TO 445		507 TO 517	2	4
**** FOR	473 TO 485,	SEE	401 TO 413 ABOVE	****	
**** FOR	477 TO 489,	SEE	405 TO 417 ABOVE	****	
**** FOR	481 TO 490,	SEE	409 TO 418 ABOVE	****	
**** FOR	485 TO 491,	SEE	29 TO 32 ABOVE	****	
**** FOR	489 TO 492,	SEE	30 TO 33 ABOVE	****	
**** FOR	490 TO 493,	SEE	138 TO 151 ABOVE	****	
**** FOR	491 TO 501,	SEE	419 TO 429 ABOVE	****	
**** FOR	492 TO 507,	SEE	420 TO 435 ABOVE	****	
**** FOR	493 TO 509,	SEE	421 TO 437 ABOVE	****	
**** FOR	501 TO 515,	SEE	125 TO 137 ABOVE	****	
**** FOR	507 TO 517,	SEE	435 TO 445 ABOVE	****	
275	523 TO 537		1025 TO 1045	2	4

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
****	FOR 529 TO 553,	SEE	49 TO 73 ABOVE	****	
****	FOR 537 TO 561,	SEE	57 TO 81 ABOVE	****	
****	FOR 545 TO 569,	SEE	65 TO 89 ABOVE	****	
****	FOR 553 TO 577,	SEE	73 TO 97 ABOVE	****	
****	FOR 561 TO 581,	SEE	81 TO 101 ABOVE	****	
****	FOR 569 TO 582,	SEE	89 TO 102 ABOVE	****	
****	FOR 577 TO 583,	SEE	97 TO 103 ABOVE	****	
****	FOR 581 TO 584,	SEE	101 TO 104 ABOVE	****	
****	FOR 582 TO 585,	SEE	102 TO 105 ABOVE	****	
****	FOR 613 TO 619,	SEE	149 TO 152 ABOVE	****	
****	FOR 617 TO 620,	SEE	150 TO 153 ABOVE	****	
****	FOR 618 TO 621,	SEE	18 TO 31 ABOVE	****	
****	FOR 629 TO 649,	SEE	177 TO 201 ABOVE	****	
****	FOR 633 TO 657,	SEE	185 TO 209 ABOVE	****	
****	FOR 661 TO 681,	SEE	177 TO 201 ABOVE	****	
****	FOR 669 TO 689,	SEE	185 TO 209 ABOVE	****	
****	FOR 701 TO 721,	SEE	73 TO 97 ABOVE	****	
****	FOR 737 TO 761,	SEE	1 TO 13 ABOVE	****	
****	FOR 745 TO 769,	SEE	5 TO 17 ABOVE	****	
****	FOR 753 TO 770,	SEE	9 TO 18 ABOVE	****	
****	FOR 761 TO 793,	SEE	13 TO 29 ABOVE	****	
****	FOR 769 TO 795,	SEE	17 TO 30 ABOVE	****	
****	FOR 770 TO 797,	SEE	18 TO 31 ABOVE	****	
****	FOR 793 TO 799,	SEE	29 TO 32 ABOVE	****	
****	FOR 795 TO 801,	SEE	30 TO 33 ABOVE	****	
****	FOR 797 TO 809,	SEE	31 TO 37 ABOVE	****	
****	FOR 799 TO 817,	SEE	32 TO 41 ABOVE	****	
****	FOR 801 TO 825,	SEE	33 TO 45 ABOVE	****	
****	FOR 809 TO 833,	SEE	37 TO 49 ABOVE	****	
****	FOR 817 TO 837,	SEE	185 TO 209 ABOVE	****	
****	FOR 825 TO 841,	SEE	265 TO 281 ABOVE	****	
****	FOR 833 TO 845,	SEE	121 TO 133 ABOVE	****	
****	FOR 837 TO 849,	SEE	125 TO 137 ABOVE	****	
****	FOR 841 TO 850,	SEE	129 TO 138 ABOVE	****	
****	FOR 845 TO 861,	SEE	133 TO 149 ABOVE	****	
****	FOR 849 TO 862,	SEE	137 TO 150 ABOVE	****	
****	FOR 850 TO 863,	SEE	138 TO 151 ABOVE	****	
****	FOR 861 TO 864,	SEE	149 TO 152 ABOVE	****	
****	FOR 862 TO 865,	SEE	150 TO 153 ABOVE	****	
****	FOR 863 TO 869,	SEE	151 TO 157 ABOVE	****	
****	FOR 864 TO 873,	SEE	152 TO 161 ABOVE	****	
****	FOR 865 TO 877,	SEE	153 TO 165 ABOVE	****	
****	FOR 869 TO 881,	SEE	157 TO 169 ABOVE	****	
****	FOR 885 TO 888,	SEE	327 TO 333 ABOVE	****	
****	FOR 917 TO 920,	SEE	29 TO 32 ABOVE	****	
****	FOR 918 TO 921,	SEE	30 TO 33 ABOVE	****	
****	FOR 933 TO 936,	SEE	29 TO 32 ABOVE	****	
****	FOR 934 TO 937,	SEE	30 TO 33 ABOVE	****	
****	FOR 949 TO 952,	SEE	29 TO 32 ABOVE	****	
****	FOR 950 TO 953,	SEE	30 TO 33 ABOVE	****	
****	FOR 965 TO 968,	SEE	29 TO 32 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 966 TO 969,	SEE	30 TO	33 ABOVE	****	
**** FOR 981 TO 984,	SEE	29 TO	32 ABOVE	****	
**** FOR 982 TO 985,	SEE	30 TO	33 ABOVE	****	
**** FOR 997 TO 1000,	SEE	29 TO	32 ABOVE	****	
**** FOR 998 TO 1001,	SEE	30 TO	33 ABOVE	****	
**** FOR 1009 TO 1012,	SEE	30 TO	33 ABOVE	****	
**** FOR 1025 TO 1045,	SEE	523 TO	537 ABOVE	****	
**** FOR 1041 TO 1053,	SEE	1 TO	13 ABOVE	****	
**** FOR 1045 TO 1057,	SEE	5 TO	17 ABOVE	****	
**** FOR 1049 TO 1058,	SEE	9 TO	18 ABOVE	****	
**** FOR 1053 TO 1069,	SEE	13 TO	29 ABOVE	****	
**** FOR 1057 TO 1070,	SEE	17 TO	30 ABOVE	****	
**** FOR 1058 TO 1071,	SEE	18 TO	31 ABOVE	****	
**** FOR 1069 TO 1072,	SEE	29 TO	32 ABOVE	****	
**** FOR 1070 TO 1073,	SEE	30 TO	33 ABOVE	****	
**** FOR 1071 TO 1077,	SEE	31 TO	37 ABOVE	****	
**** FOR 1072 TO 1081,	SEE	32 TO	41 ABOVE	****	
**** FOR 1073 TO 1085,	SEE	33 TO	45 ABOVE	****	
**** FOR 1085 TO 1105,	SEE	177 TO	201 ABOVE	****	
**** FOR 1089 TO 1113,	SEE	41 TO	57 ABOVE	****	
**** FOR 1097 TO 1121,	SEE	45 TO	65 ABOVE	****	
**** FOR 1105 TO 1129,	SEE	49 TO	73 ABOVE	****	
**** FOR 1113 TO 1137,	SEE	57 TO	81 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 5 NOTES IN LENGTH --
 EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 493 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
276	1 TO 17		737 TO 769	2	5
277	1 TO 17		1041 TO 1057	2	5
278	5 TO 18		745 TO 770	2	5
279	5 TO 18		1045 TO 1058	2	5
280	9 TO 29		753 TO 793	2	5
281	9 TO 29		1049 TO 1069	2	5
282	13 TO 30		761 TO 795	2	5
283	13 TO 30		1053 TO 1070	2	5
284	17 TO 31		769 TO 797	2	5
285	17 TO 31		1057 TO 1071	2	5
286	18 TO 32		770 TO 799	2	5
287	18 TO 32		1058 TO 1072	2	5
288	29 TO 33		413 TO 420	2	5
289	29 TO 33		485 TO 492	2	5
290	29 TO 33		793 TO 801	2	5
291	29 TO 33		917 TO 921	2	5
292	29 TO 33		933 TO 937	2	5
293	29 TO 33		949 TO 953	2	5
294	29 TO 33		965 TO 969	2	5
295	29 TO 33		981 TO 985	2	5
296	29 TO 33		997 TO 1001	2	5
297	29 TO 33		1069 TO 1073	2	5
298	30 TO 37		795 TO 809	2	5
299	30 TO 37		1070 TO 1077	2	5
300	31 TO 41		797 TO 817	2	5
301	31 TO 41		1071 TO 1081	2	5
302	32 TO 45		799 TO 825	2	5
303	32 TO 45		1072 TO 1085	2	5
304	33 TO 49		801 TO 833	2	5
305	41 TO 65		1089 TO 1121	2	5
306	45 TO 73		1097 TO 1129	2	5
307	49 TO 81		529 TO 561	2	5
308	49 TO 81		1105 TO 1137	2	5
*** FOR	49 TO 81,	SEE	49 TO 81	ABOVE	****
309	57 TO 89		537 TO 569	2	5
310	57 TO 89		1113 TO 1145	2	5
311	65 TO 97		345 TO 377	2	5
312	65 TO 97		545 TO 577	2	5
313	65 TO 97		1121 TO 1153	2	5
*** FOR	65 TO 97,	SEE	65 TO 97	ABOVE	****
314	73 TO 101		553 TO 581	2	5
315	81 TO 102		561 TO 582	2	5
*** FOR	81 TO 102,	SEE	81 TO 102	ABOVE	****
316	89 TO 103		569 TO 583	2	5

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
317	97 TO 104		577 TO 584	2	5
318	104 TO 121		221 TO 237	2	5
319	121 TO 137		273 TO 289	2	5
320	121 TO 137		833 TO 849	2	5
321	125 TO 138		277 TO 290	2	5
322	125 TO 138		837 TO 850	2	5
323	129 TO 149		281 TO 301	2	5
324	129 TO 149		841 TO 861	2	5
325	133 TO 150		285 TO 302	2	5
326	133 TO 150		845 TO 862	2	5
327	137 TO 151		289 TO 303	2	5
328	137 TO 151		849 TO 863	2	5
329	138 TO 152		290 TO 304	2	5
330	138 TO 152		850 TO 864	2	5
**** FOR	138 TO 152,	SEE	138 TO 152 ABOVE	****	
331	149 TO 153		301 TO 305	2	5
332	149 TO 153		613 TO 620	2	5
333	149 TO 153		861 TO 865	2	5
334	150 TO 157		302 TO 309	2	5
335	150 TO 157		862 TO 869	2	5
336	151 TO 161		303 TO 313	2	5
337	151 TO 161		863 TO 873	2	5
**** FOR	151 TO 161,	SEE	151 TO 161 ABOVE	****	
338	152 TO 165		304 TO 317	2	5
339	152 TO 165		864 TO 877	2	5
340	153 TO 169		865 TO 881	2	5
341	177 TO 209		629 TO 657	2	5
342	177 TO 209		661 TO 689	2	5
**** FOR	221 TO 237,	SEE	104 TO 121 ABOVE	****	
343	265 TO 285		825 TO 845	2	5
**** FOR	265 TO 285,	SEE	265 TO 285 ABOVE	****	
**** FOR	273 TO 289,	SEE	121 TO 137 ABOVE	****	
**** FOR	277 TO 290,	SEE	125 TO 138 ABOVE	****	
**** FOR	281 TO 301,	SEE	129 TO 149 ABOVE	****	
**** FOR	285 TO 302,	SEE	133 TO 150 ABOVE	****	
**** FOR	289 TO 303,	SEE	137 TO 151 ABOVE	****	
**** FOR	290 TO 304,	SEE	138 TO 152 ABOVE	****	
**** FOR	301 TO 305,	SEE	149 TO 153 ABOVE	****	
**** FOR	302 TO 309,	SEE	150 TO 157 ABOVE	****	
**** FOR	303 TO 313,	SEE	151 TO 161 ABOVE	****	
**** FOR	304 TO 317,	SEE	152 TO 165 ABOVE	****	
**** FOR	345 TO 377,	SEE	65 TO 97 ABOVE	****	
344	401 TO 417		473 TO 489	2	5
**** FOR	401 TO 417,	SEE	401 TO 417 ABOVE	****	
345	405 TO 418		477 TO 490	2	5
346	409 TO 419		481 TO 491	2	5
**** FOR	413 TO 420,	SEE	29 TO 33 ABOVE	****	
347	417 TO 421		489 TO 493	2	5
348	418 TO 429		490 TO 501	2	5
349	419 TO 435		491 TO 507	2	5
**** FOR	419 TO 435,	SEE	419 TO 435 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
350	420 TO 437		492 TO 509	2	5
351	421 TO 443		493 TO 515	2	5
352	429 TO 445		501 TO 517	2	5
**** FOR	473 TO 489,	SEE	401 TO 417 ABOVE	****	
**** FOR	477 TO 490,	SEE	405 TO 418 ABOVE	****	
**** FOR	481 TO 491,	SEE	409 TO 419 ABOVE	****	
**** FOR	485 TO 492,	SEE	29 TO 33 ABOVE	****	
**** FOR	489 TO 493,	SEE	417 TO 421 ABOVE	****	
**** FOR	490 TO 501,	SEE	418 TO 429 ABOVE	****	
**** FOR	491 TO 507,	SEE	419 TO 435 ABOVE	****	
**** FOR	492 TO 509,	SEE	420 TO 437 ABOVE	****	
**** FOR	493 TO 515,	SEE	421 TO 443 ABOVE	****	
**** FOR	501 TO 517,	SEE	429 TO 445 ABOVE	****	
**** FOR	529 TO 561,	SEE	49 TO 81 ABOVE	****	
**** FOR	537 TO 569,	SEE	57 TO 89 ABOVE	****	
**** FOR	545 TO 577,	SEE	65 TO 97 ABOVE	****	
**** FOR	553 TO 581,	SEE	73 TO 101 ABOVE	****	
**** FOR	561 TO 582,	SEE	81 TO 102 ABOVE	****	
**** FOR	569 TO 583,	SEE	89 TO 103 ABOVE	****	
**** FOR	577 TO 584,	SEE	97 TO 104 ABOVE	****	
**** FOR	613 TO 620,	SEE	149 TO 153 ABOVE	****	
**** FOR	629 TO 657,	SEE	177 TO 209 ABOVE	****	
**** FOR	661 TO 689,	SEE	177 TO 209 ABOVE	****	
**** FOR	737 TO 769,	SEE	1 TO 17 ABOVE	****	
**** FOR	745 TO 770,	SEE	5 TO 18 ABOVE	****	
**** FOR	753 TO 793,	SEE	9 TO 29 ABOVE	****	
**** FOR	761 TO 795,	SEE	13 TO 30 ABOVE	****	
**** FOR	769 TO 797,	SEE	17 TO 31 ABOVE	****	
**** FOR	770 TO 799,	SEE	18 TO 32 ABOVE	****	
**** FOR	793 TO 801,	SEE	29 TO 33 ABOVE	****	
**** FOR	795 TO 809,	SEE	30 TO 37 ABOVE	****	
**** FOR	797 TO 817,	SEE	31 TO 41 ABOVE	****	
**** FOR	799 TO 825,	SEE	32 TO 45 ABOVE	****	
**** FOR	801 TO 833,	SEE	33 TO 49 ABOVE	****	
**** FOR	825 TO 845,	SEE	265 TO 285 ABOVE	****	
**** FOR	833 TO 849,	SEE	121 TO 137 ABOVE	****	
**** FOR	837 TO 850,	SEE	125 TO 138 ABOVE	****	
**** FOR	841 TO 861,	SEE	129 TO 149 ABOVE	****	
**** FOR	845 TO 862,	SEE	133 TO 150 ABOVE	****	
**** FOR	849 TO 863,	SEE	137 TO 151 ABOVE	****	
**** FOR	850 TO 864,	SEE	138 TO 152 ABOVE	****	
**** FOR	861 TO 865,	SEE	149 TO 153 ABOVE	****	
**** FOR	862 TO 869,	SEE	150 TO 157 ABOVE	****	
**** FOR	863 TO 873,	SEE	151 TO 161 ABOVE	****	
**** FOR	864 TO 877,	SEE	152 TO 165 ABOVE	****	
**** FOR	865 TO 881,	SEE	153 TO 169 ABOVE	****	
**** FOR	917 TO 921,	SEE	29 TO 33 ABOVE	****	
**** FOR	933 TO 937,	SEE	29 TO 33 ABOVE	****	
**** FOR	949 TO 953,	SEE	29 TO 33 ABOVE	****	
**** FOR	965 TO 969,	SEE	29 TO 33 ABOVE	****	
**** FOR	981 TO 985,	SEE	29 TO 33 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 997 TO 1001,	SEE	29 TO	33 ABOVE	****	
**** FOR 1041 TO 1057,	SEE	1 TO	17 ABOVE	****	
**** FOR 1045 TO 1058,	SEE	5 TO	18 ABOVE	****	
**** FOR 1049 TO 1069,	SEE	9 TO	29 ABOVE	****	
**** FOR 1053 TO 1070,	SEE	13 TO	30 ABOVE	****	
**** FOR 1057 TO 1071,	SEE	17 TO	31 ABOVE	****	
**** FOR 1058 TO 1072,	SEE	18 TO	32 ABOVE	****	
**** FOR 1069 TO 1073,	SEE	29 TO	33 ABOVE	****	
**** FOR 1070 TO 1077,	SEE	30 TO	37 ABOVE	****	
**** FOR 1071 TO 1081,	SEE	31 TO	41 ABOVE	****	
**** FOR 1072 TO 1085,	SEE	32 TO	45 ABOVE	****	
**** FOR 1089 TO 1121,	SEE	41 TO	65 ABOVE	****	
**** FOR 1097 TO 1129,	SEE	45 TO	73 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 6 NOTES IN LENGTH --
 EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 667 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
353	1 TO 18		737 TO 770	2	6
354	1 TO 18		1041 TO 1058	2	6
355	5 TO 29		745 TO 793	2	6
356	5 TO 29		1045 TO 1069	2	6
357	9 TO 30		753 TO 795	2	6
358	9 TO 30		1049 TO 1070	2	6
359	13 TO 31		761 TO 797	2	6
360	13 TO 31		1053 TO 1071	2	6
361	17 TO 32		769 TO 799	2	6
362	17 TO 32		1057 TO 1072	2	6
363	18 TO 33		770 TO 801	2	6
364	18 TO 33		1058 TO 1073	2	6
365	29 TO 37		793 TO 809	2	6
366	29 TO 37		1069 TO 1077	2	6
367	30 TO 41		795 TO 817	2	6
368	30 TO 41		1070 TO 1081	2	6
369	31 TO 45		797 TO 825	2	6
370	31 TO 45		1071 TO 1085	2	6
371	32 TO 49		799 TO 833	2	6
372	41 TO 73		1089 TO 1129	2	6
373	45 TO 81		1097 TO 1137	2	6
374	49 TO 89		529 TO 569	2	6
375	49 TO 89		1105 TO 1145	2	6
376	57 TO 97		537 TO 577	2	6
377	57 TO 97		1113 TO 1153	2	6
378	65 TO 101		545 TO 581	2	6
379	73 TO 102		553 TO 582	2	6
380	81 TO 103		561 TO 583	2	6
381	89 TO 104		569 TO 584	2	6
382	97 TO 105		577 TO 585	2	6
383	121 TO 138		273 TO 290	2	6
384	121 TO 138		833 TO 850	2	6
385	125 TO 149		277 TO 301	2	6
386	125 TO 149		837 TO 861	2	6
387	129 TO 150		281 TO 302	2	6
388	129 TO 150		841 TO 862	2	6
389	133 TO 151		285 TO 303	2	6
390	133 TO 151		845 TO 863	2	6
391	137 TO 152		289 TO 304	2	6
392	137 TO 152		849 TO 864	2	6
393	138 TO 153		290 TO 305	2	6
394	138 TO 153		850 TO 865	2	6
395	149 TO 157		301 TO 309	2	6
396	149 TO 157		861 TO 869	2	6

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
397	150 TO 161		302 TO 313	2	6
398	150 TO 161		862 TO 873	2	6
399	151 TO 165		303 TO 317	2	6
400	151 TO 165		863 TO 877	2	6
401	152 TO 169		864 TO 881	2	6
402	265 TO 289		825 TO 849	2	6
**** FOR	273 TO 290,	SEE	121 TO 138 ABOVE	****	
**** FOR	277 TO 301,	SEE	125 TO 149 ABOVE	****	
**** FOR	281 TO 302,	SEE	129 TO 150 ABOVE	****	
**** FOR	285 TO 303,	SEE	133 TO 151 ABOVE	****	
**** FOR	289 TO 304,	SEE	137 TO 152 ABOVE	****	
**** FOR	290 TO 305,	SEE	138 TO 153 ABOVE	****	
**** FOR	301 TO 309,	SEE	149 TO 157 ABOVE	****	
**** FOR	302 TO 313,	SEE	150 TO 161 ABOVE	****	
**** FOR	303 TO 317,	SEE	151 TO 165 ABOVE	****	
403	401 TO 418		473 TO 490	2	6
404	405 TO 419		477 TO 491	2	6
405	409 TO 420		481 TO 492	2	6
406	413 TO 421		485 TO 493	2	6
407	417 TO 429		489 TO 501	2	6
**** FOR	417 TO 429,	SEE	417 TO 429 ABOVE	****	
408	418 TO 435		490 TO 507	2	6
**** FOR	418 TO 435,	SEE	418 TO 435 ABOVE	****	
409	419 TO 437		491 TO 509	2	6
410	420 TO 443		492 TO 515	2	6
411	421 TO 445		493 TO 517	2	6
**** FOR	473 TO 490,	SEE	401 TO 418 ABOVE	****	
**** FOR	477 TO 491,	SEE	405 TO 419 ABOVE	****	
**** FOR	481 TO 492,	SEE	409 TO 420 ABOVE	****	
**** FOR	485 TO 493,	SEE	413 TO 421 ABOVE	****	
**** FOR	489 TO 501,	SEE	417 TO 429 ABOVE	****	
**** FOR	490 TO 507,	SEE	418 TO 435 ABOVE	****	
**** FOR	491 TO 509,	SEE	419 TO 437 ABOVE	****	
**** FOR	492 TO 515,	SEE	420 TO 443 ABOVE	****	
**** FOR	493 TO 517,	SEE	421 TO 445 ABOVE	****	
**** FOR	529 TO 569,	SEE	49 TO 89 ABOVE	****	
**** FOR	537 TO 577,	SEE	57 TO 97 ABOVE	****	
**** FOR	545 TO 581,	SEE	65 TO 101 ABOVE	****	
**** FOR	553 TO 582,	SEE	73 TO 102 ABOVE	****	
**** FOR	561 TO 583,	SEE	81 TO 103 ABOVE	****	
**** FOR	569 TO 584,	SEE	89 TO 104 ABOVE	****	
**** FOR	577 TO 585,	SEE	97 TO 105 ABOVE	****	
**** FOR	737 TO 770,	SEE	1 TO 18 ABOVE	****	
**** FOR	745 TO 793,	SEE	5 TO 29 ABOVE	****	
**** FOR	753 TO 795,	SEE	9 TO 30 ABOVE	****	
**** FOR	761 TO 797,	SEE	13 TO 31 ABOVE	****	
**** FOR	769 TO 799,	SEE	17 TO 32 ABOVE	****	
**** FOR	770 TO 801,	SEE	18 TO 33 ABOVE	****	
**** FOR	793 TO 809,	SEE	29 TO 37 ABOVE	****	
**** FOR	795 TO 817,	SEE	30 TO 41 ABOVE	****	
**** FOR	797 TO 825,	SEE	31 TO 45 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST LENGTH
**** FOR 799 TO 833,	SEE 32 TO 49 ABOVE ****			
**** FOR 825 TO 849,	SEE 265 TO 289 ABOVE ****			
**** FOR 833 TO 850,	SEE 121 TO 138 ABOVE ****			
**** FOR 837 TO 861,	SEE 125 TO 149 ABOVE ****			
**** FOR 841 TO 862,	SEE 129 TO 150 ABOVE ****			
**** FOR 845 TO 863,	SEE 133 TO 151 ABOVE ****			
**** FOR 849 TO 864,	SEE 137 TO 152 ABOVE ****			
**** FOR 850 TO 865,	SEE 138 TO 153 ABOVE ****			
**** FOR 861 TO 869,	SEE 149 TO 157 ABOVE ****			
**** FOR 862 TO 873,	SEE 150 TO 161 ABOVE ****			
**** FOR 863 TO 877,	SEE 151 TO 165 ABOVE ****			
**** FOR 864 TO 881,	SEE 152 TO 169 ABOVE ****			
**** FOR 1041 TO 1058,	SEE 1 TO 18 ABOVE ****			
**** FOR 1045 TO 1069,	SEE 5 TO 29 ABOVE ****			
**** FOR 1049 TO 1070,	SEE 9 TO 30 ABOVE ****			
**** FOR 1053 TO 1071,	SEE 13 TO 31 ABOVE ****			
**** FOR 1057 TO 1072,	SEE 17 TO 32 ABOVE ****			
**** FOR 1058 TO 1073,	SEE 18 TO 33 ABOVE ****			
**** FOR 1069 TO 1077,	SEE 29 TO 37 ABOVE ****			
**** FOR 1070 TO 1081,	SEE 30 TO 41 ABOVE ****			
**** FOR 1071 TO 1085,	SEE 31 TO 45 ABOVE ****			

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 7 NOTES IN LENGTH ->
 EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 839 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
412	1 TO 29		737 TO 793	2	7
413	1 TO 29		1041 TO 1069	2	7
414	5 TO 30		745 TO 795	2	7
415	5 TO 30		1045 TO 1070	2	7
416	9 TO 31		753 TO 797	2	7
417	9 TO 31		1049 TO 1071	2	7
418	13 TO 32		761 TO 799	2	7
419	13 TO 32		1053 TO 1072	2	7
420	17 TO 33		769 TO 801	2	7
421	17 TO 33		1057 TO 1073	2	7
422	18 TO 37		770 TO 809	2	7
423	18 TO 37		1058 TO 1077	2	7
424	29 TO 41		793 TO 817	2	7
425	29 TO 41		1069 TO 1081	2	7
426	30 TO 45		795 TO 825	2	7
427	30 TO 45		1070 TO 1085	2	7
428	31 TO 49		797 TO 833	2	7
429	41 TO 81		1089 TO 1137	2	7
430	45 TO 89		1097 TO 1145	2	7
431	49 TO 97		529 TO 577	2	7
432	49 TO 97		1105 TO 1153	2	7
433	57 TO 101		537 TO 581	2	7
434	65 TO 102		545 TO 582	2	7
435	73 TO 103		553 TO 583	2	7
436	81 TO 104		561 TO 584	2	7
437	89 TO 105		569 TO 585	2	7
438	121 TO 149		273 TO 301	2	7
439	121 TO 149		833 TO 861	2	7
440	125 TO 150		277 TO 302	2	7
441	125 TO 150		837 TO 862	2	7
442	129 TO 151		281 TO 303	2	7
443	129 TO 151		841 TO 863	2	7
444	133 TO 152		285 TO 304	2	7
445	133 TO 152		845 TO 864	2	7
446	137 TO 153		289 TO 305	2	7
447	137 TO 153		849 TO 865	2	7
448	138 TO 157		290 TO 309	2	7
449	138 TO 157		850 TO 869	2	7
450	149 TO 161		301 TO 313	2	7
451	149 TO 161		861 TO 873	2	7
452	150 TO 165		302 TO 317	2	7
453	150 TO 165		862 TO 877	2	7
454	151 TO 169		863 TO 881	2	7
455	265 TO 290		825 TO 850	2	7

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
456	401 TO 419		473 TO 491	2	7
457	405 TO 420		477 TO 492	2	7
458	409 TO 421		481 TO 493	2	7
459	413 TO 429		485 TO 501	2	7
460	417 TO 435		489 TO 507	2	7
461	418 TO 437		490 TO 509	2	7
462	419 TO 443		491 TO 515	2	7
463	420 TO 445		492 TO 517	2	7

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 8 NOTES IN LENGTH --
 EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 859 SECONDS INTO EXECUTION.

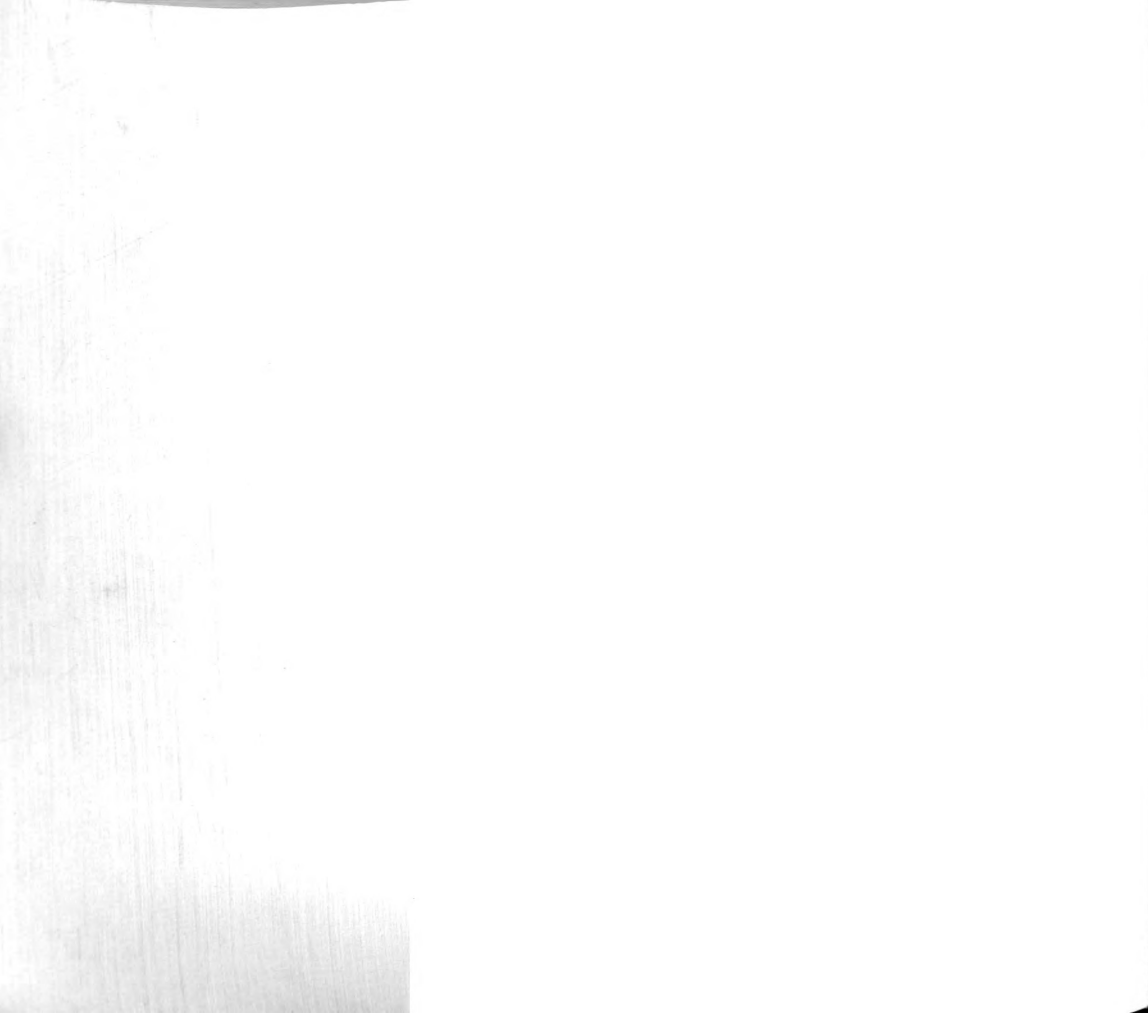
PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
464	1 TO 30		737 TO 795	2	8
465	1 TO 30		1041 TO 1070	2	8
466	5 TO 31		745 TO 797	2	8
467	5 TO 31		1045 TO 1071	2	8
468	9 TO 32		753 TO 799	2	8
469	9 TO 32		1049 TO 1072	2	8
470	13 TO 33		761 TO 801	2	8
471	13 TO 33		1053 TO 1073	2	8
472	17 TO 37		769 TO 809	2	8
473	17 TO 37		1057 TO 1077	2	8
474	18 TO 41		770 TO 817	2	8
475	18 TO 41		1058 TO 1081	2	8
476	29 TO 45		793 TO 825	2	8
477	29 TO 45		1069 TO 1085	2	8
478	30 TO 49		795 TO 833	2	8
479	41 TO 89		1089 TO 1145	2	8
480	45 TO 97		1097 TO 1153	2	8
481	49 TO 101		529 TO 581	2	8
482	57 TO 102		537 TO 582	2	8
483	65 TO 103		545 TO 583	2	8
484	73 TO 104		553 TO 584	2	8
485	81 TO 105		561 TO 585	2	8
486	121 TO 150		273 TO 302	2	8
487	121 TO 150		833 TO 862	2	8
488	125 TO 151		277 TO 303	2	8
489	125 TO 151		837 TO 863	2	8
490	129 TO 152		281 TO 304	2	8
491	129 TO 152		841 TO 864	2	8
492	133 TO 153		285 TO 305	2	8
493	133 TO 153		845 TO 865	2	8
494	137 TO 157		289 TO 309	2	8
495	137 TO 157		849 TO 869	2	8
496	138 TO 161		290 TO 313	2	8
497	138 TO 161		850 TO 873	2	8
498	149 TO 165		301 TO 317	2	8
499	149 TO 165		861 TO 877	2	8
500	150 TO 169		862 TO 881	2	8
501	265 TO 301		825 TO 861	2	8
502	401 TO 420		473 TO 492	2	8
503	405 TO 421		477 TO 493	2	8
504	409 TO 429		481 TO 501	2	8
505	413 TO 435		485 TO 507	2	8
506	417 TO 437		489 TO 509	2	8
507	418 TO 443		490 TO 515	2	8

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
508	419 TO 445		491 TO 517	2	8

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 9 NOTES IN LENGTH --
 EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 879 SECONDS INTO EXECUTION.

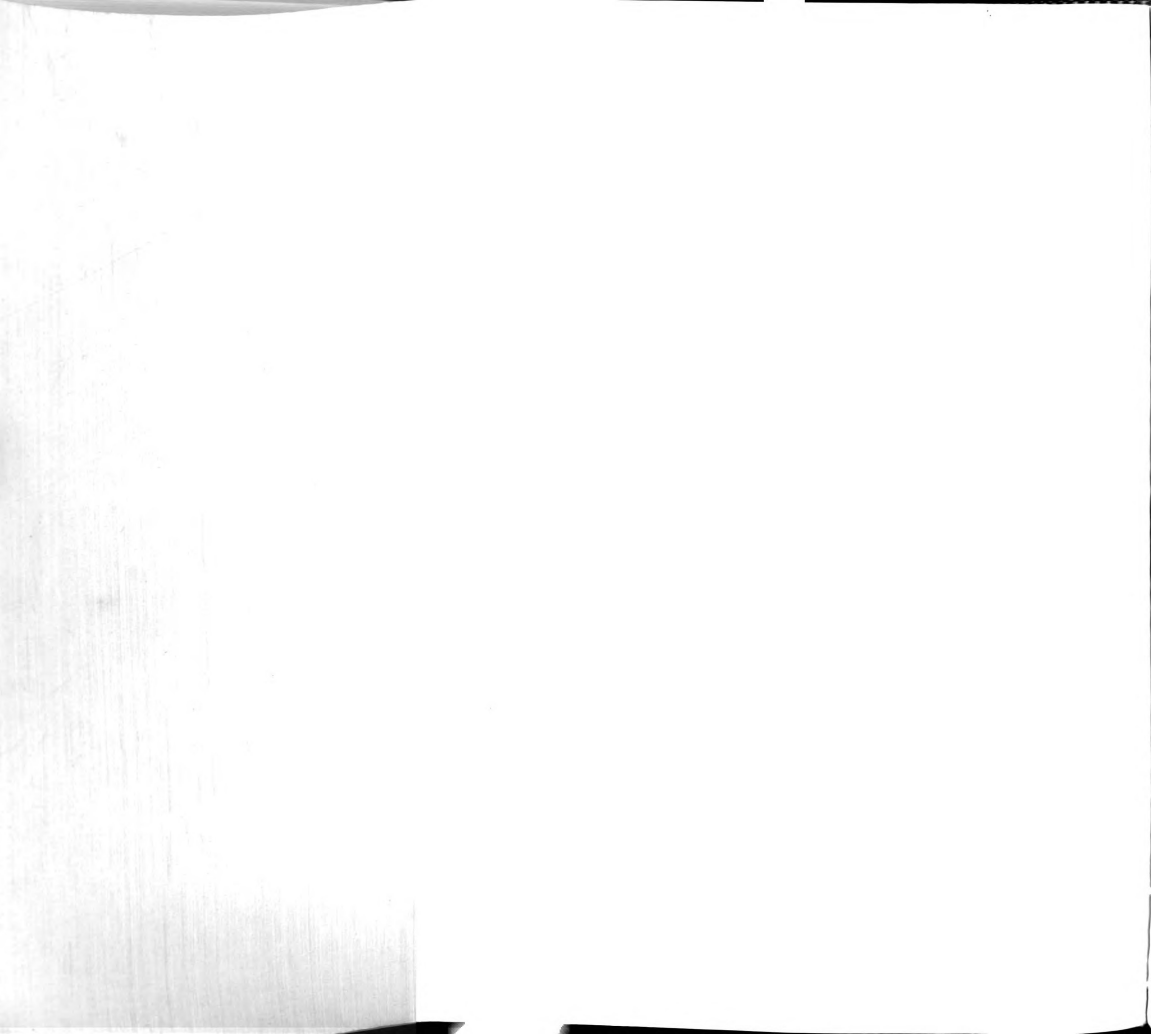
PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
509	1 TO 31		737 TO 797	2	9
510	1 TO 31		1041 TO 1071	2	9
511	5 TO 32		745 TO 799	2	9
512	5 TO 32		1045 TO 1072	2	9
513	9 TO 33		753 TO 801	2	9
514	9 TO 33		1049 TO 1073	2	9
515	13 TO 37		761 TO 809	2	9
516	13 TO 37		1053 TO 1077	2	9
517	17 TO 41		769 TO 817	2	9
518	17 TO 41		1057 TO 1081	2	9
519	18 TO 45		770 TO 825	2	9
520	18 TO 45		1058 TO 1085	2	9
521	29 TO 49		793 TO 833	2	9
522	41 TO 97		1089 TO 1153	2	9
523	49 TO 102		529 TO 582	2	9
524	57 TO 103		537 TO 583	2	9
525	65 TO 104		545 TO 584	2	9
526	73 TO 105		553 TO 585	2	9
527	121 TO 151		273 TO 303	2	9
528	121 TO 151		833 TO 863	2	9
529	125 TO 152		277 TO 304	2	9
530	125 TO 152		837 TO 864	2	9
531	129 TO 153		281 TO 305	2	9
532	129 TO 153		841 TO 865	2	9
533	133 TO 157		285 TO 309	2	9
534	133 TO 157		845 TO 869	2	9
535	137 TO 161		289 TO 313	2	9
536	137 TO 161		849 TO 873	2	9
537	138 TO 165		290 TO 317	2	9
538	138 TO 165		850 TO 877	2	9
539	149 TO 169		861 TO 881	2	9
540	265 TO 302		825 TO 862	2	9
541	401 TO 421		473 TO 493	2	9
542	405 TO 429		477 TO 501	2	9
543	409 TO 435		481 TO 507	2	9
544	413 TO 437		485 TO 509	2	9
545	417 TO 443		489 TO 515	2	9
546	418 TO 445		490 TO 517	2	9



*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 10 NOTES IN LENGTH --
 EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 899 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
547	1 TO 32		737 TO 799	2	10
548	1 TO 32		1041 TO 1072	2	10
549	5 TO 33		745 TO 801	2	10
550	5 TO 33		1045 TO 1073	2	10
551	9 TO 37		753 TO 809	2	10
552	9 TO 37		1049 TO 1077	2	10
553	13 TO 41		761 TO 817	2	10
554	13 TO 41		1053 TO 1081	2	10
555	17 TO 45		769 TO 825	2	10
556	17 TO 45		1057 TO 1085	2	10
557	18 TO 49		770 TO 833	2	10
558	49 TO 103		529 TO 583	2	10
559	57 TO 104		537 TO 584	2	10
560	65 TO 105		545 TO 585	2	10
561	121 TO 152		273 TO 304	2	10
562	121 TO 152		833 TO 864	2	10
563	125 TO 153		277 TO 305	2	10
564	125 TO 153		837 TO 865	2	10
565	129 TO 157		281 TO 309	2	10
566	129 TO 157		841 TO 869	2	10
567	133 TO 161		285 TO 313	2	10
568	133 TO 161		845 TO 873	2	10
569	137 TO 165		289 TO 317	2	10
570	137 TO 165		849 TO 877	2	10
571	138 TO 169		850 TO 881	2	10
572	265 TO 303		825 TO 863	2	10
573	401 TO 429		473 TO 501	2	10
574	405 TO 435		477 TO 507	2	10
575	409 TO 437		481 TO 509	2	10
576	413 TO 443		485 TO 515	2	10
577	417 TO 445		489 TO 517	2	10



*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 11 NOTES IN LENGTH --
 EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 917 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
578	1 TO 33		737 TO 801	2	11
579	1 TO 33		1041 TO 1073	2	11
580	5 TO 37		745 TO 809	2	11
581	5 TO 37		1045 TO 1077	2	11
582	9 TO 41		753 TO 817	2	11
583	9 TO 41		1049 TO 1081	2	11
584	13 TO 45		761 TO 825	2	11
585	13 TO 45		1053 TO 1085	2	11
586	17 TO 49		769 TO 833	2	11
587	49 TO 104		529 TO 584	2	11
588	57 TO 105		537 TO 585	2	11
589	121 TO 153		273 TO 305	2	11
590	121 TO 153		833 TO 865	2	11
591	125 TO 157		277 TO 309	2	11
592	125 TO 157		837 TO 869	2	11
593	129 TO 161		281 TO 313	2	11
594	129 TO 161		841 TO 873	2	11
595	133 TO 165		285 TO 317	2	11
596	133 TO 165		845 TO 877	2	11
597	137 TO 169		849 TO 881	2	11
598	265 TO 304		825 TO 864	2	11
599	401 TO 435		473 TO 507	2	11
600	405 TO 437		477 TO 509	2	11
601	409 TO 443		481 TO 515	2	11
602	413 TO 445		485 TO 517	2	11

*** TYPE I LISTING CONTINUED ***

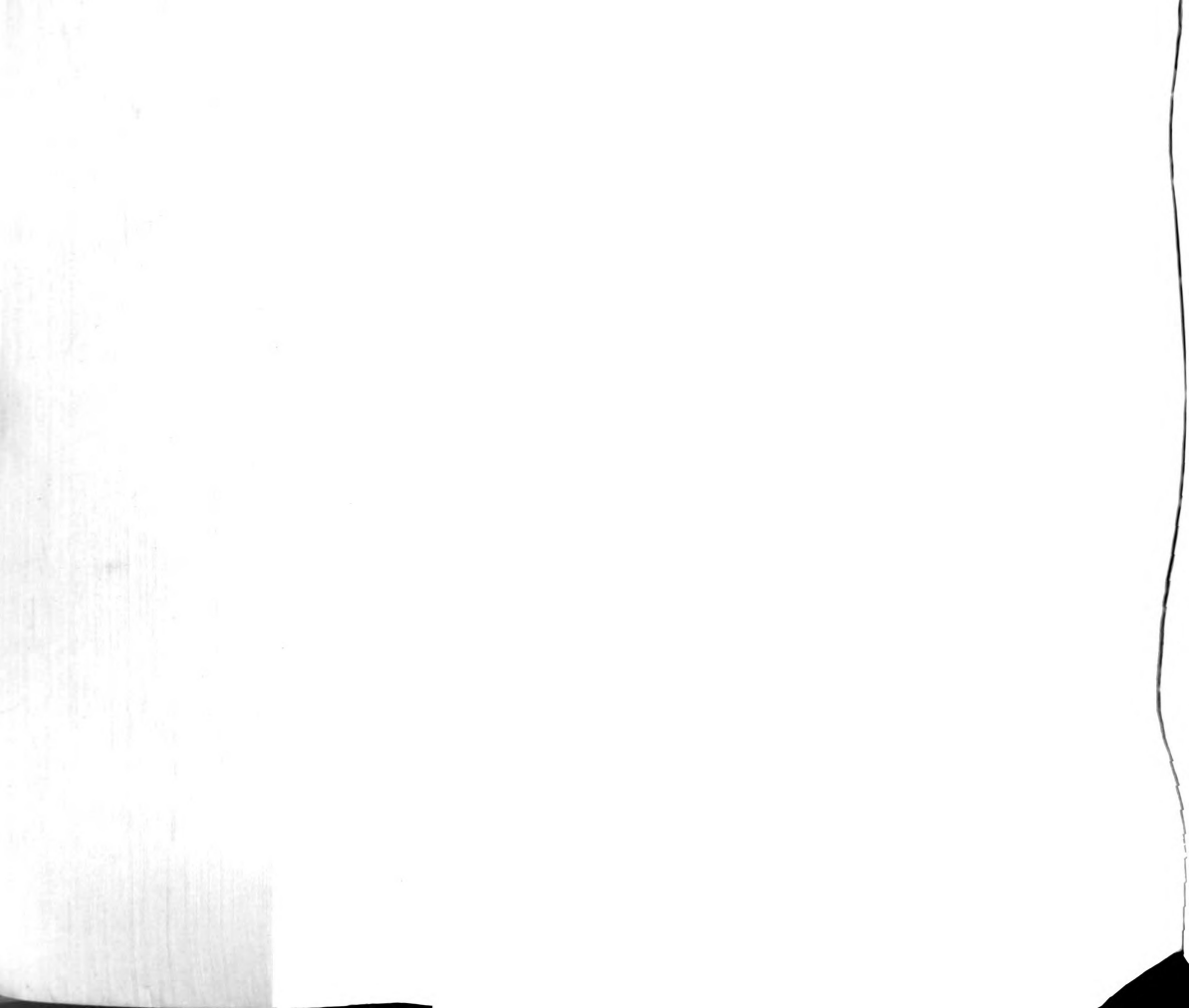
SEARCH FOR PATTERNS OF 12 NOTES IN LENGTH --
 EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 936 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
603	1 TO 37		737 TO 809	2	12
604	1 TO 37		1041 TO 1077	2	12
605	5 TO 41		745 TO 817	2	12
606	5 TO 41		1045 TO 1081	2	12
607	9 TO 45		753 TO 825	2	12
608	9 TO 45		1049 TO 1085	2	12
609	13 TO 49		761 TO 833	2	12
610	49 TO 105		529 TO 585	2	12
611	121 TO 157		273 TO 309	2	12
612	121 TO 157		833 TO 869	2	12
613	125 TO 161		277 TO 313	2	12
614	125 TO 161		837 TO 873	2	12
615	129 TO 165		281 TO 317	2	12
616	129 TO 165		841 TO 877	2	12
617	133 TO 169		845 TO 881	2	12
618	265 TO 305		825 TO 865	2	12
619	401 TO 437		473 TO 509	2	12
620	405 TO 443		477 TO 515	2	12
621	409 TO 445		481 TO 517	2	12

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 13 NOTES IN LENGTH --
 EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 954 SECONDS INTO EXECUTION.

PATTERN	NCOTES	RELATED TO	NOTES	TEST	LENGTH
622	1 TO 41		737 TO 817	2	13
623	1 TO 41		1041 TO 1081	2	13
624	5 TO 45		745 TO 825	2	13
625	5 TO 45		1045 TO 1085	2	13
626	9 TO 49		753 TO 833	2	13
627	121 TO 161		273 TO 313	2	13
628	121 TO 161		833 TO 873	2	13
629	125 TO 165		277 TO 317	2	13
630	125 TO 165		837 TO 877	2	13
631	129 TO 169		841 TO 881	2	13
632	265 TO 309		825 TO 869	2	13
633	401 TO 443		473 TO 515	2	13
634	405 TO 445		477 TO 517	2	13



*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 14 NOTES IN LENGTH --
 EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 972 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
635	1 TO 45		737 TO 825	2	14
636	1 TO 45		1041 TO 1085	2	14
637	5 TO 49		745 TO 833	2	14
638	121 TO 165		273 TO 317	2	14
639	121 TO 165		833 TO 877	2	14
640	125 TO 169		837 TO 881	2	14
641	265 TO 313		825 TO 873	2	14
642	401 TO 445		473 TO 517	2	14

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 15 NOTES IN LENGTH --
EXACT CONTOUR (ORIGINAL)
WAS BEGUN AT 989 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
643	1 TO 49		737 TO 833	2	15
644	121 TO 169		833 TO 881	2	15
645	265 TO 317		825 TO 877	2	15

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 16 NOTES IN LENGTH --
EXACT CONTOUR (ORIGINAL)
WAS BEGUN AT 1006 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
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END OF TYPE I LISTING. TOTAL OF 645 PATTERNS LOCATED.

*** TYPE II LISTING ***

HINDEMITH LUDIS TONALIS FUGA NONA IN B-FLAT, BOTTOM VOICE
EXACT CCNTOUR (ORIGINAL)

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	265 TO 317	2	15
ORIGINAL PATTERN	121 TO 169	2	15
SUBPATTERN	149 TO 153	4	5
SUBPATTERN	150 TO 153	4	4
SUBPATTERN	149 TO 152	4	4
SUBPATTERN	138 TO 151	5	4
SUBPATTERN	125 TO 137	5	4
SUBPATTERN	161 TO 169	6	3
SUBPATTERN	157 TO 165	5	3
SUBPATTERN	150 TO 152	4	3
SUBPATTERN	149 TO 151	6	3
SUBPATTERN	129 TO 137	5	3
SUBPATTERN	125 TO 133	5	3
ORIGINAL PATTERN	1 TO 49	2	15
SUBPATTERN	29 TO 33	11	5
SUBPATTERN	30 TO 33	12	4
SUBPATTERN	29 TO 32	11	4
SUBPATTERN	18 TO 31	4	4
SUBPATTERN	41 TO 49	13	3
SUBPATTERN	37 TO 45	9	3
SUBPATTERN	33 TO 41	4	3
SUBPATTERN	31 TO 33	15	3
SUBPATTERN	30 TO 32	12	3
SUBPATTERN	29 TO 31	15	3
SUBPATTERN	18 TO 30	7	3

*** TEST 2 COMPLETED AT 1196 SECONDS INTO EXECUTION ***

***** MUSIC MELODIC PATTERN ANALYSIS *****

HINDEMITH LUDIS TONALIS FUGA NONA IN B-FLAT, BOTTOM VOICE

TEST REQUESTED 6
 UNITS OF DATA PER CARD 16

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES 1 THROUGH 16
 36 C 0 0 0 38 0 -1 0 38 0 0 0 43 0 -1 0

NOTES 17 THROUGH 32
 43 33 0 0 0 0 0 0 0 0 0 0 36 38 41 38

NOTES 33 THROUGH 48
 36 0 0 0 32 0 0 0 31 0 0 0 29 0 0 0

NOTES 49 THROUGH 64
 28 0 0 0 -1 0 0 0 30 0 0 0 -1 0 0 0

NOTES 65 THROUGH 80
 33 C 0 0 0 -1 0 0 0 31 0 0 0 -1 0 0 0

NOTES 81 THROUGH 96
 30 0 0 0 -1 0 0 0 29 0 0 0 -1 0 0 0

NOTES 97 THROUGH 112
 28 0 0 0 52 51 52 51 52 0 0 0 52 0 0 0

NOTES 113 THROUGH 128
 49 0 0 0 -1 0 0 0 49 0 0 0 47 0 -1 0

NOTES 129 THROUGH 144
 47 0 0 0 42 0 -1 0 42 52 0 0 0 0 0 0

NOTES 145 THROUGH 160
 0 0 0 0 49 47 44 47 49 0 0 0 53 0 0 0

NOTES 161 THROUGH 176
 54 C 0 0 0 56 0 0 0 57 0 0 0 -1 0 0 0

NOTES 177 THROUGH 192
 45 0 0 0 0 0 0 0 43 0 0 0 0 0 0 0

NOTES 193 THROUGH 208
 41 0 0 0 0 0 0 0 40 0 0 0 0 0 0 0

NOTES 209 THROUGH 224
 38 C 0 0 -1 0 0 0 0 0 51 0 51 0 -1 0

NOTES 225 THROUGH 240
 0 0 52 0 52 0 -1 0 0 0 49 0 49 0 -1 0

NOTES 241 THROUGH 256
 0 0 50 0 50 0 -1 0 0 0 52 0 52 0 0 0

NOTES 257 THROUGH 272
 53 C 0 0 -1 0 0 0 41 0 0 0 0 0 0 0

NOTES 273 THROUGH 288
 40 0 0 0 38 0 -1 0 38 0 0 0 33 0 -1 0

NOTES 289 THROUGH 304
 33 43 0 0 0 0 0 0 0 0 0 0 40 38 35 38

NOTES 305 THROUGH 320
 40 0 0 0 44 0 0 0 45 0 0 0 47 0 0 0

NOTES 321 THROUGH 336
 49 0 0 0 37 36 37 39 41 0 0 0 42 0 0 0

NOTES 337 THROUGH 352
 43 0 0 0 -1 0 0 0 41 0 0 0 0 0 0 0

NOTES 353 THROUGH 368
 39 0 0 0 0 0 0 0 38 0 0 0 0 0 0 0

NOTES 369 THROUGH 384
 37 0 0 0 0 0 0 0 36 0 0 0 0 0 0 0

NOTES 385 THROUGH 400
 35 0 0 0 0 0 0 0 33 0 0 0 0 0 0 0

NOTES 401 THROUGH 416
 35 C 0 0 37 0 0 0 38 0 0 0 42 0 0 0

NOTES 417 THROUGH 432
 44 47 44 42 39 0 0 0 0 0 0 0 49 0 -1 0

NOTES 433 THROUGH 448
 0 0 49 0 44 0 0 0 -1 0 44 0 42 0 0 0

NOTES 449 THROUGH 464
 41 0 0 0 0 0 0 0 44 0 0 0 0 0 0 0

NOTES 465 THROUGH 480
 39 0 0 0 -1 0 0 0 28 0 0 0 30 0 0 0

NOTES 481 THROUGH 496
 31 0 0 0 35 0 0 0 37 40 37 35 32 0 0 0

NOTES 497 THROUGH 512
 0 0 0 0 42 0 -1 0 0 0 42 0 37 0 0 0

NOTES 513 THROUGH 528
 -1 0 37 0 35 0 0 0 -1 0 33 0 38 0 0 0

NOTES 529 THROUGH 544
 31 0 0 0 -1 0 0 0 33 0 0 0 -1 0 0 0

NOTES 545 THROUGH 560
 36 0 0 0 -1 0 0 0 34 0 0 0 -1 0 0 0

NOTES 561 THROUGH 576
 33 0 0 0 -1 0 0 0 32 0 0 0 -1 0 0 0

NOTES 577 THROUGH 592
 31 0 0 0 55 54 55 54 55 0 0 0 50 0 52 0

NOTES 593 THROUGH 608
 47 0 0 0 -1 0 0 0 54 0 0 0 52 0 0 0

NOTES 609 THROUGH 624
 51 0 0 0 47 0 0 0 45 42 45 47 50 0 0 0

NOTES 625 THROUGH 640
 0 0 0 0 40 0 -1 0 38 0 0 0 0 0 0 0

NOTES 641 THROUGH 656
 36 0 0 0 0 0 0 0 35 0 0 0 0 0 0 0

NOTES 657 THROUGH 672
 33 0 0 0 45 0 0 0 0 0 0 0 43 0 0 0

NOTES 673 THROUGH 688
 41 0 0 0 0 0 0 0 40 0 0 0 0 0 0 0

NOTES 689 THROUGH 704
 38 0 0 0 0 0 0 0 42 0 0 0 38 0 0 0

NOTES 705 THROUGH 720
 37 0 0 0 0 0 0 0 36 0 0 0 0 0 0 0

NOTES 721 THROUGH 736
 35 0 0 0 -1 0 0 0 0 0 0 0 0 0 0 0

NOTES 737 THROUGH 752
 41 0 0 0 0 0 0 0 43 0 0 0 -1 0 0 0

NOTES 753 THROUGH 768
 43 0 0 0 0 0 0 0 48 0 0 0 -1 0 0 0

NOTES 769 THROUGH 784
 48 38 0 0 0 0 0 0 0 0 0 0 0 0 0 0

NOTES	785 THROUGH				800											
	0	-0	0	0	0	0	0	0	41	0	43	0	46	0	43	0
NOTES	801 THROUGH				816											
	41	0	0	0	0	0	0	0	37	0	0	0	0	0	0	0
NOTES	817 THROUGH				832											
	36	0	0	0	0	0	0	0	34	0	0	0	0	0	0	0
NOTES	833 THROUGH				848											
	33	0	0	0	31	0	-1	0	31	0	0	0	26	0	-1	0
NOTES	849 THROUGH				864											
	26	36	0	0	0	0	0	0	0	0	0	0	33	31	28	31
NOTES	865 THROUGH				880											
	33	0	0	0	37	0	0	0	38	0	0	0	40	0	0	0
NOTES	881 THROUGH				896											
	41	0	0	0	53	55	57	58	60	0	56	0	54	0	49	0
NOTES	897 THROUGH				912											
	46	0	42	0	39	0	35	0	-1	0	0	0	0	0	0	0
NOTES	913 THROUGH				928											
	-1	0	0	0	24	26	29	26	24	0	0	0	-1	0	0	0
NOTES	929 THROUGH				944											
	0	0	0	0	49	51	54	51	49	0	0	0	-1	0	0	0
NOTES	945 THROUGH				960											
	0	0	0	0	23	25	28	25	23	0	0	0	-1	0	0	0
NOTES	961 THROUGH				976											
	0	0	0	0	30	32	35	32	30	0	0	0	-1	0	0	0
NOTES	977 THROUGH				992											
	0	0	0	0	45	47	50	47	45	0	0	0	-1	0	0	0
NOTES	993 THROUGH				1008											
	0	0	0	0	22	24	27	24	22	0	0	0	-1	0	0	0
NOTES	1009 THROUGH				1024											
	44	47	44	42	41	0	0	0	-1	0	0	0	36	0	37	0
NOTES	1025 THROUGH				1040											
	38	0	0	0	0	0	-1	0	43	0	0	0	0	0	-1	0
NOTES	1041 THROUGH				1056											
	36	0	0	0	38	0	-1	0	38	0	0	0	43	0	-1	0
NOTES	1057 THROUGH				1072											
	43	33	0	0	0	0	0	0	0	0	0	0	36	38	41	38

NOTES 1073 THROUGH 1088

36 0 0 0 32 0 0 0 31 0 0 0 29 0 0 0

NOTES 1089 THROUGH 1104

27 0 0 0 0 0 0 0 25 0 0 0 0 0 0 0

NOTES 1105 THROUGH 1120

24 0 0 0 -1 0 0 0 26 0 0 0 -1 0 0 0

NOTES 1121 THROUGH 1136

29 0 0 0 -1 0 0 0 27 0 0 0 -1 0 0 0

NOTES 1137 THROUGH 1152

26 0 0 0 -1 0 0 0 25 0 0 0 -1 0 0 0

NOTES 1153 THROUGH 1168

24 0 0 0 -1 0 0 0 0 0 0 0 0 0 0 0

NOTES 1169 THROUGH 1184

0 0 0 0 0 0 0 0 55 0 0 0 0 0 0 0

NOTES 1185 THROUGH 1185

-99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

The interval tables appearing with the remaining tests of the Hindemith fugue are identical to the tables shown for Test 2. In order to reduce the size of this appendix, these interval tables have been omitted.

*** TYPE I LISTING ***

HINDEMITH LUDIS TONALIS FUGA NJNA IN B-FLAT, BOTTOM VOICE

SEARCH FOR PATTERNS OF 3 NOTES IN LENGTH --
 EXACT RETROGRADE
 WAS BEGUN AT 32 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO 9		113 TO 125	6	3
2	1 TO 9		437 TO 445	6	3
3	1 TO 9		509 TO 517	6	3
4	5 TO 13		129 TO 137	6	3
5	5 TO 13		281 TO 289	6	3
6	5 TO 13		435 TO 443	6	3
7	5 TO 13		507 TO 515	6	3
8	5 TO 13		841 TO 849	6	3
9	9 TO 17		125 TO 133	6	3
10	9 TO 17		277 TO 285	6	3
11	9 TO 17		429 TO 437	6	3
12	9 TO 17		501 TO 509	6	3
13	9 TO 17		837 TO 845	6	3
14	13 TO 18		421 TO 435	6	3
15	13 TO 18		493 TO 507	6	3
16	17 TO 29		420 TO 429	6	3
17	17 TO 29		492 TO 501	6	3
18	18 TO 30		149 TO 151	6	3
19	18 TO 30		301 TO 303	6	3
20	18 TO 30		419 TO 421	6	3
21	18 TO 30		491 TO 493	6	3
22	18 TO 30		613 TO 618	6	3
23	18 TO 30		861 TO 863	6	3
24	29 TO 31		31 TO 33	6	3
25	29 TO 31		138 TO 150	6	3
26	29 TO 31		290 TO 302	6	3
27	29 TO 31		418 TO 420	6	3
28	29 TO 31		490 TO 492	6	3
29	29 TO 31		797 TO 801	6	3
30	29 TO 31		850 TO 862	6	3
31	29 TO 31		919 TO 921	6	3
32	29 TO 31		935 TO 937	6	3
33	29 TO 31		951 TO 953	6	3
34	29 TO 31		967 TO 969	6	3
35	29 TO 31		983 TO 985	6	3
36	29 TO 31		999 TO 1001	6	3
37	29 TO 31		1010 TO 1012	6	3
38	29 TO 31		1071 TO 1073	6	3
39	30 TO 32		417 TO 419	6	3
40	30 TO 32		489 TO 491	6	3
41	30 TO 32		795 TO 799	6	3
42	30 TO 32		918 TO 920	6	3

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
43	30 TO 32		934 TO 936	6	3
44	30 TO 32		950 TO 952	6	3
45	30 TO 32		966 TO 968	6	3
46	30 TO 32		982 TO 984	6	3
47	30 TO 32		998 TO 1000	6	3
48	30 TO 32		1009 TO 1011	6	3
49	30 TO 32		1070 TO 1072	6	3
50	31 TO 33		49 TO 65	6	3
51	31 TO 33		413 TO 418	6	3
52	31 TO 33		485 TO 490	6	3
53	31 TO 33		529 TO 545	6	3
54	31 TO 33		619 TO 621	6	3
55	31 TO 33		793 TO 797	6	3
56	31 TO 33		917 TO 919	6	3
57	31 TO 33		933 TO 935	6	3
58	31 TO 33		949 TO 951	6	3
59	31 TO 33		965 TO 967	6	3
60	31 TO 33		981 TO 983	6	3
61	31 TO 33		997 TO 999	6	3
62	31 TO 33		1069 TO 1071	6	3
63	31 TO 33		1105 TO 1121	6	3
64	32 TO 37		409 TO 417	6	3
65	32 TO 37		481 TO 489	6	3
66	33 TO 41		405 TO 413	6	3
67	33 TO 41		477 TO 485	6	3
68	37 TO 45		161 TO 169	6	3
69	37 TO 45		328 TO 333	6	3
70	37 TO 45		401 TO 409	6	3
71	37 TO 45		473 TO 481	6	3
72	37 TO 45		873 TO 881	6	3
73	37 TO 45		886 TO 888	6	3
74	41 TO 49		157 TO 165	6	3
75	41 TO 49		309 TO 317	6	3
76	41 TO 49		326 TO 328	6	3
77	41 TO 49		869 TO 877	6	3
78	41 TO 49		887 TO 889	6	3
**** FOR	49 TO 65,	SEE	29 TO 31	ABOVE ****	
**** FOR	65 TO 81,	SEE	41 TO 49	ABOVE ****	
79	73 TO 89		329 TO 337	6	3
80	73 TO 89		1021 TO 1025	6	3
**** FOR	81 TO 97,	SEE	73 TO 89	ABOVE ****	
81	101 TO 103		103 TO 105	6	3
82	101 TO 103		325 TO 327	6	3
83	101 TO 103		581 TO 583	6	3
84	101 TO 103		583 TO 585	6	3
85	102 TO 104		582 TO 584	6	3
**** FOR	103 TO 105,	SEE	101 TO 103	ABOVE ****	
86	113 TO 125		245 TO 253	6	3
87	113 TO 125		737 TO 753	6	3
88	113 TO 125		1041 TO 1049	6	3
89	121 TO 129		243 TO 251	6	3

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
90	125 TO 133		753 TO 769	6	3
91	125 TO 133		1049 TO 1057	6	3
92	129 TO 137		745 TO 761	6	3
93	129 TO 137		1045 TO 1053	6	3
94	137 TO 149		620 TO 629	6	3
**** FOR	138 TO 150,	SEE	31 TO 33 ABOVE ****		
95	149 TO 151		151 TO 153	6	3
96	149 TO 151		303 TO 305	6	3
97	149 TO 151		618 TO 620	6	3
98	149 TO 151		770 TO 795	6	3
99	149 TO 151		863 TO 865	6	3
100	149 TO 151		1058 TO 1070	6	3
101	150 TO 152		302 TO 304	6	3
102	150 TO 152		617 TO 619	6	3
103	150 TO 152		862 TO 864	6	3
**** FOR	151 TO 153,	SEE	18 TO 30 ABOVE ****		
104	152 TO 157		609 TO 617	6	3
105	152 TO 157		889 TO 893	6	3
106	153 TO 161		605 TO 613	6	3
107	157 TO 165		185 TO 201	6	3
108	157 TO 165		345 TO 361	6	3
109	157 TO 165		443 TO 449	6	3
110	157 TO 165		545 TO 561	6	3
111	157 TO 165		601 TO 609	6	3
112	157 TO 165		633 TO 649	6	3
113	157 TO 165		669 TO 681	6	3
114	157 TO 165		817 TO 833	6	3
115	157 TO 165		1011 TO 1013	6	3
116	157 TO 165		1089 TO 1105	6	3
117	157 TO 165		1121 TO 1137	6	3
118	161 TO 169		193 TO 209	6	3
119	161 TO 169		265 TO 277	6	3
120	161 TO 169		377 TO 393	6	3
121	161 TO 169		641 TO 657	6	3
122	161 TO 169		673 TO 689	6	3
123	161 TO 169		809 TO 825	6	3
124	161 TO 169		825 TO 837	6	3
125	161 TO 169		1077 TO 1085	6	3
126	177 TO 193		313 TO 321	6	3
127	177 TO 193		327 TO 329	6	3
128	177 TO 193		393 TO 405	6	3
129	177 TO 193		885 TO 887	6	3
**** FOR	185 TO 201,	SEE	41 TO 49 ABOVE ****		
**** FOR	193 TO 209,	SEE	37 TO 45 ABOVE ****		
130	243 TO 251		273 TO 281	6	3
131	243 TO 251		833 TO 841	6	3
**** FOR	245 TO 253,	SEE	1 TO 9 ABOVE ****		
132	257 TO 273		877 TO 885	6	3
**** FOR	265 TO 277,	SEE	37 TO 45 ABOVE ****		
**** FOR	273 TO 281,	SEE	121 TO 129 ABOVE ****		
**** FOR	277 TO 285,	SEE	125 TO 133 ABOVE ****		

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	281 TO	289,	SEE 129 TO	137 ABOVE	****
**** FOR	289 TO	301,	SEE 137 TO	149 ABOVE	****
**** FOR	290 TO	302,	SEE 31 TO	33 ABOVE	****
**** FOR	301 TO	303,	SEE 149 TO	151 ABOVE	****
**** FOR	302 TO	304,	SEE 150 TO	152 ABOVE	****
**** FOR	303 TO	305,	SEE 18 TO	30 ABOVE	****
**** FOR	304 TO	309,	SEE 152 TO	157 ABOVE	****
**** FOR	305 TO	313,	SEE 153 TO	161 ABOVE	****
**** FOR	309 TO	317,	SEE 157 TO	165 ABOVE	****
133	313 TO	321	337 TO	353	6 3
134	313 TO	321	515 TO	523	6 3
135	313 TO	321	629 TO	641	6 3
136	313 TO	321	661 TO	673	6 3
137	313 TO	321	1081 TO	1089	6 3
138	313 TO	321	1085 TO	1097	6 3
139	317 TO	325	657 TO	669	6 3
**** FOR	321 TO	326,	SEE 257 TO	273 ABOVE	****
**** FOR	325 TO	327,	SEE 101 TO	103 ABOVE	****
**** FOR	326 TO	328,	SEE 157 TO	165 ABOVE	****
**** FOR	327 TO	329,	SEE 313 TO	321 ABOVE	****
**** FOR	328 TO	333,	SEE 161 TO	169 ABOVE	****
140	329 TO	337	353 TO	369	6 3
141	329 TO	337	361 TO	377	6 3
142	329 TO	337	369 TO	385	6 3
143	329 TO	337	553 TO	569	6 3
144	329 TO	337	561 TO	577	6 3
145	329 TO	337	701 TO	713	6 3
146	329 TO	337	705 TO	721	6 3
147	329 TO	337	1129 TO	1145	6 3
148	329 TO	337	1137 TO	1153	6 3
**** FOR	337 TO	353,	SEE 177 TO	193 ABOVE	****
**** FOR	345 TO	361,	SEE 41 TO	49 ABOVE	****
**** FOR	353 TO	369,	SEE 73 TO	89 ABOVE	****
**** FOR	361 TO	377,	SEE 73 TO	89 ABOVE	****
**** FOR	369 TO	385,	SEE 73 TO	89 ABOVE	****
**** FOR	377 TO	393,	SEE 37 TO	45 ABOVE	****
**** FOR	393 TO	405,	SEE 313 TO	321 ABOVE	****
**** FOR	401 TO	409,	SEE 161 TO	169 ABOVE	****
149	405 TO	413	697 TO	705	6 3
150	405 TO	413	801 TO	817	6 3
151	405 TO	413	1073 TO	1081	6 3
152	409 TO	417	799 TO	809	6 3
153	409 TO	417	1072 TO	1077	6 3
**** FOR	413 TO	418,	SEE 29 TO	31 ABOVE	****
**** FOR	417 TO	419,	SEE 30 TO	32 ABOVE	****
**** FOR	418 TO	420,	SEE 31 TO	33 ABOVE	****
**** FOR	419 TO	421,	SEE 149 TO	151 ABOVE	****
154	420 TO	429	769 TO	793	6 3
155	420 TO	429	1057 TO	1069	6 3
156	421 TO	435	761 TO	770	6 3
157	421 TO	435	1053 TO	1058	6 3

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
****	FOR 429 TO 437,	SEE	125 TO 133 ABOVE	****	
****	FOR 435 TO 443,	SEE	129 TO 137 ABOVE	****	
****	FOR 437 TO 445,	SEE	113 TO 125 ABOVE	****	
****	FOR 443 TO 449,	SEE	41 TO 49 ABOVE	****	
****	FOR 473 TO 481,	SEE	161 TO 169 ABOVE	****	
****	FOR 477 TO 485,	SEE	405 TO 413 ABOVE	****	
****	FOR 481 TO 489,	SEE	409 TO 417 ABOVE	****	
****	FOR 485 TO 490,	SEE	29 TO 31 ABOVE	****	
****	FOR 489 TO 491,	SEE	30 TO 32 ABOVE	****	
****	FOR 490 TO 492,	SEE	31 TO 33 ABOVE	****	
****	FOR 491 TO 493,	SEE	149 TO 151 ABOVE	****	
****	FOR 492 TO 501,	SEE	420 TO 429 ABOVE	****	
****	FOR 493 TO 507,	SEE	421 TO 435 ABOVE	****	
****	FOR 501 TO 509,	SEE	125 TO 133 ABOVE	****	
****	FOR 507 TO 515,	SEE	129 TO 137 ABOVE	****	
****	FOR 509 TO 517,	SEE	113 TO 125 ABOVE	****	
****	FOR 515 TO 523,	SEE	177 TO 193 ABOVE	****	
158	517 TO 525		585 TO 591	6	3
159	525 TO 537		952 TO 965	6	3
****	FOR 529 TO 545,	SEE	29 TO 31 ABOVE	****	
****	FOR 545 TO 561,	SEE	41 TO 49 ABOVE	****	
****	FOR 553 TO 569,	SEE	73 TO 89 ABOVE	****	
****	FOR 561 TO 577,	SEE	73 TO 89 ABOVE	****	
****	FOR 581 TO 583,	SEE	101 TO 103 ABOVE	****	
****	FOR 582 TO 584,	SEE	102 TO 104 ABOVE	****	
****	FOR 583 TO 585,	SEE	101 TO 103 ABOVE	****	
****	FOR 601 TO 609,	SEE	41 TO 49 ABOVE	****	
160	605 TO 613		865 TO 873	6	3
161	609 TO 617		864 TO 869	6	3
****	FOR 613 TO 618,	SEE	149 TO 151 ABOVE	****	
****	FOR 617 TO 619,	SEE	150 TO 152 ABOVE	****	
****	FOR 618 TO 620,	SEE	18 TO 30 ABOVE	****	
****	FOR 619 TO 621,	SEE	29 TO 31 ABOVE	****	
162	620 TO 629		849 TO 861	6	3
****	FOR 629 TO 641,	SEE	177 TO 193 ABOVE	****	
****	FOR 633 TO 649,	SEE	41 TO 49 ABOVE	****	
****	FOR 641 TO 657,	SEE	37 TO 45 ABOVE	****	
****	FOR 661 TO 673,	SEE	177 TO 193 ABOVE	****	
****	FOR 669 TO 681,	SEE	41 TO 49 ABOVE	****	
****	FOR 673 TO 689,	SEE	37 TO 45 ABOVE	****	
****	FOR 697 TO 705,	SEE	33 TO 41 ABOVE	****	
****	FOR 701 TO 713,	SEE	73 TO 89 ABOVE	****	
****	FOR 705 TO 721,	SEE	73 TO 89 ABOVE	****	
****	FOR 737 TO 753,	SEE	1 TO 9 ABOVE	****	
****	FOR 745 TO 761,	SEE	5 TO 13 ABOVE	****	
****	FOR 753 TO 769,	SEE	9 TO 17 ABOVE	****	
****	FOR 761 TO 770,	SEE	13 TO 18 ABOVE	****	
****	FOR 769 TO 793,	SEE	17 TO 29 ABOVE	****	
****	FOR 770 TO 795,	SEE	18 TO 30 ABOVE	****	
****	FOR 793 TO 797,	SEE	29 TO 31 ABOVE	****	
****	FOR 795 TO 799,	SEE	30 TO 32 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 797 TO 801,	SEE 31 TO 33 ABOVE	****			
**** FOR 799 TO 809,	SEE 32 TO 37 ABOVE	****			
**** FOR 801 TO 817,	SEE 33 TO 41 ABOVE	****			
**** FOR 809 TO 825,	SEE 37 TO 45 ABOVE	****			
**** FOR 817 TO 833,	SEE 41 TO 49 ABOVE	****			
**** FOR 825 TO 837,	SEE 37 TO 45 ABOVE	****			
**** FOR 833 TO 841,	SEE 121 TO 129 ABOVE	****			
**** FOR 837 TO 845,	SEE 125 TO 133 ABOVE	****			
**** FOR 841 TO 849,	SEE 129 TO 137 ABOVE	****			
**** FOR 849 TO 861,	SEE 137 TO 149 ABOVE	****			
**** FOR 850 TO 862,	SEE 31 TO 33 ABOVE	****			
**** FOR 861 TO 863,	SEE 149 TO 151 ABOVE	****			
**** FOR 862 TO 864,	SEE 150 TO 152 ABOVE	****			
**** FOR 863 TO 865,	SEE 18 TO 30 ABOVE	****			
**** FOR 864 TO 869,	SEE 152 TO 157 ABOVE	****			
**** FOR 865 TO 873,	SEE 153 TO 161 ABOVE	****			
**** FOR 869 TO 877,	SEE 157 TO 165 ABOVE	****			
**** FOR 873 TO 881,	SEE 161 TO 169 ABOVE	****			
**** FOR 885 TO 887,	SEE 313 TO 321 ABOVE	****			
**** FOR 886 TO 888,	SEE 161 TO 169 ABOVE	****			
**** FOR 887 TO 889,	SEE 157 TO 165 ABOVE	****			
**** FOR 889 TO 893,	SEE 609 TO 617 ABOVE	****			
**** FOR 917 TO 919,	SEE 29 TO 31 ABOVE	****			
**** FOR 918 TO 920,	SEE 30 TO 32 ABOVE	****			
**** FOR 919 TO 921,	SEE 31 TO 33 ABOVE	****			
**** FOR 933 TO 935,	SEE 29 TO 31 ABOVE	****			
**** FOR 934 TO 936,	SEE 30 TO 32 ABOVE	****			
**** FOR 935 TO 937,	SEE 31 TO 33 ABOVE	****			
**** FOR 949 TO 951,	SEE 29 TO 31 ABOVE	****			
**** FOR 950 TO 952,	SEE 30 TO 32 ABOVE	****			
**** FOR 951 TO 953,	SEE 31 TO 33 ABOVE	****			
163 552 TO 965	1033 TO 1045	6	3		
**** FOR 965 TO 967,	SEE 29 TO 31 ABOVE	****			
**** FOR 966 TO 968,	SEE 30 TO 32 ABOVE	****			
**** FOR 967 TO 969,	SEE 31 TO 33 ABOVE	****			
**** FOR 981 TO 983,	SEE 29 TO 31 ABOVE	****			
**** FOR 982 TO 984,	SEE 30 TO 32 ABOVE	****			
**** FOR 983 TO 985,	SEE 31 TO 33 ABOVE	****			
**** FOR 997 TO 999,	SEE 29 TO 31 ABOVE	****			
**** FOR 998 TO 1000,	SEE 30 TO 32 ABOVE	****			
**** FOR 999 TO 1001,	SEE 31 TO 33 ABOVE	****			
**** FOR 1009 TO 1011,	SEE 30 TO 32 ABOVE	****			
**** FOR 1010 TO 1012,	SEE 31 TO 33 ABOVE	****			
**** FOR 1011 TO 1013,	SEE 41 TO 49 ABOVE	****			
**** FOR 1021 TO 1025,	SEE 329 TO 337 ABOVE	****			
**** FOR 1033 TO 1045,	SEE 525 TO 537 ABOVE	****			
**** FOR 1041 TO 1049,	SEE 1 TO 9 ABOVE	****			
**** FOR 1045 TO 1053,	SEE 5 TO 13 ABOVE	****			
**** FOR 1049 TO 1057,	SEE 9 TO 17 ABOVE	****			
**** FOR 1053 TO 1058,	SEE 13 TO 18 ABOVE	****			
**** FOR 1057 TO 1069,	SEE 17 TO 29 ABOVE	****			

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PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 1058 TO 1070,	SEE	18 TO	30 ABOVE	****	
**** FOR 1069 TO 1071,	SEE	29 TO	31 ABOVE	****	
**** FOR 1070 TO 1072,	SEE	30 TO	32 ABOVE	****	
**** FOR 1071 TO 1073,	SEE	31 TO	33 ABOVE	****	
**** FOR 1072 TO 1077,	SEE	32 TO	37 ABOVE	****	
**** FOR 1073 TO 1081,	SEE	33 TO	41 ABOVE	****	
**** FOR 1077 TO 1085,	SEE	37 TO	45 ABOVE	****	
**** FOR 1081 TO 1089,	SEE	177 TO	193 ABOVE	****	
**** FOR 1085 TO 1097,	SEE	177 TO	193 ABOVE	****	
**** FOR 1089 TO 1105,	SEE	41 TO	49 ABOVE	****	
**** FOR 1105 TO 1121,	SEE	29 TO	31 ABOVE	****	
**** FOR 1121 TO 1137,	SEE	41 TO	49 ABOVE	****	
**** FOR 1129 TO 1145,	SEE	73 TO	89 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 4 NOTES IN LENGTH --
 EXACT RETROGRADE
 WAS BEGUN AT 325 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
164	1 TO	13	435 TO 445	6	4
165	1 TO	13	507 TO 517	6	4
166	5 TO	17	125 TO 137	6	4
167	5 TO	17	277 TO 289	6	4
168	5 TO	17	429 TO 443	6	4
169	5 TO	17	501 TO 515	6	4
170	5 TO	17	837 TO 849	6	4
171	9 TO	18	421 TO 437	6	4
172	9 TO	18	493 TO 509	6	4
173	13 TO	29	420 TO 435	6	4
174	13 TO	29	492 TO 507	6	4
175	17 TO	30	419 TO 429	6	4
176	17 TO	30	491 TO 501	6	4
177	18 TO	31	138 TO 151	6	4
178	18 TO	31	290 TO 303	6	4
179	18 TO	31	418 TO 421	6	4
180	18 TO	31	490 TO 493	6	4
181	18 TO	31	850 TO 863	6	4
182	29 TO	32	417 TO 420	6	4
183	29 TO	32	489 TO 492	6	4
184	29 TO	32	795 TO 801	6	4
185	29 TO	32	918 TO 921	6	4
186	29 TO	32	934 TO 937	6	4
187	29 TO	32	950 TO 953	6	4
188	29 TO	32	966 TO 969	6	4
189	29 TO	32	982 TO 985	6	4
190	29 TO	32	998 TO 1001	6	4
191	29 TO	32	1009 TO 1012	6	4
192	29 TO	32	1070 TO 1073	6	4
193	30 TO	33	413 TO 419	6	4
194	30 TO	33	485 TO 491	6	4
195	30 TO	33	793 TO 799	6	4
196	30 TO	33	917 TO 920	6	4
197	30 TO	33	933 TO 936	6	4
198	30 TO	33	949 TO 952	6	4
199	30 TO	33	965 TO 968	6	4
200	30 TO	33	981 TO 984	6	4
201	30 TO	33	997 TO 1000	6	4
202	30 TO	33	1069 TO 1072	6	4
203	31 TO	37	409 TO 418	6	4
204	31 TO	37	481 TO 490	6	4
205	32 TO	41	405 TO 417	6	4
206	32 TO	41	477 TO 489	6	4
207	33 TO	45	401 TO 413	6	4

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
208	33 TO 45		473 TO 485	6	4
209	37 TO 49		157 TO 169	6	4
210	37 TO 49		869 TO 881	6	4
211	101 TO 104		582 TO 585	6	4
212	102 TO 105		581 TO 584	6	4
213	113 TO 129		243 TO 253	6	4
214	125 TO 137		745 TO 769	6	4
215	125 TO 137		1045 TO 1057	6	4
216	137 TO 150		619 TO 629	6	4
217	138 TO 151		618 TO 621	6	4
218	138 TO 151		770 TO 797	6	4
219	138 TO 151		1058 TO 1071	6	4
220	149 TO 152		302 TO 305	6	4
221	149 TO 152		617 TO 620	6	4
222	149 TO 152		862 TO 865	6	4
223	150 TO 153		301 TO 304	6	4
224	150 TO 153		613 TO 619	6	4
225	150 TO 153		861 TO 864	6	4
226	151 TO 157		609 TO 618	6	4
227	152 TO 161		605 TO 617	6	4
228	153 TO 165		601 TO 613	6	4
229	157 TO 169		809 TO 833	6	4
230	177 TO 201		309 TO 321	6	4
231	177 TO 201		326 TO 329	6	4
232	185 TO 209		886 TO 889	6	4
233	257 TO 277		873 TO 885	6	4
**** FOR	277 TO 289,	SEE	125 TO 137 ABOVE ****		
**** FOR	289 TO 302,	SEE	137 TO 150 ABOVE ****		
**** FOR	290 TO 303,	SEE	138 TO 151 ABOVE ****		
**** FOR	301 TO 304,	SEE	149 TO 152 ABOVE ****		
**** FOR	302 TO 305,	SEE	150 TO 153 ABOVE ****		
**** FOR	303 TO 309,	SEE	151 TO 157 ABOVE ****		
**** FOR	304 TO 313,	SEE	152 TO 161 ABOVE ****		
**** FOR	305 TO 317,	SEE	153 TO 165 ABOVE ****		
234	309 TO 321		337 TO 361	6	4
235	309 TO 321		629 TO 649	6	4
236	309 TO 321		661 TO 681	6	4
237	309 TO 321		1085 TO 1105	6	4
238	313 TO 325		657 TO 673	6	4
**** FOR	326 TO 329,	SEE	309 TO 321 ABOVE ****		
239	327 TO 333		1077 TO 1089	6	4
240	328 TO 337		369 TO 393	6	4
**** FOR	337 TO 361,	SEE	177 TO 201 ABOVE ****		
**** FOR	393 TO 409,	SEE	327 TO 333 ABOVE ****		
241	401 TO 413		801 TO 825	6	4
242	401 TO 413		1073 TO 1085	6	4
243	405 TO 417		799 TO 817	6	4
244	405 TO 417		1072 TO 1081	6	4
245	409 TO 418		797 TO 809	6	4
246	409 TO 418		1071 TO 1077	6	4
**** FOR	413 TO 419,	SEE	29 TO 32 ABOVE ****		

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	417 TO 420,	SEE	30 TO 33 ABOVE	****	
**** FOR	418 TO 421,	SEE	138 TO 151 ABOVE	****	
247	419 TO 429		769 TO 795	6	4
248	419 TO 429		1057 TO 1070	6	4
249	420 TO 435		761 TO 793	6	4
250	420 TO 435		1053 TO 1069	6	4
251	421 TO 437		753 TO 770	6	4
252	421 TO 437		1049 TO 1058	6	4
**** FOR	429 TO 443,	SEE	125 TO 137 ABOVE	****	
253	435 TO 445		737 TO 761	6	4
254	435 TO 445		1041 TO 1053	6	4
**** FOR	473 TO 485,	SEE	401 TO 413 ABOVE	****	
**** FOR	477 TO 489,	SEE	405 TO 417 ABOVE	****	
**** FOR	481 TO 490,	SEE	409 TO 418 ABOVE	****	
**** FOR	485 TO 491,	SEE	29 TO 32 ABOVE	****	
**** FOR	489 TO 492,	SEE	30 TO 33 ABOVE	****	
**** FOR	490 TO 493,	SEE	138 TO 151 ABOVE	****	
**** FOR	491 TO 501,	SEE	419 TO 429 ABOVE	****	
**** FOR	492 TO 507,	SEE	420 TO 435 ABOVE	****	
**** FOR	493 TO 509,	SEE	421 TO 437 ABOVE	****	
**** FOR	501 TO 515,	SEE	125 TO 137 ABOVE	****	
**** FOR	507 TO 517,	SEE	435 TO 445 ABOVE	****	
255	525 TO 545		951 TO 965	6	4
**** FOR	581 TO 584,	SEE	101 TO 104 ABOVE	****	
**** FOR	582 TO 585,	SEE	102 TO 105 ABOVE	****	
256	601 TO 613		865 TO 877	6	4
257	605 TO 617		864 TO 873	6	4
258	609 TO 618		863 TO 869	6	4
**** FOR	613 TO 619,	SEE	149 TO 152 ABOVE	****	
**** FOR	617 TO 620,	SEE	150 TO 153 ABOVE	****	
**** FOR	618 TO 621,	SEE	18 TO 31 ABOVE	****	
259	619 TO 629		849 TO 862	6	4
**** FOR	629 TO 649,	SEE	177 TO 201 ABOVE	****	
**** FOR	633 TO 657,	SEE	185 TO 209 ABOVE	****	
**** FOR	661 TO 681,	SEE	177 TO 201 ABOVE	****	
**** FOR	669 TO 689,	SEE	185 TO 209 ABOVE	****	
**** FOR	737 TO 761,	SEE	1 TO 13 ABOVE	****	
**** FOR	745 TO 769,	SEE	5 TO 17 ABOVE	****	
**** FOR	753 TO 770,	SEE	9 TO 18 ABOVE	****	
**** FOR	761 TO 793,	SEE	13 TO 29 ABOVE	****	
**** FOR	769 TO 795,	SEE	17 TO 30 ABOVE	****	
**** FOR	770 TO 797,	SEE	18 TO 31 ABOVE	****	
**** FOR	793 TO 799,	SEE	29 TO 32 ABOVE	****	
**** FOR	795 TO 801,	SEE	30 TO 33 ABOVE	****	
**** FOR	797 TO 809,	SEE	31 TO 37 ABOVE	****	
**** FOR	799 TO 817,	SEE	32 TO 41 ABOVE	****	
**** FOR	801 TO 825,	SEE	33 TO 45 ABOVE	****	
**** FOR	809 TO 833,	SEE	37 TO 49 ABOVE	****	
**** FOR	817 TO 837,	SEE	185 TO 209 ABOVE	****	
**** FOR	837 TO 849,	SEE	125 TO 137 ABOVE	****	
**** FOR	849 TO 862,	SEE	137 TO 150 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
****	FOR 850 TO 863,	SEE	138 TO 151 ABOVE	****	
****	FOR 861 TO 864,	SEE	149 TO 152 ABOVE	****	
****	FOR 862 TO 865,	SEE	150 TO 153 ABOVE	****	
****	FOR 863 TO 869,	SEE	151 TO 157 ABOVE	****	
****	FOR 864 TO 873,	SEE	152 TO 161 ABOVE	****	
****	FOR 865 TO 877,	SEE	153 TO 165 ABOVE	****	
****	FOR 869 TO 881,	SEE	157 TO 169 ABOVE	****	
****	FOR 885 TO 888,	SEE	327 TO 333 ABOVE	****	
****	FOR 917 TO 920,	SEE	29 TO 32 ABOVE	****	
****	FOR 918 TO 921,	SEE	30 TO 33 ABOVE	****	
****	FOR 933 TO 936,	SEE	29 TO 32 ABOVE	****	
****	FOR 934 TO 937,	SEE	30 TO 33 ABOVE	****	
****	FOR 949 TO 952,	SEE	29 TO 32 ABOVE	****	
****	FOR 950 TO 953,	SEE	30 TO 33 ABOVE	****	
****	FOR 965 TO 968,	SEE	29 TO 32 ABOVE	****	
****	FOR 966 TO 969,	SEE	30 TO 33 ABOVE	****	
****	FOR 981 TO 984,	SEE	29 TO 32 ABOVE	****	
****	FOR 982 TO 985,	SEE	30 TO 33 ABOVE	****	
****	FOR 997 TO 1000,	SEE	29 TO 32 ABOVE	****	
****	FOR 998 TO 1001,	SEE	30 TO 33 ABOVE	****	
****	FOR 1009 TO 1012,	SEE	30 TO 33 ABOVE	****	
****	FOR 1041 TO 1053,	SEE	1 TO 13 ABOVE	****	
****	FOR 1045 TO 1057,	SEE	5 TO 17 ABOVE	****	
****	FOR 1049 TO 1058,	SEE	9 TO 18 ABOVE	****	
****	FOR 1053 TO 1069,	SEE	13 TO 29 ABOVE	****	
****	FOR 1057 TO 1070,	SEE	17 TO 30 ABOVE	****	
****	FOR 1058 TO 1071,	SEE	18 TO 31 ABOVE	****	
****	FOR 1069 TO 1072,	SEE	29 TO 32 ABOVE	****	
****	FOR 1070 TO 1073,	SEE	30 TO 33 ABOVE	****	
****	FOR 1071 TO 1077,	SEE	31 TO 37 ABOVE	****	
****	FOR 1072 TO 1081,	SEE	32 TO 41 ABOVE	****	
****	FOR 1073 TO 1085,	SEE	33 TO 45 ABOVE	****	
****	FOR 1085 TO 1105,	SEE	177 TO 201 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 5 NOTES IN LENGTH --
 EXACT RETROGRADE
 WAS BEGUN AT 477 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
260	1 TO 17		429 TO 445	6	5
261	1 TO 17		501 TO 517	6	5
262	5 TO 18		421 TO 443	6	5
263	5 TO 18		493 TO 515	6	5
264	9 TO 29		420 TO 437	6	5
265	9 TO 29		492 TO 509	6	5
266	13 TO 30		419 TO 435	6	5
267	13 TO 30		491 TO 507	6	5
268	17 TO 31		418 TO 429	6	5
269	17 TO 31		490 TO 501	6	5
270	18 TO 32		417 TO 421	6	5
271	18 TO 32		489 TO 493	6	5
272	29 TO 33		413 TO 420	6	5
273	29 TO 33		485 TO 492	6	5
274	29 TO 33		793 TO 801	6	5
275	29 TO 33		917 TO 921	6	5
276	29 TO 33		933 TO 937	6	5
277	29 TO 33		949 TO 953	6	5
278	29 TO 33		965 TO 969	6	5
279	29 TO 33		981 TO 985	6	5
280	29 TO 33		997 TO 1001	6	5
281	29 TO 33		1069 TO 1073	6	5
282	30 TO 37		409 TO 419	6	5
283	30 TO 37		481 TO 491	6	5
284	31 TO 41		405 TO 418	6	5
285	31 TO 41		477 TO 490	6	5
286	32 TO 45		401 TO 417	6	5
287	32 TO 45		473 TO 489	6	5
288	137 TO 151		618 TO 629	6	5
289	138 TO 152		617 TO 621	6	5
*** FOR	138 TO 152,	SEE	138 TO 152 ABOVE	****	
290	149 TO 153		301 TO 305	6	5
291	149 TO 153		613 TO 620	6	5
292	149 TO 153		861 TO 865	6	5
293	150 TO 157		609 TO 619	6	5
294	151 TO 161		605 TO 618	6	5
*** FOR	151 TO 161,	SEE	151 TO 161 ABOVE	****	
295	152 TO 165		601 TO 617	6	5
*** FOR	289 TO 303,	SEE	137 TO 151 ABOVE	****	
*** FOR	290 TO 304,	SEE	138 TO 152 ABOVE	****	
*** FOR	301 TO 305,	SEE	149 TO 153 ABOVE	****	
*** FOR	302 TO 309,	SEE	150 TO 157 ABOVE	****	
*** FOR	303 TO 313,	SEE	151 TO 161 ABOVE	****	
*** FOR	304 TO 317,	SEE	152 TO 165 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
296	309 TO 325		657 TO 681	6	5
**** FOR	309 TO 325,	SEE	309 TO 325 ABOVE	****	
297	393 TO 413		1073 TO 1089	6	5
298	401 TO 417		799 TO 825	6	5
299	401 TO 417		1072 TO 1085	6	5
**** FOR	401 TO 417,	SEE	401 TO 417 ABOVE	****	
300	405 TO 418		797 TO 817	6	5
301	405 TO 418		1071 TO 1081	6	5
302	409 TO 419		795 TO 809	6	5
303	409 TO 419		1070 TO 1077	6	5
**** FOR	413 TO 420,	SEE	29 TO 33 ABOVE	****	
304	417 TO 421		770 TO 799	6	5
305	417 TO 421		1058 TO 1072	6	5
306	418 TO 429		769 TO 797	6	5
307	418 TO 429		1057 TO 1071	6	5
308	419 TO 435		761 TO 795	6	5
309	419 TO 435		1053 TO 1070	6	5
**** FOR	419 TO 435,	SEE	419 TO 435 ABOVE	****	
310	420 TO 437		753 TO 793	6	5
311	420 TO 437		1049 TO 1069	6	5
312	421 TO 443		745 TO 770	6	5
313	421 TO 443		1045 TO 1058	6	5
314	429 TO 445		737 TO 769	6	5
315	429 TO 445		1041 TO 1057	6	5
**** FOR	473 TO 489,	SEE	401 TO 417 ABOVE	****	
**** FOR	477 TO 490,	SEE	405 TO 418 ABOVE	****	
**** FOR	481 TO 491,	SEE	409 TO 419 ABOVE	****	
**** FOR	485 TO 492,	SEE	29 TO 33 ABOVE	****	
**** FOR	489 TO 493,	SEE	417 TO 421 ABOVE	****	
**** FOR	490 TO 501,	SEE	418 TO 429 ABOVE	****	
**** FOR	491 TO 507,	SEE	419 TO 435 ABOVE	****	
**** FOR	492 TO 509,	SEE	420 TO 437 ABOVE	****	
**** FOR	493 TO 515,	SEE	421 TO 443 ABOVE	****	
**** FOR	501 TO 517,	SEE	429 TO 445 ABOVE	****	
316	601 TO 617		864 TO 877	6	5
**** FOR	601 TO 617,	SEE	601 TO 617 ABOVE	****	
317	605 TO 618		863 TO 873	6	5
318	609 TO 619		862 TO 869	6	5
**** FOR	613 TO 620,	SEE	149 TO 153 ABOVE	****	
319	617 TO 621		850 TO 864	6	5
320	618 TO 629		849 TO 863	6	5
**** FOR	737 TO 769,	SEE	1 TO 17 ABOVE	****	
**** FOR	745 TO 770,	SEE	5 TO 18 ABOVE	****	
**** FOR	753 TO 793,	SEE	9 TO 29 ABOVE	****	
**** FOR	761 TO 795,	SEE	13 TO 30 ABOVE	****	
**** FOR	769 TO 797,	SEE	17 TO 31 ABOVE	****	
**** FOR	770 TO 799,	SEE	18 TO 32 ABOVE	****	
**** FOR	793 TO 801,	SEE	29 TO 33 ABOVE	****	
**** FOR	795 TO 809,	SEE	30 TO 37 ABOVE	****	
**** FOR	797 TO 817,	SEE	31 TO 41 ABOVE	****	
**** FOR	799 TO 825,	SEE	32 TO 45 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
****	FOR 849 TO 863,	SEE	137 TO 151 ABOVE	****	
****	FOR 850 TO 864,	SEE	138 TO 152 ABOVE	****	
****	FOR 861 TO 865,	SEE	149 TO 153 ABOVE	****	
****	FOR 862 TO 869,	SEE	150 TO 157 ABOVE	****	
****	FOR 863 TO 873,	SEE	151 TO 161 ABOVE	****	
****	FOR 864 TO 877,	SEE	152 TO 165 ABOVE	****	
****	FOR 917 TO 921,	SEE	29 TO 33 ABOVE	****	
****	FOR 933 TO 937,	SEE	29 TO 33 ABOVE	****	
****	FOR 949 TO 953,	SEE	29 TO 33 ABOVE	****	
****	FOR 965 TO 969,	SEE	29 TO 33 ABOVE	****	
****	FOR 981 TO 985,	SEE	29 TO 33 ABOVE	****	
****	FOR 997 TO 1001,	SEE	29 TO 33 ABOVE	****	
****	FOR 1041 TO 1057,	SEE	1 TO 17 ABOVE	****	
****	FOR 1045 TO 1058,	SEE	5 TO 18 ABOVE	****	
****	FOR 1049 TO 1069,	SEE	9 TO 29 ABOVE	****	
****	FOR 1053 TO 1070,	SEE	13 TO 30 ABOVE	****	
****	FOR 1057 TO 1071,	SEE	17 TO 31 ABOVE	****	
****	FOR 1058 TO 1072,	SEE	18 TO 32 ABOVE	****	
****	FOR 1069 TO 1073,	SEE	29 TO 33 ABOVE	****	
****	FOR 1070 TO 1077,	SEE	30 TO 37 ABOVE	****	
****	FOR 1071 TO 1081,	SEE	31 TO 41 ABOVE	****	
****	FOR 1072 TO 1085,	SEE	32 TO 45 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 6 NOTES IN LENGTH --
 EXACT RETROGRADE
 WAS BEGUN AT 626 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
321	1 TO 18		421 TO 445	6	6
322	1 TO 18		493 TO 517	6	6
323	5 TO 29		420 TO 443	6	6
324	5 TO 29		492 TO 515	6	6
325	9 TO 30		419 TO 437	6	6
326	9 TO 30		491 TO 509	6	6
327	13 TO 31		418 TO 435	6	6
328	13 TO 31		490 TO 507	6	6
329	17 TO 32		417 TO 429	6	6
330	17 TO 32		489 TO 501	6	6
331	18 TO 33		413 TO 421	6	6
332	18 TO 33		485 TO 493	6	6
333	29 TO 37		409 TO 420	6	6
334	29 TO 37		481 TO 492	6	6
335	30 TO 41		405 TO 419	6	6
336	30 TO 41		477 TO 491	6	6
337	31 TO 45		401 TO 418	6	6
338	31 TO 45		473 TO 490	6	6
339	137 TO 152		617 TO 629	6	6
340	138 TO 153		613 TO 621	6	6
341	149 TO 157		609 TO 620	6	6
342	150 TO 161		605 TO 619	6	6
343	151 TO 165		601 TO 618	6	6
**** FOR	289 TO 304,	SEE	137 TO 152 ABOVE ****		
**** FOR	290 TO 305,	SEE	138 TO 153 ABOVE ****		
**** FOR	301 TO 309,	SEE	149 TO 157 ABOVE ****		
**** FOR	302 TO 313,	SEE	150 TO 161 ABOVE ****		
**** FOR	303 TO 317,	SEE	151 TO 165 ABOVE ****		
344	393 TO 417		1072 TO 1089	6	6
**** FOR	393 TO 417,	SEE	393 TO 417 ABOVE ****		
345	401 TO 418		797 TO 825	6	6
346	401 TO 418		1071 TO 1085	6	6
347	405 TO 419		795 TO 817	6	6
348	405 TO 419		1070 TO 1081	6	6
349	409 TO 420		793 TO 809	6	6
350	409 TO 420		1069 TO 1077	6	6
351	413 TO 421		770 TO 801	6	6
352	413 TO 421		1058 TO 1073	6	6
353	417 TO 429		769 TO 799	6	6
354	417 TO 429		1057 TO 1072	6	6
**** FOR	417 TO 429,	SEE	417 TO 429 ABOVE ****		
355	418 TO 435		761 TO 797	6	6
356	418 TO 435		1053 TO 1071	6	6
**** FOR	418 TO 435,	SEE	418 TO 435 ABOVE ****		

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
357	419 TO 437		753 TO 795	6	6
358	419 TO 437		1049 TO 1070	6	6
359	420 TO 443		745 TO 793	6	6
360	420 TO 443		1045 TO 1069	6	6
361	421 TO 445		737 TO 770	6	6
362	421 TO 445		1041 TO 1058	6	6
**** FOR	473 TO 490,	SEE	401 TO 418 ABOVE	****	
**** FOR	477 TO 491,	SEE	405 TO 419 ABOVE	****	
**** FOR	481 TO 492,	SEE	409 TO 420 ABOVE	****	
**** FOR	485 TO 493,	SEE	413 TO 421 ABOVE	****	
**** FOR	489 TO 501,	SEE	417 TO 429 ABOVE	****	
**** FOR	490 TO 507,	SEE	418 TO 435 ABOVE	****	
**** FOR	491 TO 509,	SEE	419 TO 437 ABOVE	****	
**** FOR	492 TO 515,	SEE	420 TO 443 ABOVE	****	
**** FOR	493 TO 517,	SEE	421 TO 445 ABOVE	****	
363	601 TO 618		863 TO 877	6	6
364	605 TO 619		862 TO 873	6	6
365	609 TO 620		861 TO 869	6	6
366	613 TO 621		850 TO 865	6	6
367	617 TO 629		849 TO 864	6	6
**** FOR	617 TO 629,	SEE	617 TO 629 ABOVE	****	
**** FOR	737 TO 770,	SEE	1 TO 18 ABOVE	****	
**** FOR	745 TO 793,	SEE	5 TO 29 ABOVE	****	
**** FOR	753 TO 795,	SEE	9 TO 30 ABOVE	****	
**** FOR	761 TO 797,	SEE	13 TO 31 ABOVE	****	
**** FOR	769 TO 799,	SEE	17 TO 32 ABOVE	****	
**** FOR	770 TO 801,	SEE	18 TO 33 ABOVE	****	
**** FOR	793 TO 809,	SEE	29 TO 37 ABOVE	****	
**** FOR	795 TO 817,	SEE	30 TO 41 ABOVE	****	
**** FOR	797 TO 825,	SEE	31 TO 45 ABOVE	****	
**** FOR	849 TO 864,	SEE	137 TO 152 ABOVE	****	
**** FOR	850 TO 865,	SEE	138 TO 153 ABOVE	****	
**** FOR	861 TO 869,	SEE	149 TO 157 ABOVE	****	
**** FOR	862 TO 873,	SEE	150 TO 161 ABOVE	****	
**** FOR	863 TO 877,	SEE	151 TO 165 ABOVE	****	
**** FOR	1041 TO 1058,	SEE	1 TO 18 ABOVE	****	
**** FOR	1045 TO 1069,	SEE	5 TO 29 ABOVE	****	
**** FOR	1049 TO 1070,	SEE	9 TO 30 ABOVE	****	
**** FOR	1053 TO 1071,	SEE	13 TO 31 ABOVE	****	
**** FOR	1057 TO 1072,	SEE	17 TO 32 ABOVE	****	
**** FOR	1058 TO 1073,	SEE	18 TO 33 ABOVE	****	
**** FOR	1069 TO 1077,	SEE	29 TO 37 ABOVE	****	
**** FOR	1070 TO 1081,	SEE	30 TO 41 ABOVE	****	
**** FOR	1071 TO 1085,	SEE	31 TO 45 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 7 NOTES IN LENGTH --
 EXACT RETROGRADE
 WAS BEGUN AT 770 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
368	1 TO 29		420 TO 445	6	7
369	1 TO 29		492 TO 517	6	7
370	5 TO 30		419 TO 443	6	7
371	5 TO 30		491 TO 515	6	7
372	9 TO 31		418 TO 437	6	7
373	9 TO 31		490 TO 509	6	7
374	13 TO 32		417 TO 435	6	7
375	13 TO 32		489 TO 507	6	7
376	17 TO 33		413 TO 429	6	7
377	17 TO 33		485 TO 501	6	7
378	18 TO 37		409 TO 421	6	7
379	18 TO 37		481 TO 493	6	7
380	29 TO 41		405 TO 420	6	7
381	29 TO 41		477 TO 492	6	7
382	30 TO 45		401 TO 419	6	7
383	30 TO 45		473 TO 491	6	7
384	137 TO 153		613 TO 629	6	7
385	138 TO 157		609 TO 621	6	7
386	149 TO 161		605 TO 620	6	7
387	150 TO 165		601 TO 619	6	7
388	393 TO 418		1071 TO 1089	6	7
389	401 TO 419		795 TO 825	6	7
390	401 TO 419		1070 TO 1085	6	7
391	405 TO 420		793 TO 817	6	7
392	405 TO 420		1069 TO 1081	6	7
393	409 TO 421		770 TO 809	6	7
394	409 TO 421		1058 TO 1077	6	7
395	413 TO 429		769 TO 801	6	7
396	413 TO 429		1057 TO 1073	6	7
397	417 TO 435		761 TO 799	6	7
398	417 TO 435		1053 TO 1072	6	7
399	418 TO 437		753 TO 797	6	7
400	418 TO 437		1049 TO 1071	6	7
401	419 TO 443		745 TO 795	6	7
402	419 TO 443		1045 TO 1070	6	7
403	420 TO 445		737 TO 793	6	7
404	420 TO 445		1041 TO 1069	6	7
405	601 TO 619		862 TO 877	6	7
406	605 TO 620		861 TO 873	6	7
407	609 TO 621		850 TO 869	6	7
408	613 TO 629		849 TO 865	6	7

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 8 NOTES IN LENGTH --
 EXACT RETROGRADE
 WAS BEGUN AT 789 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
409	1 TO 30		419 TO 445	6	8
410	1 TO 30		491 TO 517	6	8
411	5 TO 31		418 TO 443	6	8
412	5 TO 31		490 TO 515	6	8
413	9 TO 32		417 TO 437	6	8
414	9 TO 32		489 TO 509	6	8
415	13 TO 33		413 TO 435	6	8
416	13 TO 33		485 TO 507	6	8
417	17 TO 37		409 TO 429	6	8
418	17 TO 37		481 TO 501	6	8
419	18 TO 41		405 TO 421	6	8
420	18 TO 41		477 TO 493	6	8
421	29 TO 45		401 TO 420	6	8
422	29 TO 45		473 TO 492	6	8
423	137 TO 157		609 TO 629	6	8
424	138 TO 161		605 TO 621	6	8
425	149 TO 165		601 TO 620	6	8
426	393 TO 419		1070 TO 1089	6	8
427	401 TO 420		793 TO 825	6	8
428	401 TO 420		1069 TO 1085	6	8
429	405 TO 421		770 TO 817	6	8
430	405 TO 421		1058 TO 1081	6	8
431	409 TO 429		769 TO 809	6	8
432	409 TO 429		1057 TO 1077	6	8
433	413 TO 435		761 TO 801	6	8
434	413 TO 435		1053 TO 1073	6	8
435	417 TO 437		753 TO 799	6	8
436	417 TO 437		1049 TO 1072	6	8
437	418 TO 443		745 TO 797	6	8
438	418 TO 443		1045 TO 1071	6	8
439	419 TO 445		737 TO 795	6	8
440	419 TO 445		1041 TO 1070	6	8
441	601 TO 620		861 TO 877	6	8
442	605 TO 621		850 TO 873	6	8
443	609 TO 629		849 TO 869	6	8

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 9 NOTES IN LENGTH --
 EXACT RETROGRADE
 WAS BEGUN AT 807 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
444	1 TO 31		418 TO 445	6	9
445	1 TO 31		490 TO 517	6	9
446	5 TO 32		417 TO 443	6	9
447	5 TO 32		489 TO 515	6	9
448	9 TO 33		413 TO 437	6	9
449	9 TO 33		485 TO 509	6	9
450	13 TO 37		409 TO 435	6	9
451	13 TO 37		481 TO 507	6	9
452	17 TO 41		405 TO 429	6	9
453	17 TO 41		477 TO 501	6	9
454	18 TO 45		401 TO 421	6	9
455	18 TO 45		473 TO 493	6	9
456	137 TO 161		605 TO 629	6	9
457	138 TO 165		601 TO 621	6	9
458	393 TO 420		1069 TO 1089	6	9
459	401 TO 421		770 TO 825	6	9
460	401 TO 421		1058 TO 1085	6	9
461	405 TO 429		769 TO 817	6	9
462	405 TO 429		1057 TO 1081	6	9
463	409 TO 435		761 TO 809	6	9
464	409 TO 435		1053 TO 1077	6	9
465	413 TO 437		753 TO 801	6	9
466	413 TO 437		1049 TO 1073	6	9
467	417 TO 443		745 TO 799	6	9
468	417 TO 443		1045 TO 1072	6	9
469	418 TO 445		737 TO 797	6	9
470	418 TO 445		1041 TO 1071	6	9
471	601 TO 621		850 TO 877	6	9
472	605 TO 629		849 TO 873	6	9

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 10 NOTES IN LENGTH --
 EXACT RETROGRADE
 WAS BEGUN AT 825 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
473	1 TO 32		417 TO 445	6	10
474	1 TO 32		489 TO 517	6	10
475	5 TO 33		413 TO 443	6	10
476	5 TO 33		485 TO 515	6	10
477	9 TO 37		409 TO 437	6	10
478	9 TO 37		481 TO 509	6	10
479	13 TO 41		405 TO 435	6	10
480	13 TO 41		477 TO 507	6	10
481	17 TO 45		401 TO 429	6	10
482	17 TO 45		473 TO 501	6	10
483	137 TO 165		601 TO 629	6	10
484	393 TO 421		1058 TO 1089	6	10
485	401 TO 429		769 TO 825	6	10
486	401 TO 429		1057 TO 1085	6	10
487	405 TO 435		761 TO 817	6	10
488	405 TO 435		1053 TO 1081	6	10
489	409 TO 437		753 TO 809	6	10
490	409 TO 437		1049 TO 1077	6	10
491	413 TO 443		745 TO 801	6	10
492	413 TO 443		1045 TO 1073	6	10
493	417 TO 445		737 TO 799	6	10
494	417 TO 445		1041 TO 1072	6	10
495	601 TO 629		849 TO 877	6	10

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 11 NOTES IN LENGTH --
 EXACT RETROGRADE
 WAS BEGUN AT 842 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
496	1 TO 33		413 TO 445	6	11
497	1 TO 33		485 TO 517	6	11
498	5 TO 37		409 TO 443	6	11
499	5 TO 37		481 TO 515	6	11
500	9 TO 41		405 TO 437	6	11
501	9 TO 41		477 TO 509	6	11
502	13 TO 45		401 TO 435	6	11
503	13 TO 45		473 TO 507	6	11
504	393 TO 429		1057 TO 1089	6	11
505	401 TO 435		761 TO 825	6	11
506	401 TO 435		1053 TO 1085	6	11
507	405 TO 437		753 TO 817	6	11
508	405 TO 437		1049 TO 1081	6	11
509	409 TO 443		745 TO 809	6	11
510	409 TO 443		1045 TO 1077	6	11
511	413 TO 445		737 TO 801	6	11
512	413 TO 445		1041 TO 1073	6	11

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 12 NOTES IN LENGTH --
 EXACT RETROGRADE
 WAS BEGUN AT 858 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
513	1 TO 37		409 TO 445	6	12
514	1 TO 37		481 TO 517	6	12
515	5 TO 41		405 TO 443	6	12
516	5 TO 41		477 TO 515	6	12
517	9 TO 45		401 TO 437	6	12
518	9 TO 45		473 TO 509	6	12
519	393 TO 435		1053 TO 1089	6	12
520	401 TO 437		753 TO 825	6	12
521	401 TO 437		1049 TO 1085	6	12
522	405 TO 443		745 TO 817	6	12
523	405 TO 443		1045 TO 1081	6	12
524	409 TO 445		737 TO 809	6	12
525	409 TO 445		1041 TO 1077	6	12

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 13 NOTES IN LENGTH --
 EXACT RETROGRADE
 WAS BEGUN AT 875 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
526	1 TO 41		405 TO 445	6	13
527	1 TO 41		477 TO 517	6	13
528	5 TO 45		401 TO 443	6	13
529	5 TO 45		473 TO 515	6	13
530	393 TO 437		1049 TO 1089	6	13
531	401 TO 443		745 TO 825	6	13
532	401 TO 443		1045 TO 1085	6	13
533	405 TO 445		737 TO 817	6	13
534	405 TO 445		1041 TO 1081	6	13

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 14 NOTES IN LENGTH --
EXACT RETROGRADE
WAS BEGUN AT 891 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
535	1 TO 45		401 TO 445	6	14
536	1 TO 45		473 TO 517	6	14
537	393 TO 443		1045 TO 1089	6	14
538	401 TO 445		737 TO 825	6	14
539	401 TO 445		1041 TO 1085	6	14

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 15 NOTES IN LENGTH --
EXACT RETROGRADE
WAS BEGUN AT 908 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
540	393 TO 445		1041 TO 1089	6	15

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 16 NOTES IN LENGTH --
EXACT RETROGRADE
WAS BEGUN AT 924 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
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END OF TYPE I LISTING. TOTAL OF 540 PATTERNS LOCATED.

*** TYPE II LISTING ***

HINDEMITH LUDIS TONALIS FUGA NONA IN B-FLAT, BOTTOM VOICE
EXACT RETROGRADE

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	393 TO 445	2	15
SUBPATTERN	405 TO 413	4	3

**** TEST 6 COMPLETED AT 1033 SECONDS INTO EXECUTION ****

***** MUSIC MELODIC PATTERN ANALYSIS *****

HINDEMITH LUDIS TONALIS FUGA NONA IN B-FLAT, BOTTOM VOICE

TEST REQUESTED 12
 UNITS OF DATA PER CARD 16

COMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES	1	THROUGH	16													
	36	0	0	0	38	0	-1	0	38	0	0	0	43	0	-1	0
NOTES	17	THROUGH	32													
	43	33	0	0	0	0	0	0	0	0	0	0	36	38	41	38
NOTES	33	THROUGH	48													
	36	0	0	0	32	0	0	0	31	0	0	0	29	0	0	0
NOTES	49	THROUGH	64													
	28	0	0	0	-1	0	0	0	30	0	0	0	-1	0	0	0
NOTES	65	THROUGH	80													
	33	0	0	0	-1	0	0	0	31	0	0	0	-1	0	0	0
NOTES	81	THROUGH	96													
	30	0	0	0	-1	0	0	0	29	0	0	0	-1	0	0	0
NOTES	97	THROUGH	112													
	28	0	0	0	52	51	52	51	52	0	0	0	52	0	0	0
NOTES	113	THROUGH	128													
	49	0	0	0	-1	0	0	0	49	0	0	0	47	0	-1	0
NOTES	129	THROUGH	144													
	47	0	0	0	42	0	-1	0	42	52	0	0	0	0	0	0
NOTES	145	THROUGH	160													
	0	0	0	0	49	47	44	47	49	0	0	0	53	0	0	0
NOTES	161	THROUGH	176													
	54	0	0	0	56	0	0	0	57	0	0	0	-1	0	0	0
NOTES	177	THROUGH	192													
	45	0	0	0	0	0	0	0	43	0	0	0	0	0	0	0
NOTES	193	THROUGH	208													
	41	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0

NOTES 209 THROUGH 224
 38 0 0 0 -1 0 0 0 0 0 51 0 51 0 -1 0

NOTES 225 THROUGH 240
 0 0 52 0 52 0 -1 0 0 0 49 0 49 0 -1 0

NOTES 241 THROUGH 256
 0 0 50 0 50 0 -1 0 0 0 52 0 52 0 0 0

NOTES 257 THROUGH 272
 53 0 0 0 -1 0 0 0 41 0 0 0 0 0 0

NOTES 273 THROUGH 288
 40 0 0 0 38 0 -1 0 38 0 0 0 33 0 -1 0

NOTES 289 THROUGH 304
 33 43 0 0 0 0 0 0 0 0 0 0 40 38 35 38

NOTES 305 THROUGH 320
 40 0 0 0 44 0 0 0 45 0 0 0 47 0 0 0

NOTES 321 THROUGH 336
 49 0 0 0 37 36 37 39 41 0 0 0 42 0 0 0

NOTES 337 THROUGH 352
 43 0 0 0 -1 0 0 0 41 0 0 0 0 0 0 0

NOTES 353 THROUGH 368
 39 0 0 0 0 0 0 0 38 0 0 0 0 0 0 0

NOTES 369 THROUGH 384
 37 0 0 0 0 0 0 0 36 0 0 0 0 0 0 0

NOTES 385 THROUGH 400
 35 0 0 0 0 0 0 0 33 0 0 0 0 0 0 0

NOTES 401 THROUGH 416
 35 0 0 0 37 0 0 0 38 0 0 0 42 0 0 0

NOTES 417 THROUGH 432
 44 47 44 42 39 0 0 0 0 0 0 49 0 -1 0

NOTES 433 THROUGH 448
 0 0 49 0 44 0 0 0 -1 0 44 0 42 0 0 0

NOTES 449 THROUGH 464
 41 0 0 0 0 0 0 0 44 0 0 0 0 0 0 0

NOTES 465 THROUGH 480
 39 0 0 0 -1 0 0 0 28 0 0 0 30 0 0 0

NOTES 481 THROUGH 496
 31 0 0 0 35 0 0 0 37 40 37 35 32 0 0 0

NOTES 497 THROUGH 512
0 0 0 0 42 0 -1 0 0 0 42 0 37 0 0 0

NOTES 513 THROUGH 528
-1 0 37 0 35 0 0 0 -1 0 33 0 38 0 0 0

NOTES 529 THROUGH 544
31 0 0 0 -1 0 0 0 33 0 0 0 -1 0 0 0

NOTES 545 THROUGH 560
36 0 0 0 -1 0 0 0 34 0 0 0 -1 0 0 0

NOTES 561 THROUGH 576
33 0 0 0 -1 0 0 0 32 0 0 0 -1 0 0 0

NOTES 577 THROUGH 592
31 0 0 0 55 54 55 54 55 0 0 0 50 0 52 0

NOTES 593 THROUGH 608
47 0 0 0 -1 0 0 0 54 0 0 0 52 0 0 0

NOTES 609 THROUGH 624
51 0 0 0 47 0 0 0 45 42 45 47 50 0 0 0

NOTES 625 THROUGH 640
0 0 0 0 40 0 -1 0 38 0 0 0 0 0 0 0

NOTES 641 THROUGH 656
36 0 0 0 0 0 0 0 35 0 0 0 0 0 0 0

NOTES 657 THROUGH 672
33 0 0 0 45 0 0 0 0 0 0 0 43 0 0 0

NOTES 673 THROUGH 688
41 0 0 0 0 0 0 0 40 0 0 0 0 0 0 0

NOTES 689 THROUGH 704
38 0 0 0 0 0 0 0 42 0 0 0 38 0 0 0

NOTES 705 THROUGH 720
37 0 0 0 0 0 0 0 36 0 0 0 0 0 0 0

NOTES 721 THROUGH 736
35 0 0 0 -1 0 0 0 0 0 0 0 0 0 0 0

NOTES 737 THROUGH 752
41 0 0 0 0 0 0 0 43 0 0 0 -1 0 0 0

NOTES 753 THROUGH 768
43 0 0 0 0 0 0 0 48 0 0 0 -1 0 0 0

NOTES 769 THROUGH 784
48 38 0 0 0 0 0 0 0 0 0 0 0 0 0 0

NOTES	785	THROUGH	800														
	0	C	0	0	0	0	0	0	41	0	43	0	46	0	43	0	
NOTES	801	THROUGH	816														
	41	0	0	0	0	0	0	0	37	0	0	0	0	0	0	0	
NOTES	817	THROUGH	832														
	36	C	0	0	0	0	0	0	34	0	0	0	0	0	0	0	
NOTES	833	THROUGH	848														
	33	0	0	0	31	0	-1	0	31	0	0	0	26	0	-1	0	
NOTES	849	THROUGH	864														
	26	36	0	0	0	0	0	0	0	0	0	0	33	31	28	31	
NOTES	865	THROUGH	880														
	33	C	0	0	37	0	0	0	38	0	0	0	40	0	0	0	
NOTES	881	THROUGH	896														
	41	0	0	0	53	55	57	58	60	0	56	0	54	0	49	0	
NOTES	897	THROUGH	912														
	46	0	42	0	39	0	35	0	71	0	0	0	0	0	0	0	
NOTES	913	THROUGH	928														
	-1	0	0	0	24	26	29	26	24	0	0	0	-1	0	0	0	
NOTES	929	THROUGH	944														
	0	C	0	0	49	51	54	51	49	0	0	0	-1	0	0	0	
NOTES	945	THROUGH	960														
	0	C	0	0	23	25	28	25	23	0	0	0	-1	0	0	0	
NOTES	961	THROUGH	976														
	0	0	0	0	30	32	35	32	30	0	0	0	-1	0	0	0	
NOTES	977	THROUGH	992														
	0	C	0	0	45	47	50	47	45	0	0	0	-1	0	0	0	
NOTES	993	THROUGH	1008														
	0	0	0	0	22	24	27	24	22	0	0	0	-1	C	0	0	
NOTES	1009	THROUGH	1024														
	44	47	44	42	41	0	0	0	-1	0	0	0	36	0	37	0	
NOTES	1025	THROUGH	1040														
	38	0	0	0	0	0	-1	0	43	0	0	0	0	0	-1	0	
NOTES	1041	THROUGH	1056														
	36	0	0	0	38	0	-1	0	38	0	0	0	43	0	-1	0	
NOTES	1057	THROUGH	1072														
	43	33	0	0	0	0	0	0	0	0	0	0	36	38	41	38	

NOTES 1073 THROUGH 1088

36 0 0 0 32 0 0 0 31 0 0 0 29 0 0 0

NOTES 1089 THROUGH 1104

27 0 0 0 0 0 0 0 25 0 0 0 0 0 0 0

NOTES 1105 THROUGH 1120

24 0 0 0 -1 0 0 0 26 0 0 0 -1 0 0 0

NOTES 1121 THROUGH 1136

29 0 0 0 -1 0 0 0 27 0 0 0 -1 0 0 0

NOTES 1137 THROUGH 1152

26 0 0 0 -1 0 0 0 25 0 0 0 -1 0 0 0

NOTES 1153 THROUGH 1168

24 0 0 0 -1 0 0 0 0 0 0 0 0 0 0 0

NOTES 1169 THROUGH 1184

0 0 0 0 0 0 0 0 55 0 0 0 0 0 0 0

NOTES 1185 THROUGH 1185

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THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

*** TYPE I LISTING ***

HINDEMITH LUDIS TONALIS FUGA NONA IN B-FLAT, BOTTOM VOICE

SEARCH FOR PATTERNS OF 3 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 34 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO 9		1041 TO 1049	12	3
2	5 TO 13		1045 TO 1053	12	3
3	9 TO 17		1049 TO 1057	12	3
4	13 TO 18		1053 TO 1058	12	3
5	17 TO 29		1057 TO 1069	12	3
6	18 TO 30		1058 TO 1070	12	3
7	29 TO 31		917 TO 919	12	3
8	29 TO 31		933 TO 935	12	3
9	29 TO 31		949 TO 951	12	3
10	29 TO 31		965 TO 967	12	3
11	29 TO 31		981 TO 983	12	3
12	29 TO 31		997 TO 999	12	3
13	29 TO 31		1069 TO 1071	12	3
14	30 TO 32		417 TO 419	12	3
15	30 TO 32		489 TO 491	12	3
16	30 TO 32		918 TO 920	12	3
17	30 TO 32		934 TO 936	12	3
18	30 TO 32		950 TO 952	12	3
19	30 TO 32		966 TO 968	12	3
20	30 TO 32		982 TO 984	12	3
21	30 TO 32		998 TO 1000	12	3
22	30 TO 32		1009 TO 1011	12	3
23	30 TO 32		1070 TO 1072	12	3
24	31 TO 33		919 TO 921	12	3
25	31 TO 33		935 TO 937	12	3
26	31 TO 33		951 TO 953	12	3
27	31 TO 33		967 TO 969	12	3
28	31 TO 33		983 TO 985	12	3
29	31 TO 33		999 TO 1001	12	3
30	31 TO 33		1071 TO 1073	12	3
31	32 TO 37		1072 TO 1077	12	3
32	33 TO 41		1073 TO 1081	12	3
33	37 TO 45		1077 TO 1085	12	3
34	41 TO 49		601 TO 609	12	3
35	49 TO 65		529 TO 545	12	3
36	49 TO 65		1105 TO 1121	12	3
37	57 TO 73		537 TO 553	12	3
38	57 TO 73		1113 TO 1129	12	3
39	65 TO 81		545 TO 561	12	3
40	65 TO 81		817 TO 833	12	3
41	65 TO 81		1089 TO 1105	12	3
42	65 TO 81		1121 TO 1137	12	3

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
43	73 TO	89	553 TO	569	12 3
44	73 TO	89	561 TO	577	12 3
45	73 TO	89	705 TO	721	12 3
46	73 TO	89	1129 TO	1145	12 3
47	73 TO	89	1137 TO	1153	12 3
*** FOR	81 TO	97,	SEE 73 TO	89 ABOVE ****	
48	89 TO	101	569 TO	581	12 3
49	97 TO	102	577 TO	582	12 3
50	101 TO	103	325 TO	327	12 3
51	101 TO	103	581 TO	583	12 3
52	102 TO	104	582 TO	584	12 3
53	103 TO	105	583 TO	585	12 3
54	121 TO	129	273 TO	281	12 3
55	121 TO	129	833 TO	841	12 3
56	125 TO	133	277 TO	285	12 3
57	125 TO	133	837 TO	845	12 3
58	129 TO	137	281 TO	289	12 3
59	129 TO	137	841 TO	849	12 3
60	133 TO	138	285 TO	290	12 3
61	133 TO	138	845 TO	850	12 3
62	137 TO	149	289 TO	301	12 3
63	137 TO	149	849 TO	861	12 3
64	138 TO	150	290 TO	302	12 3
65	138 TO	150	850 TO	862	12 3
66	149 TO	151	301 TO	303	12 3
67	149 TO	151	861 TO	863	12 3
68	150 TO	152	302 TO	304	12 3
69	150 TO	152	617 TO	619	12 3
70	150 TO	152	862 TO	864	12 3
71	151 TO	153	303 TO	305	12 3
72	151 TO	153	863 TO	865	12 3
73	152 TO	157	304 TO	309	12 3
74	152 TO	157	864 TO	869	12 3
75	153 TO	161	305 TO	313	12 3
76	153 TO	161	865 TO	873	12 3
77	157 TO	165	309 TO	317	12 3
78	157 TO	165	869 TO	877	12 3
79	161 TO	169	401 TO	409	12 3
80	161 TO	169	473 TO	481	12 3
81	161 TO	169	873 TO	881	12 3
82	165 TO	177	253 TO	265	12 3
83	177 TO	193	337 TO	353	12 3
84	185 TO	201	345 TO	361	12 3
85	185 TO	201	633 TO	649	12 3
86	193 TO	209	641 TO	657	12 3
87	219 TO	227	235 TO	243	12 3
88	221 TO	229	237 TO	245	12 3
*** FOR	235 TO	243,	SEE 219 TO	227 ABOVE ****	
*** FOR	237 TO	245,	SEE 221 TO	229 ABOVE ****	
*** FOR	253 TO	265,	SEE 165 TO	177 ABOVE ****	
89	265 TO	277	825 TO	837	12 3

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	273 TO 281,	SEE	121 TO 129 ABOVE	****	
**** FOR	277 TO 285,	SEE	125 TO 133 ABOVE	****	
**** FOR	281 TO 289,	SEE	129 TO 137 ABOVE	****	
**** FOR	285 TO 290,	SEE	133 TO 138 ABOVE	****	
**** FOR	289 TO 301,	SEE	137 TO 149 ABOVE	****	
**** FOR	290 TO 302,	SEE	138 TO 150 ABOVE	****	
**** FOR	301 TO 303,	SEE	149 TO 151 ABOVE	****	
**** FOR	302 TO 304,	SEE	150 TO 152 ABOVE	****	
**** FOR	303 TO 305,	SEE	151 TO 153 ABOVE	****	
**** FOR	304 TO 309,	SEE	152 TO 157 ABOVE	****	
**** FOR	305 TO 313,	SEE	153 TO 161 ABOVE	****	
**** FOR	309 TO 317,	SEE	157 TO 165 ABOVE	****	
**** FOR	325 TO 327,	SEE	101 TO 103 ABOVE	****	
**** FOR	337 TO 353,	SEE	177 TO 193 ABOVE	****	
**** FOR	345 TO 361,	SEE	185 TO 201 ABOVE	****	
90	353 TO 369		369 TO 385	12	3
**** FOR	361 TO 377,	SEE	353 TO 369 ABOVE	****	
**** FOR	369 TO 385,	SEE	353 TO 369 ABOVE	****	
91	377 TO 393		673 TO 689	12	3
92	377 TO 393		809 TO 825	12	3
**** FOR	401 TO 409,	SEE	161 TO 169 ABOVE	****	
93	405 TO 413		477 TO 485	12	3
94	409 TO 417		481 TO 489	12	3
95	413 TO 418		485 TO 490	12	3
**** FOR	417 TO 419,	SEE	30 TO 32 ABOVE	****	
96	418 TO 420		490 TO 492	12	3
97	418 TO 420		1010 TO 1012	12	3
98	419 TO 421		491 TO 493	12	3
99	420 TO 429		492 TO 501	12	3
100	421 TO 435		493 TO 507	12	3
101	429 TO 437		501 TO 509	12	3
102	435 TO 443		507 TO 515	12	3
103	437 TO 445		509 TO 517	12	3
**** FOR	473 TO 481,	SEE	161 TO 169 ABOVE	****	
**** FOR	477 TO 485,	SEE	405 TO 413 ABOVE	****	
**** FOR	481 TO 489,	SEE	409 TO 417 ABOVE	****	
**** FOR	485 TO 490,	SEE	413 TO 418 ABOVE	****	
**** FOR	489 TO 491,	SEE	30 TO 32 ABOVE	****	
**** FOR	490 TO 492,	SEE	418 TO 420 ABOVE	****	
**** FOR	491 TO 493,	SEE	419 TO 421 ABOVE	****	
**** FOR	492 TO 501,	SEE	420 TO 429 ABOVE	****	
**** FOR	493 TO 507,	SEE	421 TO 425 ABOVE	****	
**** FOR	501 TO 509,	SEE	429 TO 437 ABOVE	****	
**** FOR	507 TO 515,	SEE	435 TO 443 ABOVE	****	
**** FOR	509 TO 517,	SEE	437 TO 445 ABOVE	****	
**** FOR	529 TO 545,	SEE	49 TO 65 ABOVE	****	
**** FOR	537 TO 553,	SEE	57 TO 73 ABOVE	****	
**** FOR	545 TO 561,	SEE	65 TO 81 ABOVE	****	
**** FOR	553 TO 569,	SEE	73 TO 89 ABOVE	****	
**** FOR	561 TO 577,	SEE	73 TO 89 ABOVE	****	
**** FOR	569 TO 581,	SEE	89 TO 101 ABOVE	****	

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 577 TO 582,	SEE	97 TO 102	ABOVE	****	
**** FOR 581 TO 583,	SEE	101 TO 103	ABOVE	****	
**** FOR 582 TO 584,	SEE	102 TO 104	ABOVE	****	
**** FOR 583 TO 585,	SEE	103 TO 105	ABOVE	****	
**** FOR 601 TO 609,	SEE	41 TO 49	ABOVE	****	
**** FOR 617 TO 619,	SEE	150 TO 152	ABOVE	****	
104 629 TO 641	1085 TO 1097	12		3	
**** FOR 633 TO 649,	SEE	185 TO 201	ABOVE	****	
**** FOR 641 TO 657,	SEE	193 TO 209	ABOVE	****	
**** FOR 673 TO 689,	SEE	377 TO 393	ABOVE	****	
**** FOR 705 TO 721,	SEE	73 TO 89	ABOVE	****	
**** FOR 809 TO 825,	SEE	377 TO 393	ABOVE	****	
**** FOR 817 TO 833,	SEE	65 TO 81	ABOVE	****	
**** FOR 825 TO 837,	SEE	265 TO 277	ABOVE	****	
**** FOR 833 TO 841,	SEE	121 TO 129	ABOVE	****	
**** FOR 837 TO 845,	SEE	125 TO 133	ABOVE	****	
**** FOR 841 TO 849,	SEE	129 TO 137	ABOVE	****	
**** FOR 845 TO 850,	SEE	133 TO 138	ABOVE	****	
**** FOR 849 TO 861,	SEE	137 TO 149	ABOVE	****	
**** FOR 850 TO 862,	SEE	138 TO 150	ABOVE	****	
**** FOR 861 TO 863,	SEE	149 TO 151	ABOVE	****	
**** FOR 862 TO 864,	SEE	150 TO 152	ABOVE	****	
**** FOR 863 TO 865,	SEE	151 TO 153	ABOVE	****	
**** FOR 864 TO 869,	SEE	152 TO 157	ABOVE	****	
**** FOR 865 TO 873,	SEE	153 TO 161	ABOVE	****	
**** FOR 869 TO 877,	SEE	157 TO 165	ABOVE	****	
**** FOR 873 TO 881,	SEE	161 TO 169	ABOVE	****	
105 895 TO 899	899 TO 903	12		3	
**** FOR 899 TO 903,	SEE	895 TO 899	ABOVE	****	
**** FOR 917 TO 919,	SEE	29 TO 31	ABOVE	****	
**** FOR 918 TO 920,	SEE	30 TO 32	ABOVE	****	
**** FOR 919 TO 921,	SEE	31 TO 33	ABOVE	****	
**** FOR 933 TO 935,	SEE	29 TO 31	ABOVE	****	
**** FOR 934 TO 936,	SEE	30 TO 32	ABOVE	****	
**** FOR 935 TO 937,	SEE	31 TO 33	ABOVE	****	
**** FOR 949 TO 951,	SEE	29 TO 31	ABOVE	****	
**** FOR 950 TO 952,	SEE	30 TO 32	ABOVE	****	
**** FOR 951 TO 953,	SEE	31 TO 33	ABOVE	****	
**** FOR 965 TO 967,	SEE	29 TO 31	ABOVE	****	
**** FOR 966 TO 968,	SEE	30 TO 32	ABOVE	****	
**** FOR 967 TO 969,	SEE	31 TO 33	ABOVE	****	
**** FOR 981 TO 983,	SEE	29 TO 31	ABOVE	****	
**** FOR 982 TO 984,	SEE	30 TO 32	ABOVE	****	
**** FOR 983 TO 985,	SEE	31 TO 33	ABOVE	****	
**** FOR 997 TO 999,	SEE	29 TO 31	ABOVE	****	
**** FOR 998 TO 1000,	SEE	30 TO 32	ABOVE	****	
**** FOR 999 TO 1001,	SEE	31 TO 33	ABOVE	****	
**** FOR 1009 TO 1011,	SEE	30 TO 32	ABOVE	****	
**** FOR 1010 TO 1012,	SEE	418 TO 420	ABOVE	****	
**** FOR 1041 TO 1049,	SEE	1 TO 9	ABOVE	****	
**** FOR 1045 TO 1053,	SEE	5 TO 13	ABOVE	****	

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 1049 TO 1057,	SEE	9 TO	17 ABOVE	****	
**** FOR 1053 TO 1058,	SEE	13 TO	18 ABOVE	****	
**** FOR 1057 TO 1069,	SEE	17 TO	29 ABOVE	****	
**** FOR 1058 TO 1070,	SEE	18 TO	30 ABOVE	****	
**** FOR 1069 TO 1071,	SEE	29 TO	31 ABOVE	****	
**** FOR 1070 TO 1072,	SEE	30 TO	32 ABOVE	****	
**** FOR 1071 TO 1073,	SEE	31 TO	33 ABOVE	****	
**** FOR 1072 TO 1077,	SEE	32 TO	37 ABOVE	****	
**** FOR 1073 TO 1081,	SEE	33 TO	41 ABOVE	****	
**** FOR 1077 TO 1085,	SEE	37 TO	45 ABOVE	****	
**** FOR 1085 TO 1097,	SEE	629 TO	641 ABOVE	****	
**** FOR 1089 TO 1105,	SEE	65 TO	81 ABOVE	****	
**** FOR 1105 TO 1121,	SEE	49 TO	65 ABOVE	****	
**** FOR 1113 TO 1129,	SEE	57 TO	73 ABOVE	****	
**** FOR 1121 TO 1137,	SEE	65 TO	81 ABOVE	****	
**** FOR 1129 TO 1145,	SEE	73 TO	89 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 4 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 333 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
106	1 TO	13	1041 TO 1053	12	4
107	5 TO	17	1045 TO 1057	12	4
108	9 TO	18	1049 TO 1058	12	4
109	13 TO	29	1053 TO 1069	12	4
110	17 TO	30	1057 TO 1070	12	4
111	18 TO	31	1058 TO 1071	12	4
112	29 TO	32	917 TO 920	12	4
113	29 TO	32	933 TO 936	12	4
114	29 TO	32	949 TO 952	12	4
115	29 TO	32	965 TO 968	12	4
116	29 TO	32	981 TO 984	12	4
117	29 TO	32	997 TO 1000	12	4
118	29 TO	32	1069 TO 1072	12	4
119	30 TO	33	918 TO 921	12	4
120	30 TO	33	934 TO 937	12	4
121	30 TO	33	950 TO 953	12	4
122	30 TO	33	966 TO 969	12	4
123	30 TO	33	982 TO 985	12	4
124	30 TO	33	998 TO 1001	12	4
125	30 TO	33	1070 TO 1073	12	4
126	31 TO	37	1071 TO 1077	12	4
127	32 TO	41	1072 TO 1081	12	4
128	33 TO	45	1073 TO 1085	12	4
129	49 TO	73	529 TO 553	12	4
130	49 TO	73	1105 TO 1129	12	4
131	57 TO	81	537 TO 561	12	4
132	57 TO	81	1113 TO 1137	12	4
133	65 TO	89	545 TO 569	12	4
134	65 TO	89	1121 TO 1145	12	4
135	73 TO	97	553 TO 577	12	4
136	73 TO	97	1129 TO 1153	12	4
137	81 TO	101	561 TO 581	12	4
138	89 TO	102	569 TO 582	12	4
139	97 TO	103	577 TO 583	12	4
140	101 TO	104	581 TO 584	12	4
141	102 TO	105	582 TO 585	12	4
142	121 TO	133	273 TO 285	12	4
143	121 TO	133	833 TO 845	12	4
144	125 TO	137	277 TO 289	12	4
145	125 TO	137	837 TO 849	12	4
146	129 TO	138	281 TO 290	12	4
147	129 TO	138	841 TO 850	12	4
148	133 TO	149	285 TO 301	12	4
149	133 TO	149	845 TO 861	12	4

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
150	137 TO 150		289 TO 302	12	4
151	137 TO 150		849 TO 862	12	4
152	138 TO 151		290 TO 303	12	4
153	138 TO 151		850 TO 863	12	4
154	149 TO 152		301 TO 304	12	4
155	149 TO 152		861 TO 864	12	4
156	150 TO 153		302 TO 305	12	4
157	150 TO 153		862 TO 865	12	4
158	151 TO 157		303 TO 309	12	4
159	151 TO 157		863 TO 869	12	4
160	152 TO 161		304 TO 313	12	4
161	152 TO 161		864 TO 873	12	4
162	153 TO 165		305 TO 317	12	4
163	153 TO 165		865 TO 877	12	4
164	157 TO 169		869 TO 881	12	4
165	177 TO 201		337 TO 361	12	4
166	185 TO 209		633 TO 657	12	4
167	185 TO 209		633 TO 657	12	4
168	219 TO 229		235 TO 245	12	4
**** FOR	235 TO 245,	SEE	219 TO 229 ABOVE ****		
169	265 TO 281		825 TO 841	12	4
**** FOR	273 TO 285,	SEE	121 TO 133 ABOVE ****		
**** FOR	277 TO 289,	SEE	125 TO 137 ABOVE ****		
**** FOR	281 TO 290,	SEE	129 TO 138 ABOVE ****		
**** FOR	285 TO 301,	SEE	133 TO 149 ABOVE ****		
**** FOR	289 TO 302,	SEE	137 TO 150 ABOVE ****		
**** FOR	290 TO 303,	SEE	138 TO 151 ABOVE ****		
**** FOR	301 TO 304,	SEE	149 TO 152 ABOVE ****		
**** FOR	302 TO 305,	SEE	150 TO 153 ABOVE ****		
**** FOR	303 TO 309,	SEE	151 TO 157 ABOVE ****		
**** FOR	304 TO 313,	SEE	152 TO 161 ABOVE ****		
**** FOR	305 TO 317,	SEE	153 TO 165 ABOVE ****		
**** FOR	337 TO 361,	SEE	177 TO 201 ABOVE ****		
170	401 TO 413		473 TO 485	12	4
171	405 TO 417		477 TO 489	12	4
172	409 TO 418		481 TO 490	12	4
173	413 TO 419		485 TO 491	12	4
174	417 TO 420		489 TO 492	12	4
175	417 TO 420		1009 TO 1012	12	4
176	418 TO 421		490 TO 493	12	4
177	418 TO 421		490 TO 493	12	4
178	419 TO 429		491 TO 501	12	4
179	419 TO 429		491 TO 501	12	4
180	420 TO 435		492 TO 507	12	4
181	421 TO 437		493 TO 509	12	4
182	429 TO 443		501 TO 515	12	4
183	435 TO 445		507 TO 517	12	4
**** FOR	473 TO 485,	SEE	401 TO 413 ABOVE ****		
**** FOR	477 TO 489,	SEE	405 TO 417 ABOVE ****		
**** FOR	481 TO 490,	SEE	409 TO 418 ABOVE ****		
**** FOR	485 TO 491,	SEE	413 TO 419 ABOVE ****		

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
****	FOR 489 TO 492,	SEE	417 TO 420	ABOVE	****
****	FOR 490 TO 493,	SEE	418 TO 421	ABOVE	****
****	FOR 490 TO 493,	SEE	418 TO 421	ABOVE	****
****	FOR 491 TO 501,	SEE	419 TO 429	ABOVE	****
****	FOR 491 TO 501,	SEE	419 TO 429	ABOVE	****
****	FOR 492 TO 507,	SEE	420 TO 435	ABOVE	****
****	FOR 493 TO 509,	SEE	421 TO 437	ABOVE	****
****	FOR 501 TO 515,	SEE	429 TO 443	ABOVE	****
****	FOR 507 TO 517,	SEE	435 TO 445	ABOVE	****
****	FOR 529 TO 553,	SEE	49 TO 73	ABOVE	****
****	FOR 537 TO 561,	SEE	57 TO 81	ABOVE	****
****	FOR 545 TO 569,	SEE	65 TO 89	ABOVE	****
****	FOR 553 TO 577,	SEE	73 TO 97	ABOVE	****
****	FOR 561 TO 581,	SEE	81 TO 101	ABOVE	****
****	FOR 569 TO 582,	SEE	89 TO 102	ABOVE	****
****	FOR 577 TO 583,	SEE	97 TO 103	ABOVE	****
****	FOR 581 TO 584,	SEE	101 TO 104	ABOVE	****
****	FOR 582 TO 585,	SEE	102 TO 105	ABOVE	****
****	FOR 633 TO 657,	SEE	185 TO 209	ABOVE	****
****	FOR 633 TO 657,	SEE	185 TO 209	ABOVE	****
****	FOR 825 TO 841,	SEE	265 TO 281	ABOVE	****
****	FOR 833 TO 845,	SEE	121 TO 133	ABOVE	****
****	FOR 837 TO 849,	SEE	125 TO 137	ABOVE	****
****	FOR 841 TO 850,	SEE	129 TO 138	ABOVE	****
****	FOR 845 TO 861,	SEE	133 TO 149	ABOVE	****
****	FOR 849 TO 862,	SEE	137 TO 150	ABOVE	****
****	FOR 850 TO 863,	SEE	138 TO 151	ABOVE	****
****	FOR 861 TO 864,	SEE	149 TO 152	ABOVE	****
****	FOR 862 TO 865,	SEE	150 TO 153	ABOVE	****
****	FOR 863 TO 869,	SEE	151 TO 157	ABOVE	****
****	FOR 864 TO 873,	SEE	152 TO 161	ABOVE	****
****	FOR 865 TO 877,	SEE	153 TO 165	ABOVE	****
****	FOR 869 TO 881,	SEE	157 TO 169	ABOVE	****
****	FOR 917 TO 920,	SEE	29 TO 32	ABOVE	****
****	FOR 918 TO 921,	SEE	30 TO 33	ABOVE	****
****	FOR 933 TO 936,	SEE	29 TO 32	ABOVE	****
****	FOR 934 TO 937,	SEE	30 TO 33	ABOVE	****
****	FOR 949 TO 952,	SEE	29 TO 32	ABOVE	****
****	FOR 950 TO 953,	SEE	30 TO 33	ABOVE	****
****	FOR 965 TO 968,	SEE	29 TO 32	ABOVE	****
****	FOR 966 TO 969,	SEE	30 TO 33	ABOVE	****
****	FOR 981 TO 984,	SEE	29 TO 32	ABOVE	****
****	FOR 982 TO 985,	SEE	30 TO 33	ABOVE	****
****	FOR 997 TO 1000,	SEE	29 TO 32	ABOVE	****
****	FOR 998 TO 1001,	SEE	30 TO 33	ABOVE	****
****	FOR 1009 TO 1012,	SEE	417 TO 420	ABOVE	****
****	FOR 1041 TO 1053,	SEE	1 TO 13	ABOVE	****
****	FOR 1045 TO 1057,	SEE	5 TO 17	ABOVE	****
****	FOR 1049 TO 1058,	SEE	9 TO 18	ABOVE	****
****	FOR 1053 TO 1069,	SEE	13 TO 29	ABOVE	****
****	FOR 1057 TO 1070,	SEE	17 TO 30	ABOVE	****

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 1058 TO 1071,	SEE	18 TO	31 ABOVE	****	
**** FOR 1069 TO 1072,	SEE	29 TO	32 ABOVE	****	
**** FOR 1070 TO 1073,	SEE	30 TO	33 ABOVE	****	
**** FOR 1071 TO 1077,	SEE	31 TO	37 ABOVE	****	
**** FOR 1072 TO 1081,	SEE	32 TO	41 ABOVE	****	
**** FOR 1073 TO 1085,	SEE	33 TO	45 ABOVE	****	
**** FOR 1105 TO 1129,	SEE	49 TO	73 ABOVE	****	
**** FOR 1113 TO 1137,	SEE	57 TO	81 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 5 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 449 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
184	1 TO	17	1041 TO 1057	12	5
185	5 TO	18	1045 TO 1058	12	5
186	9 TO	29	1049 TO 1069	12	5
187	13 TO	30	1053 TO 1070	12	5
188	17 TO	31	1057 TO 1071	12	5
189	18 TO	32	1058 TO 1072	12	5
190	29 TO	33	917 TO 921	12	5
191	29 TO	33	933 TO 937	12	5
192	29 TO	33	949 TO 953	12	5
193	29 TO	33	965 TO 969	12	5
194	29 TO	33	981 TO 985	12	5
195	29 TO	33	997 TO 1001	12	5
196	29 TO	33	1069 TO 1073	12	5
197	30 TO	37	1070 TO 1077	12	5
198	31 TO	41	1071 TO 1081	12	5
199	32 TO	45	1072 TO 1085	12	5
200	49 TO	81	529 TO 561	12	5
201	49 TO	81	1105 TO 1137	12	5
202	57 TO	89	537 TO 569	12	5
203	57 TO	89	1113 TO 1145	12	5
204	65 TO	97	545 TO 577	12	5
205	65 TO	97	1121 TO 1153	12	5
206	73 TO	101	553 TO 581	12	5
207	81 TO	102	561 TO 582	12	5
208	89 TO	103	569 TO 583	12	5
209	97 TO	104	577 TO 584	12	5
210	121 TO	137	273 TO 289	12	5
211	121 TO	137	833 TO 849	12	5
212	125 TO	138	277 TO 290	12	5
213	125 TO	138	837 TO 850	12	5
214	129 TO	149	281 TO 301	12	5
215	129 TO	149	841 TO 861	12	5
216	133 TO	150	285 TO 302	12	5
217	133 TO	150	845 TO 862	12	5
218	137 TO	151	289 TO 303	12	5
219	137 TO	151	849 TO 863	12	5
220	138 TO	152	290 TO 304	12	5
221	138 TO	152	850 TO 864	12	5
222	149 TO	153	301 TO 305	12	5
223	149 TO	153	861 TO 865	12	5
224	150 TO	157	302 TO 309	12	5
225	150 TO	157	862 TO 869	12	5
226	151 TO	161	303 TO 313	12	5
227	151 TO	161	863 TO 873	12	5

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
228	152 TO 165		304 TO 317	12	5
229	152 TO 165		864 TO 877	12	5
230	153 TO 169		865 TO 881	12	5
231	265 TO 285		825 TO 845	12	5
**** FOR	273 TO 289,	SEE	121 TO 137 ABOVE	****	
**** FOR	277 TO 290,	SEE	125 TO 138 ABOVE	****	
**** FOR	281 TO 301,	SEE	129 TO 149 ABOVE	****	
**** FOR	285 TO 302,	SEE	133 TO 150 ABOVE	****	
**** FOR	289 TO 303,	SEE	137 TO 151 ABOVE	****	
**** FOR	290 TO 304,	SEE	138 TO 152 ABOVE	****	
**** FOR	301 TO 305,	SEE	149 TO 153 ABOVE	****	
**** FOR	302 TO 309,	SEE	150 TO 157 ABOVE	****	
**** FOR	303 TO 313,	SEE	151 TO 161 ABOVE	****	
**** FOR	304 TO 317,	SEE	152 TO 165 ABOVE	****	
232	401 TO 417		473 TO 489	12	5
233	405 TO 418		477 TO 490	12	5
234	409 TO 419		481 TO 491	12	5
235	413 TO 420		485 TO 492	12	5
236	417 TO 421		489 TO 493	12	5
237	418 TO 429		490 TO 501	12	5
238	418 TO 429		490 TO 501	12	5
239	419 TO 435		491 TO 507	12	5
240	419 TO 435		491 TO 507	12	5
241	420 TO 437		492 TO 509	12	5
242	421 TO 443		493 TO 515	12	5
243	429 TO 445		501 TO 517	12	5
**** FOR	473 TO 489,	SEE	401 TO 417 ABOVE	****	
**** FOR	477 TO 490,	SEE	405 TO 418 ABOVE	****	
**** FOR	481 TO 491,	SEE	409 TO 419 ABOVE	****	
**** FOR	485 TO 492,	SEE	413 TO 420 ABOVE	****	
**** FOR	489 TO 493,	SEE	417 TO 421 ABOVE	****	
**** FOR	490 TO 501,	SEE	418 TO 429 ABOVE	****	
**** FOR	490 TO 501,	SEE	418 TO 429 ABOVE	****	
**** FOR	491 TO 507,	SEE	419 TO 435 ABOVE	****	
**** FOR	491 TO 507,	SEE	419 TO 435 ABOVE	****	
**** FOR	492 TO 509,	SEE	420 TO 437 ABOVE	****	
**** FOR	493 TO 515,	SEE	421 TO 443 ABOVE	****	
**** FOR	501 TO 517,	SEE	429 TO 445 ABOVE	****	
**** FOR	529 TO 561,	SEE	49 TO 81 ABOVE	****	
**** FOR	530 TO 569,	SEE	57 TO 89 ABOVE	****	
**** FOR	545 TO 577,	SEE	65 TO 97 ABOVE	****	
**** FOR	553 TO 581,	SEE	73 TO 101 ABOVE	****	
**** FOR	561 TO 582,	SEE	81 TO 102 ABOVE	****	
**** FOR	569 TO 583,	SEE	89 TO 103 ABOVE	****	
**** FOR	577 TO 584,	SEE	97 TO 104 ABOVE	****	
**** FOR	825 TO 845,	SEE	265 TO 285 ABOVE	****	
**** FOR	833 TO 849,	SEE	121 TO 137 ABOVE	****	
**** FOR	837 TO 850,	SEE	125 TO 138 ABOVE	****	
**** FOR	841 TO 861,	SEE	129 TO 149 ABOVE	****	
**** FOR	845 TO 862,	SEE	133 TO 150 ABOVE	****	
**** FOR	849 TO 863,	SEE	137 TO 151 ABOVE	****	

P	A	T	T	E	R	N	NOTES	RELATED TO	NOTES	TEST	LENGTH
****	FOR	850	TO	864,			SEE	138 TO	152 ABOVE	****	
****	FOR	861	TO	865,			SEE	149 TO	153 ABOVE	****	
****	FOR	862	TO	869,			SEE	150 TO	157 ABOVE	****	
****	FOR	863	TO	873,			SEE	151 TO	161 ABOVE	****	
****	FOR	864	TO	877,			SEE	152 TO	165 ABOVE	****	
****	FOR	865	TO	881,			SEE	153 TO	169 ABOVE	****	
****	FOR	917	TO	921,			SEE	29 TO	33 ABOVE	****	
****	FOR	933	TO	937,			SEE	29 TO	33 ABOVE	****	
****	FOR	949	TO	953,			SEE	29 TO	33 ABOVE	****	
****	FOR	965	TO	969,			SEE	29 TO	33 ABOVE	****	
****	FOR	981	TO	985,			SEE	29 TO	33 ABOVE	****	
****	FOR	997	TO	1001,			SEE	29 TO	33 ABOVE	****	
****	FOR	1041	TO	1057,			SEE	1 TO	17 ABOVE	****	
****	FOR	1045	TO	1058,			SEE	5 TO	18 ABOVE	****	
****	FOR	1049	TO	1069,			SEE	9 TO	29 ABOVE	****	
****	FOR	1053	TO	1070,			SEE	13 TO	30 ABOVE	****	
****	FOR	1057	TO	1071,			SEE	17 TO	31 ABOVE	****	
****	FOR	1058	TO	1072,			SEE	18 TO	32 ABOVE	****	
****	FOR	1069	TO	1073,			SEE	29 TO	33 ABOVE	****	
****	FOR	1070	TO	1077,			SEE	30 TO	37 ABOVE	****	
****	FOR	1071	TO	1081,			SEE	31 TO	41 ABOVE	****	
****	FOR	1072	TO	1085,			SEE	32 TO	45 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 6 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT CONTJUR (ORIGINAL)
 WAS BEGUN AT 569 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
244	1 TO	18	1041 TO 1058	12	6
245	5 TO	29	1045 TO 1069	12	6
246	9 TO	30	1049 TO 1070	12	6
247	13 TO	31	1053 TO 1071	12	6
248	17 TO	32	1057 TO 1072	12	6
249	18 TO	33	1058 TO 1073	12	6
250	29 TO	37	1069 TO 1077	12	6
251	30 TO	41	1070 TO 1081	12	6
252	31 TO	45	1071 TO 1085	12	6
253	49 TO	89	529 TO 569	12	6
254	49 TO	89	1105 TO 1145	12	6
255	57 TO	97	537 TO 577	12	6
256	57 TO	97	1113 TO 1153	12	6
257	65 TO	101	545 TO 581	12	6
258	73 TO	102	553 TO 582	12	6
259	81 TO	103	561 TO 583	12	6
260	89 TO	104	569 TO 584	12	6
261	97 TO	105	577 TO 585	12	6
262	121 TO	138	273 TO 290	12	6
263	121 TO	138	833 TO 850	12	6
264	125 TO	149	277 TO 301	12	6
265	125 TO	149	837 TO 861	12	6
266	129 TO	150	281 TO 302	12	6
267	129 TO	150	841 TO 862	12	6
268	133 TO	151	285 TO 303	12	6
269	133 TO	151	845 TO 863	12	6
270	137 TO	152	289 TO 304	12	6
271	137 TO	152	849 TO 864	12	6
272	138 TO	153	290 TO 305	12	6
273	138 TO	153	850 TO 865	12	6
274	149 TO	157	301 TO 309	12	6
275	149 TO	157	861 TO 869	12	6
276	150 TO	161	302 TO 313	12	6
277	150 TO	161	862 TO 873	12	6
278	151 TO	165	303 TO 317	12	6
279	151 TO	165	863 TO 877	12	6
280	152 TO	169	864 TO 881	12	6
281	265 TO	289	825 TO 849	12	6
**** FOR	273 TO	290,	SEE 121 TO 138 ABOVE ****		
**** FOR	277 TO	301,	SEE 125 TO 149 ABOVE ****		
**** FOR	281 TO	302,	SEE 129 TO 150 ABOVE ****		
**** FOR	285 TO	303,	SEE 133 TO 151 ABOVE ****		
**** FOR	289 TO	304,	SEE 137 TO 152 ABOVE ****		
**** FOR	290 TO	305,	SEE 138 TO 153 ABOVE ****		

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 301 TO 309,	SEE 149 TO 157 ABOVE	****			
**** FOR 302 TO 313,	SEE 150 TO 161 ABOVE	****			
**** FOR 303 TO 317,	SEE 151 TO 165 ABOVE	****			
282 401 TO 418	473 TO 490	12	6		
283 405 TO 419	477 TO 491	12	6		
284 409 TO 420	481 TO 492	12	6		
285 413 TO 421	485 TO 493	12	6		
286 417 TO 429	489 TO 501	12	6		
287 418 TO 435	490 TO 507	12	6		
288 418 TO 435	490 TO 507	12	6		
289 419 TO 437	491 TO 509	12	6		
290 419 TO 437	491 TO 509	12	6		
291 420 TO 443	492 TO 515	12	6		
292 421 TO 445	493 TO 517	12	6		
**** FOR 473 TO 490,	SEE 401 TO 418 ABOVE	****			
**** FOR 477 TO 491,	SEE 405 TO 419 ABOVE	****			
**** FOR 481 TO 492,	SEE 409 TO 420 ABOVE	****			
**** FOR 485 TO 493,	SEE 413 TO 421 ABOVE	****			
**** FOR 489 TO 501,	SEE 417 TO 429 ABOVE	****			
**** FOR 490 TO 507,	SEE 418 TO 435 ABOVE	****			
**** FOR 490 TO 507,	SEE 418 TO 435 ABOVE	****			
**** FOR 491 TO 509,	SEE 419 TO 437 ABOVE	****			
**** FOR 491 TO 509,	SEE 419 TO 437 ABOVE	****			
**** FOR 492 TO 515,	SEE 420 TO 443 ABOVE	****			
**** FOR 493 TO 517,	SEE 421 TO 445 ABOVE	****			
**** FOR 529 TO 569,	SEE 49 TO 89 ABOVE	****			
**** FOR 537 TO 577,	SEE 57 TO 97 ABOVE	****			
**** FOR 545 TO 581,	SEE 65 TO 101 ABOVE	****			
**** FOR 553 TO 582,	SEE 73 TO 102 ABOVE	****			
**** FOR 561 TO 583,	SEE 81 TO 103 ABOVE	****			
**** FOR 569 TO 584,	SEE 89 TO 104 ABOVE	****			
**** FOR 577 TO 585,	SEE 97 TO 105 ABOVE	****			
**** FOR 825 TO 849,	SEE 265 TO 289 ABOVE	****			
**** FOR 833 TO 850,	SEE 121 TO 138 ABOVE	****			
**** FOR 837 TO 861,	SEE 125 TO 149 ABOVE	****			
**** FOR 841 TO 862,	SEE 129 TO 150 ABOVE	****			
**** FOR 845 TO 863,	SEE 133 TO 151 ABOVE	****			
**** FOR 849 TO 864,	SEE 137 TO 152 ABOVE	****			
**** FOR 850 TO 865,	SEE 138 TO 153 ABOVE	****			
**** FOR 861 TO 869,	SEE 149 TO 157 ABOVE	****			
**** FOR 862 TO 873,	SEE 150 TO 161 ABOVE	****			
**** FOR 863 TO 877,	SEE 151 TO 165 ABOVE	****			
**** FOR 864 TO 881,	SEE 152 TO 169 ABOVE	****			
**** FOR 1041 TO 1058,	SEE 1 TO 18 ABOVE	****			
**** FOR 1045 TO 1069,	SEE 5 TO 29 ABOVE	****			
**** FOR 1049 TO 1070,	SEE 9 TO 30 ABOVE	****			
**** FOR 1053 TO 1071,	SEE 13 TO 31 ABOVE	****			
**** FOR 1057 TO 1072,	SEE 17 TO 32 ABOVE	****			
**** FOR 1058 TO 1073,	SEE 18 TO 33 ABOVE	****			
**** FOR 1069 TO 1077,	SEE 29 TO 37 ABOVE	****			
**** FOR 1070 TO 1081,	SEE 30 TO 41 ABOVE	****			

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
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**** FOR 1071 TO 1085,		SEE	31 TO	45 ABOVE	****
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*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 7 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 690 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
293	1 TO 29		1041 TO 1069	12	7
294	5 TO 30		1045 TO 1070	12	7
295	9 TO 31		1049 TO 1071	12	7
296	13 TO 32		1053 TO 1072	12	7
297	17 TO 33		1057 TO 1073	12	7
298	18 TO 37		1058 TO 1077	12	7
299	29 TO 41		1069 TO 1081	12	7
300	30 TO 45		1070 TO 1085	12	7
301	49 TO 97		529 TO 577	12	7
302	49 TO 97		1105 TO 1153	12	7
303	57 TO 101		537 TO 581	12	7
304	65 TO 102		545 TO 582	12	7
305	73 TO 103		553 TO 583	12	7
306	81 TO 104		561 TO 584	12	7
307	89 TO 105		569 TO 585	12	7
308	121 TO 149		273 TO 301	12	7
309	121 TO 149		833 TO 861	12	7
310	125 TO 150		277 TO 302	12	7
311	125 TO 150		837 TO 862	12	7
312	129 TO 151		281 TO 303	12	7
313	129 TO 151		841 TO 863	12	7
314	133 TO 152		285 TO 304	12	7
315	133 TO 152		845 TO 864	12	7
316	137 TO 153		289 TO 305	12	7
317	137 TO 153		849 TO 865	12	7
318	138 TO 157		290 TO 309	12	7
319	138 TO 157		850 TO 869	12	7
320	149 TO 161		301 TO 313	12	7
321	149 TO 161		861 TO 873	12	7
322	150 TO 165		302 TO 317	12	7
323	150 TO 165		862 TO 877	12	7
324	151 TO 169		863 TO 881	12	7
325	265 TO 290		825 TO 850	12	7
326	401 TO 419		473 TO 491	12	7
327	405 TO 420		477 TO 492	12	7
328	409 TO 421		481 TO 493	12	7
329	413 TO 429		485 TO 501	12	7
330	417 TO 435		489 TO 507	12	7
331	418 TO 437		490 TO 509	12	7
332	418 TO 437		490 TO 509	12	7
333	419 TO 443		491 TO 515	12	7
334	419 TO 443		491 TO 515	12	7
335	420 TO 445		492 TO 517	12	7

367
368
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372

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 8 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 710 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
336	1 TO	30	1041 TO 1070	12	8
337	5 TO	31	1045 TO 1071	12	8
338	9 TO	32	1049 TO 1072	12	8
339	13 TO	33	1053 TO 1073	12	8
340	17 TO	37	1057 TO 1077	12	8
341	18 TO	41	1058 TO 1081	12	8
342	29 TO	45	1069 TO 1085	12	8
343	49 TO	101	529 TO 581	12	8
344	57 TO	102	537 TO 582	12	8
345	65 TO	103	545 TO 583	12	8
346	73 TO	104	553 TO 584	12	8
347	81 TO	105	561 TO 585	12	8
348	121 TO	150	273 TO 302	12	8
349	121 TO	150	833 TO 862	12	8
350	125 TO	151	277 TO 303	12	8
351	125 TO	151	837 TO 863	12	8
352	129 TO	152	281 TO 304	12	8
353	129 TO	152	841 TO 864	12	8
354	133 TO	153	285 TO 305	12	8
355	133 TO	153	845 TO 865	12	8
356	137 TO	157	289 TO 309	12	8
357	137 TO	157	849 TO 869	12	8
358	138 TO	161	290 TO 313	12	8
359	138 TO	161	850 TO 873	12	8
360	149 TO	165	301 TO 317	12	8
361	149 TO	165	861 TO 877	12	8
362	150 TO	169	862 TO 881	12	8
363	265 TO	301	825 TO 861	12	8
364	401 TO	420	473 TO 492	12	8
365	405 TO	421	477 TO 493	12	8
366	409 TO	429	481 TO 501	12	8
367	413 TO	435	485 TO 507	12	8
368	417 TO	437	489 TO 509	12	8
369	418 TO	443	490 TO 515	12	8
370	418 TO	443	490 TO 515	12	8
371	419 TO	445	491 TO 517	12	8
372	419 TO	445	491 TO 517	12	8

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 9 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 729 SECONDS INTO EXECUTION.

PATTERN	NCOTES	RELATED TO	NOTES	TEST	LENGTH
373	1 TO	31	1041 TO 1071	12	9
374	5 TO	32	1045 TO 1072	12	9
375	9 TO	33	1049 TO 1073	12	9
376	13 TO	37	1053 TO 1077	12	9
377	17 TO	41	1057 TO 1081	12	9
378	18 TO	45	1058 TO 1085	12	9
379	49 TO	102	529 TO 532	12	9
380	57 TO	103	537 TO 583	12	9
381	65 TO	104	545 TO 584	12	9
382	73 TO	105	553 TO 585	12	9
383	121 TO	151	273 TO 303	12	9
384	121 TO	151	833 TO 863	12	9
385	125 TO	152	277 TO 304	12	9
386	125 TO	152	837 TO 864	12	9
387	129 TO	153	281 TO 305	12	9
388	129 TO	153	841 TO 865	12	9
389	133 TO	157	285 TO 309	12	9
390	133 TO	157	845 TO 869	12	9
391	137 TO	161	289 TO 313	12	9
392	137 TO	161	849 TO 873	12	9
393	138 TO	165	290 TO 317	12	9
394	138 TO	165	850 TO 877	12	9
395	149 TO	169	861 TO 881	12	9
396	265 TO	302	825 TO 862	12	9
397	401 TO	421	473 TO 493	12	9
398	405 TO	429	477 TO 501	12	9
399	409 TO	435	481 TO 507	12	9
400	413 TO	437	485 TO 509	12	9
401	417 TO	443	489 TO 515	12	9
402	418 TO	445	490 TO 517	12	9
403	418 TO	445	490 TO 517	12	9

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 10 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 748 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
404	1 TO 32		1041 TO 1072	12	10
405	5 TO 33		1045 TO 1073	12	10
406	9 TO 37		1049 TO 1077	12	10
407	13 TO 41		1053 TO 1081	12	10
408	17 TO 45		1057 TO 1085	12	10
409	49 TO 103		529 TO 583	12	10
410	57 TO 104		537 TO 584	12	10
411	65 TO 105		545 TO 585	12	10
412	121 TO 152		273 TO 304	12	10
413	121 TO 152		833 TO 864	12	10
414	125 TO 153		277 TO 305	12	10
415	125 TO 153		837 TO 865	12	10
416	129 TO 157		281 TO 309	12	10
417	129 TO 157		841 TO 869	12	10
418	133 TO 161		285 TO 313	12	10
419	133 TO 161		845 TO 873	12	10
420	137 TO 165		289 TO 317	12	10
421	137 TO 165		849 TO 877	12	10
422	138 TO 169		850 TO 881	12	10
423	265 TO 303		825 TO 863	12	10
424	401 TO 429		473 TO 501	12	10
425	405 TO 435		477 TO 507	12	10
426	409 TO 437		481 TO 509	12	10
427	413 TO 443		485 TO 515	12	10
428	417 TO 445		489 TO 517	12	10

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
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**** FOR 1071 TO 1085,		SEE	31 TO	45 ABOVE	****
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*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 7 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 690 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
293	1 TO 29		1041 TO 1069	12	7
294	5 TO 30		1045 TO 1070	12	7
295	9 TO 31		1049 TO 1071	12	7
296	13 TO 32		1053 TO 1072	12	7
297	17 TO 33		1057 TO 1073	12	7
298	18 TO 37		1058 TO 1077	12	7
299	29 TO 41		1069 TO 1081	12	7
300	30 TO 45		1070 TO 1085	12	7
301	49 TO 97		529 TO 577	12	7
302	49 TO 97		1105 TO 1153	12	7
303	57 TO 101		537 TO 581	12	7
304	65 TO 102		545 TO 582	12	7
305	73 TO 103		553 TO 583	12	7
306	81 TO 104		561 TO 584	12	7
307	89 TO 105		569 TO 585	12	7
308	121 TO 149		273 TO 301	12	7
309	121 TO 149		833 TO 861	12	7
310	125 TO 150		277 TO 302	12	7
311	125 TO 150		837 TO 862	12	7
312	129 TO 151		281 TO 303	12	7
313	129 TO 151		841 TO 863	12	7
314	133 TO 152		285 TO 304	12	7
315	133 TO 152		845 TO 864	12	7
316	137 TO 153		289 TO 305	12	7
317	137 TO 153		849 TO 865	12	7
318	138 TO 157		290 TO 309	12	7
319	138 TO 157		850 TO 869	12	7
320	149 TO 161		301 TO 313	12	7
321	149 TO 161		861 TO 873	12	7
322	150 TO 165		302 TO 317	12	7
323	150 TO 165		862 TO 877	12	7
324	151 TO 165		863 TO 881	12	7
325	265 TO 290		825 TO 850	12	7
326	401 TO 419		473 TO 491	12	7
327	405 TO 420		477 TO 492	12	7
328	409 TO 421		481 TO 493	12	7
329	413 TO 429		485 TO 501	12	7
330	417 TO 435		489 TO 507	12	7
331	418 TO 437		490 TO 509	12	7
332	418 TO 437		490 TO 509	12	7
333	419 TO 443		491 TO 515	12	7
334	419 TO 443		491 TO 515	12	7
335	420 TO 445		492 TO 517	12	7

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 8 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 710 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
336	1 TO 30		1041 TO 1070	12	8
337	5 TO 31		1045 TO 1071	12	8
338	9 TO 32		1049 TO 1072	12	8
339	13 TO 33		1053 TO 1073	12	8
340	17 TO 37		1057 TO 1077	12	8
341	18 TO 41		1058 TO 1081	12	8
342	29 TO 45		1069 TO 1085	12	8
343	49 TO 101		529 TO 581	12	8
344	57 TO 102		537 TO 582	12	8
345	65 TO 103		545 TO 583	12	8
346	73 TO 104		553 TO 584	12	8
347	81 TO 105		561 TO 585	12	8
348	121 TO 150		273 TO 302	12	8
349	121 TO 150		833 TO 862	12	8
350	125 TO 151		277 TO 303	12	8
351	125 TO 151		837 TO 863	12	8
352	129 TO 152		281 TO 304	12	8
353	129 TO 152		841 TO 864	12	8
354	133 TO 153		285 TO 305	12	8
355	133 TO 153		845 TO 865	12	8
356	137 TO 157		289 TO 309	12	8
357	137 TO 157		849 TO 869	12	8
358	138 TO 161		290 TO 313	12	8
359	138 TO 161		850 TO 873	12	8
360	149 TO 165		301 TO 317	12	8
361	149 TO 165		861 TO 877	12	8
362	150 TO 169		862 TO 881	12	8
363	265 TO 301		825 TO 861	12	8
364	401 TO 420		473 TO 492	12	8
365	405 TO 421		477 TO 493	12	8
366	409 TO 429		481 TO 501	12	8
367	413 TO 435		485 TO 507	12	8
368	417 TO 437		489 TO 509	12	8
369	418 TO 443		490 TO 515	12	8
370	418 TO 443		490 TO 515	12	8
371	419 TO 445		491 TO 517	12	8
372	419 TO 445		491 TO 517	12	8

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 9 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 729 SECONDS INTO EXECUTION.

PATTERN	NCOTES	RELATED TO	NOTES	TEST	LENGTH
373	1 TO 31		1041 TO 1071	12	9
374	5 TO 32		1045 TO 1072	12	9
375	9 TO 33		1049 TO 1073	12	9
376	13 TO 37		1053 TO 1077	12	9
377	17 TO 41		1057 TO 1081	12	9
378	18 TO 45		1058 TO 1085	12	9
379	49 TO 102		529 TO 532	12	9
380	57 TO 103		537 TO 583	12	9
381	65 TO 104		545 TO 584	12	9
382	73 TO 105		553 TO 585	12	9
383	121 TO 151		273 TO 303	12	9
384	121 TO 151		833 TO 863	12	9
385	125 TO 152		277 TO 304	12	9
386	125 TO 152		837 TO 864	12	9
387	129 TO 153		281 TO 305	12	9
388	129 TO 153		841 TO 865	12	9
389	133 TO 157		285 TO 309	12	9
390	133 TO 157		845 TO 869	12	9
391	137 TO 161		289 TO 313	12	9
392	137 TO 161		849 TO 873	12	9
393	138 TO 165		290 TO 317	12	9
394	138 TO 165		850 TO 877	12	9
395	149 TO 169		861 TO 881	12	9
396	265 TO 302		825 TO 862	12	9
397	401 TO 421		473 TO 493	12	9
398	405 TO 429		477 TO 501	12	9
399	409 TO 435		481 TO 507	12	9
400	413 TO 437		485 TO 509	12	9
401	417 TO 443		489 TO 515	12	9
402	418 TO 445		490 TO 517	12	9
403	418 TO 445		490 TO 517	12	9

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 10 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 748 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
404	1 TO 32		1041 TO 1072	12	10
405	5 TO 33		1045 TO 1073	12	10
406	9 TO 37		1049 TO 1077	12	10
407	13 TO 41		1053 TO 1081	12	10
408	17 TO 45		1057 TO 1085	12	10
409	49 TO 103		529 TO 583	12	10
410	57 TO 104		537 TO 584	12	10
411	65 TO 105		545 TO 585	12	10
412	121 TO 152		273 TO 304	12	10
413	121 TO 152		833 TO 864	12	10
414	125 TO 153		277 TO 305	12	10
415	125 TO 153		837 TO 865	12	10
416	129 TO 157		281 TO 309	12	10
417	129 TO 157		841 TO 869	12	10
418	133 TO 161		285 TO 313	12	10
419	133 TO 161		845 TO 873	12	10
420	137 TO 165		289 TO 317	12	10
421	137 TO 165		849 TO 877	12	10
422	138 TO 169		850 TO 881	12	10
423	265 TO 303		825 TO 863	12	10
424	401 TO 429		473 TO 501	12	10
425	405 TO 435		477 TO 507	12	10
426	409 TO 437		481 TO 509	12	10
427	413 TO 443		485 TO 515	12	10
428	417 TO 445		489 TO 517	12	10

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 11 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 766 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
429	1 TO 33		1041 TO 1073	12	11
430	5 TO 37		1045 TO 1077	12	11
431	9 TO 41		1049 TO 1081	12	11
432	13 TO 45		1053 TO 1085	12	11
433	49 TO 104		529 TO 584	12	11
434	57 TO 105		537 TO 585	12	11
435	121 TO 153		273 TO 305	12	11
436	121 TO 153		833 TO 865	12	11
437	125 TO 157		277 TO 309	12	11
438	125 TO 157		837 TO 869	12	11
439	129 TO 161		281 TO 313	12	11
440	129 TO 161		841 TO 873	12	11
441	133 TO 165		285 TO 317	12	11
442	133 TO 165		845 TO 877	12	11
443	137 TO 169		849 TO 881	12	11
444	265 TO 304		825 TO 864	12	11
445	401 TO 435		473 TO 507	12	11
446	405 TO 437		477 TO 509	12	11
447	409 TO 443		481 TO 515	12	11
448	413 TO 445		485 TO 517	12	11

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 12 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 784 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
449	1 TO 37		1041 TO 1077	12	12
450	5 TO 41		1045 TO 1081	12	12
451	9 TO 45		1049 TO 1085	12	12
452	49 TO 105		529 TO 585	12	12
453	121 TO 157		273 TO 309	12	12
454	121 TO 157		833 TO 869	12	12
455	125 TO 161		277 TO 313	12	12
456	125 TO 161		837 TO 873	12	12
457	129 TO 165		281 TO 317	12	12
458	129 TO 165		841 TO 877	12	12
459	133 TO 169		845 TO 881	12	12
460	265 TO 305		825 TO 865	12	12
461	401 TO 437		473 TO 509	12	12
462	405 TO 443		477 TO 515	12	12
463	409 TO 445		481 TO 517	12	12

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 13 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 801 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
464	1 TO 41		1041 TO 1081	12	13
465	5 TO 45		1045 TO 1085	12	13
466	121 TO 161		273 TO 313	12	13
467	121 TO 161		833 TO 873	12	13
468	125 TO 165		277 TO 317	12	13
469	125 TO 165		837 TO 877	12	13
470	129 TO 169		841 TO 881	12	13
471	265 TO 309		825 TO 869	12	13
472	401 TO 443		473 TO 515	12	13
473	405 TO 445		477 TO 517	12	13

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 14 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)
 WAS BEGUN AT 818 SECJNDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
474	1 TO 45		1041 TO 1085	12	14
475	121 TO 165		273 TO 317	12	14
476	121 TO 165		833 TO 877	12	14
477	125 TO 169		837 TO 881	12	14
478	265 TO 313		825 TO 873	12	14
479	401 TO 445		473 TO 517	12	14

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 15 NOTES IN LENGTH --
EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)
WAS BEGUN AT 835 SECONDS INTO EXECUTION.

PATTFRN	NOTES	RELATED TO	NOTES	TEST	LENGTH
480	121 TO 169		833 TO 881	12	15
481	265 TO 317		825 TO 877	12	15

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 16 NOTES IN LENGTH --
EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)
WAS BEGUN AT 851 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST LENGTH
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END OF TYPE I LISTING. TOTAL OF 481 PATTERNS LOCATED.

*** TYPE II LISTING ***

HINDEMITH LUDIS TONALIS FUGA NONA IN B-FLAT, BOTTOM VOICE
 EXACT RHYTHM WITH EXACT CONTOUR (ORIGINAL)

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	265 TO 317	2	15
ORIGINAL PATTERN	121 TO 169	2	15
SUBPATTERN	161 TO 169	4	3
SUBPATTERN	150 TO 152	4	3

**** TEST 12 COMPLETED AT 979 SECONDS INTO EXECUTION ****

***** MUSIC MELODIC PATTERN ANALYSIS *****

HINDEMITH LUDIS TONALIS FUGA NONA IN B-FLAT, BOTTOM VOICE

TEST REQUESTED 14
UNITS OF DATA PER CARD 16

CCOMPUTER REFERENCE NUMBER ASSIGNMENT

NOTES	1 THROUGH	16														
	36	C	0	0	38	0	-1	0	38	0	0	0	43	0	-1	0
NOTES	17 THROUGH	32														
	43	33	0	0	0	0	0	0	0	0	0	0	36	38	41	38
NOTES	33 THROUGH	48														
	36	C	0	0	32	0	0	0	31	0	0	0	29	0	0	0
NOTES	49 THROUGH	64														
	28	0	0	0	-1	0	0	0	30	0	0	0	-1	0	0	0
NOTES	65 THROUGH	80														
	33	0	0	0	-1	0	0	0	31	0	0	0	-1	0	0	0
NOTES	81 THROUGH	96														
	30	C	0	0	-1	0	0	0	29	0	0	0	-1	0	0	0
NOTES	97 THROUGH	112														
	28	0	0	0	52	51	52	51	52	0	0	0	52	0	0	0
NOTES	113 THROUGH	128														
	49	0	0	0	-1	0	0	0	49	0	0	0	47	0	-1	0
NOTES	129 THROUGH	144														
	47	0	0	0	42	0	-1	0	42	52	0	0	0	0	0	0
NOTES	145 THROUGH	160														
	0	0	0	0	49	47	44	47	49	0	0	0	53	0	0	0
NOTES	161 THROUGH	176														
	54	0	0	0	56	0	0	0	57	0	0	0	-1	0	0	0
NOTES	177 THROUGH	192														
	45	0	0	0	0	0	0	0	43	0	0	0	0	0	0	0
NOTES	193 THROUGH	208														
	41	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0

NOTES 209 THROUGH 224
 38 C 0 0 -1 0 0 0 0 0 51 0 51 0 -1 0

NOTES 225 THROUGH 240
 0 0 52 0 52 0 -1 0 0 0 49 0 49 0 -1 0

NOTES 241 THROUGH 256
 0 0 50 0 50 0 -1 0 0 0 52 0 52 0 0 0

NOTES 257 THROUGH 272
 53 0 0 0 -1 0 0 0 41 0 0 0 0 0 0

NOTES 273 THROUGH 288
 40 0 0 0 38 0 -1 0 38 0 0 0 33 0 -1 0

NOTES 289 THROUGH 304
 33 43 0 0 0 0 0 0 0 0 0 0 40 38 35 38

NOTES 305 THROUGH 320
 40 0 0 0 44 0 0 0 45 0 0 0 47 0 0 0

NOTES 321 THROUGH 336
 49 0 0 0 37 36 37 39 41 0 0 0 42 0 0 0

NOTES 337 THROUGH 352
 43 0 0 0 -1 0 0 0 41 0 0 0 0 0 0 0

NOTES 353 THROUGH 368
 39 C 0 0 0 0 0 0 0 38 0 0 0 0 0 0 0

NOTES 369 THROUGH 384
 37 0 0 0 0 0 0 0 36 0 0 0 0 0 0 0

NOTES 385 THROUGH 400
 35 C 0 0 0 0 0 0 0 33 0 0 0 0 0 0 0

NOTES 401 THROUGH 416
 35 C 0 0 37 0 0 0 38 0 0 0 42 0 0 0

NOTES 417 THROUGH 432
 44 47 44 42 39 0 0 0 0 0 0 49 0 -1 0

NOTES 433 THROUGH 448
 0 0 49 0 44 0 0 0 -1 0 44 0 42 0 0 0

NOTES 449 THROUGH 464
 41 0 0 0 0 0 0 0 44 0 0 0 0 0 0 0

NOTES 465 THROUGH 480
 39 0 0 0 -1 0 0 0 28 0 0 0 30 0 0 0

NOTES 481 THROUGH 496
 31 0 0 0 35 0 0 0 37 40 37 35 32 0 0 0

NOTES 497 THROUGH 512
 0 0 0 0 42 0 -1 0 0 0 42 0 37 0 0 0

NOTES 513 THROUGH 528
 -1 0 37 0 35 0 0 0 -1 0 33 0 38 0 0 0

NOTES 529 THROUGH 544
 31 0 0 0 -1 0 0 0 33 0 0 0 -1 0 0 0

NOTES 545 THROUGH 560
 36 0 0 0 -1 0 0 0 34 0 0 0 -1 0 0 0

NOTES 561 THROUGH 576
 33 0 0 0 -1 0 0 0 32 0 0 0 -1 0 0 0

NOTES 577 THROUGH 592
 31 0 0 0 55 54 55 54 55 0 0 0 50 0 52 0

NOTES 593 THROUGH 608
 47 0 0 0 -1 0 0 0 54 0 0 0 52 0 0 0

NOTES 609 THROUGH 624
 51 0 0 0 47 0 0 0 45 42 45 47 50 0 0 0

NOTES 625 THROUGH 640
 0 0 0 0 40 0 -1 0 38 0 0 0 0 0 0 0

NOTES 641 THROUGH 656
 36 0 0 0 0 0 0 0 35 0 0 0 0 0 0 0

NOTES 657 THROUGH 672
 33 0 0 0 45 0 0 0 0 0 0 0 43 0 0 0

NOTES 673 THROUGH 688
 41 0 0 0 0 0 0 0 40 0 0 0 0 0 0 0

NOTES 689 THROUGH 704
 38 0 0 0 0 0 0 0 42 0 0 0 38 0 0 0

NOTES 705 THROUGH 720
 37 0 0 0 0 0 0 0 36 0 0 0 0 0 0 0

NOTES 721 THROUGH 736
 35 0 0 0 -1 0 0 0 0 0 0 0 0 0 0 0

NOTES 737 THROUGH 752
 41 0 0 0 0 0 0 0 43 0 0 0 -1 0 0 0

NOTES 753 THROUGH 768
 43 0 0 0 0 0 0 0 48 0 0 0 -1 0 0 0

NOTES 769 THROUGH 784
 48 38 0 0 0 0 0 0 0 0 0 0 0 0 0 0

NOTES 785 THROUGH 800
 0 0 0 0 0 0 0 0 41 0 43 0 46 0 43 0

NOTES 801 THROUGH 816
 41 0 0 0 0 0 0 0 37 0 0 0 0 0 0

NOTES 817 THROUGH 832
 36 0 0 0 0 0 0 0 34 0 0 0 0 0 0

NOTES 833 THROUGH 848
 33 0 0 0 31 0 -1 0 31 0 0 0 26 0 -1 0

NOTES 849 THROUGH 864
 26 36 0 0 0 0 0 0 0 0 0 0 33 31 28 31

NOTES 865 THROUGH 880
 33 0 0 0 37 0 0 0 38 0 0 0 40 0 0 0

NOTES 881 THROUGH 896
 41 0 0 0 53 55 57 58 60 0 56 0 54 0 49 0

NOTES 897 THROUGH 912
 46 0 42 0 39 0 35 0 -1 0 0 0 0 0 0 0

NOTES 913 THROUGH 928
 -1 0 0 0 24 26 29 26 24 0 0 0 -1 0 0 0

NOTES 929 THROUGH 944
 0 0 0 0 49 51 54 51 49 0 0 0 -1 0 0 0

NOTES 945 THROUGH 960
 0 0 0 0 23 25 28 25 23 0 0 0 -1 0 0 0

NOTES 961 THROUGH 976
 0 0 0 0 30 32 35 32 30 0 0 0 -1 0 0 0

NOTES 977 THROUGH 992
 0 0 0 0 45 47 50 47 45 0 0 0 -1 0 0 0

NOTES 993 THROUGH 1008
 0 0 0 0 22 24 27 24 22 0 0 0 -1 0 0 0

NOTES 1009 THROUGH 1024
 44 47 44 42 41 0 0 0 -1 0 0 0 36 0 37 0

NOTES 1025 THROUGH 1040
 38 0 0 0 0 0 -1 0 43 0 0 0 0 0 -1 0

NOTES 1041 THROUGH 1056
 36 0 0 0 38 0 -1 0 38 0 0 0 43 0 -1 0

NOTES 1057 THROUGH 1072
 43 33 0 0 0 0 0 0 0 0 0 0 36 38 41 38

NOTES 1073 THROUGH 1088

36 C 0 0 32 0 0 0 31 0 0 0 29 0 0 0

NOTES 1089 THROUGH 1104

27 0 0 0 0 0 0 0 25 0 0 0 0 0 0

NOTES 1105 THROUGH 1120

24 C 0 0 -1 0 0 0 26 0 0 0 -1 0 0 0

NOTES 1121 THROUGH 1136

29 0 0 0 -1 0 0 0 27 0 0 0 -1 0 0 0

NOTES 1137 THROUGH 1152

26 0 0 0 -1 0 0 0 25 0 0 0 -1 0 0 0

NOTES 1153 THROUGH 1168

24 0 0 0 -1 0 0 0 0 0 0 0 0 0 0 0

NOTES 1169 THROUGH 1184

0 0 0 0 0 0 0 0 55 0 0 0 0 0 0 0

NOTES 1185 THROUGH 1185

-99

THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

*** TYPE I LISTING ***

HINDEMITH LUDIS TONALIS FUGA NONA IN B-FLAT, BOTTOM VOICE

SEARCH FOR PATTERNS OF 3 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT INVERSION
 WAS BEGUN AT 35 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO 9		121 TO 129	14	3
2	1 TO 9		273 TO 281	14	3
3	1 TO 9		833 TO 841	14	3
4	5 TO 13		125 TO 133	14	3
5	5 TO 13		277 TO 285	14	3
6	5 TO 13		837 TO 845	14	3
7	9 TO 17		129 TO 137	14	3
8	9 TO 17		281 TO 289	14	3
9	9 TO 17		841 TO 849	14	3
10	13 TO 18		133 TO 138	14	3
11	13 TO 18		285 TO 290	14	3
12	13 TO 18		845 TO 850	14	3
13	17 TO 29		137 TO 149	14	3
14	17 TO 29		289 TO 301	14	3
15	17 TO 29		849 TO 861	14	3
16	18 TO 30		138 TO 150	14	3
17	18 TO 30		290 TO 302	14	3
18	18 TO 30		850 TO 862	14	3
19	29 TO 31		149 TO 151	14	3
20	29 TO 31		301 TO 303	14	3
21	29 TO 31		861 TO 863	14	3
22	30 TO 32		150 TO 152	14	3
23	30 TO 32		302 TO 304	14	3
24	30 TO 32		617 TO 619	14	3
25	30 TO 32		862 TO 864	14	3
26	31 TO 33		151 TO 153	14	3
27	31 TO 33		303 TO 305	14	3
28	31 TO 33		863 TO 865	14	3
29	32 TO 37		152 TO 157	14	3
30	32 TO 37		304 TO 309	14	3
31	32 TO 37		864 TO 869	14	3
32	33 TO 41		153 TO 161	14	3
33	33 TO 41		305 TO 313	14	3
34	33 TO 41		865 TO 873	14	3
35	37 TO 45		157 TO 165	14	3
36	37 TO 45		309 TO 317	14	3
37	37 TO 45		869 TO 877	14	3
38	41 TO 49		161 TO 169	14	3
39	41 TO 49		401 TO 409	14	3
40	41 TO 49		473 TO 481	14	3
41	41 TO 49		873 TO 881	14	3
42	101 TO 103		582 TO 584	14	3

PATTERN	NOTES		RELATED TO	NOTES		TEST	LENGTH
43	102	TO	104	325	TO	327	14 3
44	102	TO	104	581	TO	583	14 3
45	121	TO	129	1041	TO	1049	14 3
46	125	TO	133	1045	TO	1053	14 3
47	129	TO	137	1049	TO	1057	14 3
48	133	TO	138	1053	TO	1058	14 3
49	137	TO	149	1057	TO	1069	14 3
50	138	TO	150	1058	TO	1070	14 3
51	149	TO	151	917	TO	919	14 3
52	149	TO	151	933	TO	935	14 3
53	149	TO	151	949	TO	951	14 3
54	149	TO	151	965	TO	967	14 3
55	149	TO	151	981	TO	983	14 3
56	149	TO	151	997	TO	999	14 3
57	149	TO	151	1069	TO	1071	14 3
58	150	TO	152	417	TO	419	14 3
59	150	TO	152	489	TO	491	14 3
60	150	TO	152	918	TO	920	14 3
61	150	TO	152	934	TO	936	14 3
62	150	TO	152	950	TO	952	14 3
63	150	TO	152	966	TO	968	14 3
64	150	TO	152	982	TO	984	14 3
65	150	TO	152	998	TO	1000	14 3
66	150	TO	152	1009	TO	1011	14 3
67	150	TO	152	1070	TO	1072	14 3
68	151	TO	153	919	TO	921	14 3
69	151	TO	153	935	TO	937	14 3
70	151	TO	153	951	TO	953	14 3
71	151	TO	153	967	TO	969	14 3
72	151	TO	153	983	TO	985	14 3
73	151	TO	153	999	TO	1001	14 3
74	151	TO	153	1071	TO	1073	14 3
75	152	TO	157	1072	TO	1077	14 3
76	153	TO	161	1073	TO	1081	14 3
77	157	TO	165	1077	TO	1085	14 3
78	161	TO	169	601	TO	609	14 3
****	FOR	273	TO 281,	SEE	121	TO 129 ABOVE	****
****	FOR	277	TO 285,	SEE	125	TO 133 ABOVE	****
****	FOR	281	TO 289,	SEE	129	TO 137 ABOVE	****
****	FOR	285	TO 290,	SEE	133	TO 138 ABOVE	****
****	FOR	289	TO 301,	SEE	137	TO 149 ABOVE	****
****	FOR	290	TO 302,	SEE	138	TO 150 ABOVE	****
****	FOR	301	TO 303,	SEE	149	TO 151 ABOVE	****
****	FOR	302	TO 304,	SEE	150	TO 152 ABOVE	****
****	FOR	303	TO 305,	SEE	151	TO 153 ABOVE	****
****	FOR	304	TO 309,	SEE	152	TO 157 ABOVE	****
****	FOR	305	TO 313,	SEE	153	TO 161 ABOVE	****
****	FOR	309	TO 317,	SEE	157	TO 165 ABOVE	****
****	FOR	325	TO 327,	SEE	101	TO 103 ABOVE	****
****	FOR	401	TO 409,	SEE	161	TO 169 ABOVE	****
79		405	TO 413		605	TO 613	14 3

PATTERN	NCTES	RELATED TO	NOTES	TEST	LENGTH
80	409 TO 417		609 TO 617	14	3
81	413 TO 418		613 TO 618	14	3
**** FOR	417 TO 419,	SEE	30 TO 32 ABOVE	****	
82	418 TO 420		618 TO 620	14	3
83	419 TO 421		619 TO 621	14	3
84	420 TO 429		620 TO 629	14	3
**** FOR	473 TO 481,	SEE	161 TO 169 ABOVE	****	
**** FOR	477 TO 485,	SEE	405 TO 413 ABOVE	****	
**** FOR	481 TO 489,	SEE	409 TO 417 ABOVE	****	
**** FOR	485 TO 490,	SEE	413 TO 418 ABOVE	****	
**** FOR	489 TO 491,	SEE	30 TO 32 ABOVE	****	
**** FOR	490 TO 492,	SEE	418 TO 420 ABOVE	****	
**** FOR	491 TO 493,	SEE	419 TO 421 ABOVE	****	
**** FOR	492 TO 501,	SEE	420 TO 429 ABOVE	****	
**** FOR	581 TO 583,	SEE	101 TO 103 ABOVE	****	
**** FOR	582 TO 584,	SEE	102 TO 104 ABOVE	****	
**** FOR	601 TO 609,	SEE	41 TO 49 ABOVE	****	
**** FOR	617 TO 619,	SEE	150 TO 152 ABOVE	****	
85	618 TO 620		1010 TO 1012	14	3
**** FOR	833 TO 841,	SEE	121 TO 129 ABOVE	****	
**** FOR	837 TO 845,	SEE	125 TO 133 ABOVE	****	
**** FOR	841 TO 849,	SEE	129 TO 137 ABOVE	****	
**** FOR	845 TO 850,	SEE	133 TO 138 ABOVE	****	
**** FOR	849 TO 861,	SEE	137 TO 149 ABOVE	****	
**** FOR	850 TO 862,	SEE	138 TO 150 ABOVE	****	
**** FOR	861 TO 863,	SEE	149 TO 151 ABOVE	****	
**** FOR	862 TO 864,	SEE	150 TO 152 ABOVE	****	
**** FOR	863 TO 865,	SEE	151 TO 153 ABOVE	****	
**** FOR	864 TO 869,	SEE	152 TO 157 ABOVE	****	
**** FOR	865 TO 873,	SEE	153 TO 161 ABOVE	****	
**** FOR	869 TO 877,	SEE	157 TO 165 ABOVE	****	
**** FOR	873 TO 881,	SEE	161 TO 169 ABOVE	****	
**** FOR	917 TO 919,	SEE	29 TO 31 ABOVE	****	
**** FOR	918 TO 920,	SEE	30 TO 32 ABOVE	****	
**** FOR	919 TO 921,	SEE	31 TO 33 ABOVE	****	
**** FOR	933 TO 935,	SEE	29 TO 31 ABOVE	****	
**** FOR	934 TO 936,	SEE	30 TO 32 ABOVE	****	
**** FOR	935 TO 937,	SEE	31 TO 33 ABOVE	****	
**** FOR	949 TO 951,	SEE	29 TO 31 ABOVE	****	
**** FOR	950 TO 952,	SEE	30 TO 32 ABOVE	****	
**** FOR	951 TO 953,	SEE	31 TO 33 ABOVE	****	
**** FOR	965 TO 967,	SEE	29 TO 31 ABOVE	****	
**** FOR	966 TO 968,	SEE	30 TO 32 ABOVE	****	
**** FOR	967 TO 969,	SEE	31 TO 33 ABOVE	****	
**** FOR	981 TO 983,	SEE	29 TO 31 ABOVE	****	
**** FOR	982 TO 984,	SEE	30 TO 32 ABOVE	****	
**** FOR	983 TO 985,	SEE	31 TO 33 ABOVE	****	
**** FOR	997 TO 999,	SEE	29 TO 31 ABOVE	****	
**** FOR	998 TO 1000,	SEE	30 TO 32 ABOVE	****	
**** FOR	999 TO 1001,	SEE	31 TO 33 ABOVE	****	
**** FOR	1009 TO 1011,	SEE	30 TO 32 ABOVE	****	

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 1010 TO 1012,	SEE	418 TO	420 ABOVE	****	
**** FOR 1041 TO 1049,	SEE	1 TO	9 ABOVE	****	
**** FOR 1045 TO 1053,	SEE	5 TO	13 ABOVE	****	
**** FOR 1049 TO 1057,	SEE	9 TO	17 ABOVE	****	
**** FOR 1053 TO 1058,	SEE	13 TO	18 ABOVE	****	
**** FOR 1057 TO 1069,	SEE	17 TO	29 ABOVE	****	
**** FOR 1058 TO 1070,	SEE	18 TO	30 ABOVE	****	
**** FOR 1069 TO 1071,	SEE	29 TO	31 ABOVE	****	
**** FOR 1070 TO 1072,	SEE	30 TO	32 ABOVE	****	
**** FOR 1071 TO 1073,	SEE	31 TO	33 ABOVE	****	
**** FOR 1072 TO 1077,	SEE	32 TO	37 ABOVE	****	
**** FOR 1073 TO 1081,	SEE	33 TO	41 ABOVE	****	
**** FOR 1077 TO 1085,	SEE	37 TO.	45 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 4 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT INVERSION
 WAS BEGUN AT 342 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
86	1 TO	13	121 TO 133	14	4
87	1 TO	13	273 TO 285	14	4
88	1 TO	13	833 TO 845	14	4
89	5 TO	17	125 TO 137	14	4
90	5 TO	17	277 TO 289	14	4
91	5 TO	17	837 TO 849	14	4
92	9 TO	18	129 TO 138	14	4
93	9 TO	18	281 TO 290	14	4
94	9 TO	18	841 TO 850	14	4
95	13 TO	29	133 TO 149	14	4
96	13 TO	29	285 TO 301	14	4
97	13 TO	29	845 TO 861	14	4
98	17 TO	30	137 TO 150	14	4
99	17 TO	30	289 TO 302	14	4
100	17 TO	30	849 TO 862	14	4
101	18 TO	31	138 TO 151	14	4
102	18 TO	31	290 TO 303	14	4
103	18 TO	31	850 TO 863	14	4
104	29 TO	32	149 TO 152	14	4
105	29 TO	32	301 TO 304	14	4
106	29 TO	32	861 TO 864	14	4
107	30 TO	33	150 TO 153	14	4
108	30 TO	33	302 TO 305	14	4
109	30 TO	33	862 TO 865	14	4
110	31 TO	37	151 TO 157	14	4
111	31 TO	37	303 TO 309	14	4
112	31 TO	37	863 TO 869	14	4
113	32 TO	41	152 TO 161	14	4
114	32 TO	41	304 TO 313	14	4
115	32 TO	41	864 TO 873	14	4
116	33 TO	45	153 TO 165	14	4
117	33 TO	45	305 TO 317	14	4
118	33 TO	45	865 TO 877	14	4
119	37 TO	49	157 TO 169	14	4
120	37 TO	49	869 TO 881	14	4
121	121 TO	133	1041 TO 1053	14	4
122	125 TO	137	1045 TO 1057	14	4
123	129 TO	138	1049 TO 1058	14	4
124	133 TO	149	1053 TO 1069	14	4
125	137 TO	150	1057 TO 1070	14	4
126	138 TO	151	1058 TO 1071	14	4
127	149 TO	152	917 TO 920	14	4
128	149 TO	152	933 TO 936	14	4
129	149 TO	152	949 TO 952	14	4

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
130	149 TO	152	965 TO	968	14 4
131	149 TO	152	981 TO	984	14 4
132	149 TO	152	997 TO	1000	14 4
133	149 TO	152	1069 TO	1072	14 4
134	150 TO	153	918 TO	921	14 4
135	150 TO	153	934 TO	937	14 4
136	150 TO	153	950 TO	953	14 4
137	150 TO	153	966 TO	969	14 4
138	150 TO	153	982 TO	985	14 4
139	150 TO	153	998 TO	1001	14 4
140	150 TO	153	1070 TO	1073	14 4
141	151 TO	157	1071 TO	1077	14 4
142	152 TO	161	1072 TO	1081	14 4
143	153 TO	165	1073 TO	1085	14 4
**** FOR	273 TO	285,	SEE 121 TO	133 ABOVE	****
**** FOR	277 TO	289,	SEE 125 TO	137 ABOVE	****
**** FOR	281 TO	290,	SEE 129 TO	138 ABOVE	****
**** FOR	285 TO	301,	SEE 133 TO	149 ABOVE	****
**** FOR	289 TO	302,	SEE 137 TO	150 ABOVE	****
**** FOR	290 TO	303,	SEE 138 TO	151 ABOVE	****
**** FOR	301 TO	304,	SEE 149 TO	152 ABOVE	****
**** FOR	302 TO	305,	SEE 150 TO	153 ABOVE	****
**** FOR	303 TO	309,	SEE 151 TO	157 ABOVE	****
**** FOR	304 TO	313,	SEE 152 TO	161 ABOVE	****
**** FOR	305 TO	317,	SEE 153 TO	165 ABOVE	****
144	401 TO	413	601 TO	613	14 4
145	405 TO	417	605 TO	617	14 4
146	409 TO	418	609 TO	618	14 4
147	413 TO	419	613 TO	619	14 4
148	417 TO	420	617 TO	620	14 4
149	418 TO	421	618 TO	621	14 4
150	418 TO	421	618 TO	621	14 4
151	419 TO	429	619 TO	629	14 4
152	419 TO	429	619 TO	629	14 4
**** FOR	473 TO	485,	SEE 401 TO	413 ABOVE	****
**** FOR	477 TO	489,	SEE 405 TO	417 ABOVE	****
**** FOR	481 TO	490,	SEE 409 TO	418 ABOVE	****
**** FOR	485 TO	491,	SEE 413 TO	419 ABOVE	****
**** FOR	489 TO	492,	SEE 417 TO	420 ABOVE	****
**** FOR	490 TO	493,	SEE 418 TO	421 ABOVE	****
**** FOR	490 TO	493,	SEE 418 TO	421 ABOVE	****
**** FOR	491 TO	501,	SEE 419 TO	429 ABOVE	****
**** FOR	491 TO	501,	SEE 419 TO	429 ABOVE	****
153	617 TO	620	1009 TO	1012	14 4
**** FOR	833 TO	845,	SEE 121 TO	133 ABOVE	****
**** FOR	837 TO	849,	SEE 125 TO	137 ABOVE	****
**** FOR	841 TO	850,	SEE 129 TO	138 ABOVE	****
**** FOR	845 TO	861,	SEE 133 TO	149 ABOVE	****
**** FOR	849 TO	862,	SEE 137 TO	150 ABOVE	****
**** FOR	850 TO	863,	SEE 138 TO	151 ABOVE	****
**** FOR	861 TO	864,	SEE 149 TO	152 ABOVE	****

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
****	FOR 862 TO 865,	SEE	150 TO 153 ABOVE	****	
****	FOR 863 TO 869,	SEE	151 TO 157 ABOVE	****	
****	FOR 864 TO 873,	SEE	152 TO 161 ABOVE	****	
****	FOR 865 TO 877,	SEE	153 TO 165 ABOVE	****	
****	FOR 917 TO 920,	SEE	29 TO 32 ABOVE	****	
****	FOR 918 TO 921,	SEE	30 TO 33 ABOVE	****	
****	FOR 933 TO 936,	SEE	29 TO 32 ABOVE	****	
****	FOR 934 TO 937,	SEE	30 TO 33 ABOVE	****	
****	FOR 949 TO 952,	SEE	29 TO 32 ABOVE	****	
****	FOR 950 TO 953,	SEE	30 TO 33 ABOVE	****	
****	FOR 965 TO 968,	SEE	29 TO 32 ABOVE	****	
****	FOR 966 TO 969,	SEE	30 TO 33 ABOVE	****	
****	FOR 981 TO 984,	SEE	29 TO 32 ABOVE	****	
****	FOR 982 TO 985,	SEE	30 TO 33 ABOVE	****	
****	FOR 997 TO 1000,	SEE	29 TO 32 ABOVE	****	
****	FOR 998 TO 1001,	SEE	30 TO 33 ABOVE	****	
****	FOR 1009 TO 1012,	SEE	417 TO 420 ABOVE	****	
****	FOR 1041 TO 1053,	SEE	1 TO 13 ABOVE	****	
****	FOR 1045 TO 1057,	SEE	5 TO 17 ABOVE	****	
****	FOR 1049 TO 1058,	SEE	9 TO 18 ABOVE	****	
****	FOR 1053 TO 1069,	SEE	13 TO 29 ABOVE	****	
****	FOR 1057 TO 1070,	SEE	17 TO 30 ABOVE	****	
****	FOR 1058 TO 1071,	SEE	18 TO 31 ABOVE	****	
****	FOR 1069 TO 1072,	SEE	29 TO 32 ABOVE	****	
****	FOR 1070 TO 1073,	SEE	30 TO 33 ABOVE	****	
****	FOR 1071 TO 1077,	SEE	31 TO 37 ABOVE	****	
****	FOR 1072 TO 1081,	SEE	32 TO 41 ABOVE	****	
****	FOR 1073 TO 1085,	SEE	33 TO 45 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 5 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT INVERSION
 WAS BEGUN AT 409 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
154	1 TO	17	121 TO 137	14	5
155	1 TO	17	273 TO 289	14	5
156	1 TO	17	833 TO 849	14	5
157	5 TO	18	125 TO 138	14	5
158	5 TO	18	277 TO 290	14	5
159	5 TO	18	837 TO 850	14	5
160	9 TO	29	129 TO 149	14	5
161	9 TO	29	281 TO 301	14	5
162	9 TO	29	841 TO 861	14	5
163	13 TO	30	133 TO 150	14	5
164	13 TO	30	285 TO 302	14	5
165	13 TO	30	845 TO 862	14	5
166	17 TO	31	137 TO 151	14	5
167	17 TO	31	289 TO 303	14	5
168	17 TO	31	849 TO 863	14	5
169	18 TO	32	138 TO 152	14	5
170	18 TO	32	290 TO 304	14	5
171	18 TO	32	850 TO 864	14	5
172	29 TO	33	149 TO 153	14	5
173	29 TO	33	301 TO 305	14	5
174	29 TO	33	861 TO 865	14	5
175	30 TO	37	150 TO 157	14	5
176	30 TO	37	302 TO 309	14	5
177	30 TO	37	862 TO 869	14	5
178	31 TO	41	151 TO 161	14	5
179	31 TO	41	303 TO 313	14	5
180	31 TO	41	863 TO 873	14	5
181	32 TO	45	152 TO 165	14	5
182	32 TO	45	304 TO 317	14	5
183	32 TO	45	864 TO 877	14	5
184	33 TO	49	153 TO 169	14	5
185	33 TO	49	865 TO 881	14	5
186	121 TO	137	1041 TO 1057	14	5
187	125 TO	138	1045 TO 1058	14	5
188	129 TO	149	1049 TO 1069	14	5
189	133 TO	150	1053 TO 1070	14	5
190	137 TO	151	1057 TO 1071	14	5
191	138 TO	152	1058 TO 1072	14	5
192	149 TO	153	917 TO 921	14	5
193	149 TO	153	933 TO 937	14	5
194	149 TO	153	949 TO 953	14	5
195	149 TO	153	965 TO 969	14	5
196	149 TO	153	981 TO 985	14	5
197	149 TO	153	997 TO 1001	14	5

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
198	149 TO	153	1069 TO 1073	14	5
199	150 TO	157	1070 TO 1077	14	5
200	151 TO	161	1071 TO 1081	14	5
201	152 TO	165	1072 TO 1085	14	5
**** FOR	273 TO	289,	SEE 121 TO	137 ABOVE	****
**** FOR	277 TO	290,	SEE 125 TO	138 ABOVE	****
**** FOR	281 TO	301,	SEE 129 TO	149 ABOVE	****
**** FOR	285 TO	302,	SEE 133 TO	150 ABOVE	****
**** FOR	289 TO	303,	SEE 137 TO	151 ABOVE	****
**** FOR	290 TO	304,	SEE 138 TO	152 ABOVE	****
**** FOR	301 TO	305,	SEE 149 TO	153 ABOVE	****
**** FOR	302 TO	309,	SEE 150 TO	157 ABOVE	****
**** FOR	303 TO	313,	SEE 151 TO	161 ABOVE	****
**** FOR	304 TO	317,	SEE 152 TO	165 ABOVE	****
202	401 TO	417	601 TO	617	14
203	405 TO	418	605 TO	618	14
204	409 TO	419	609 TO	619	14
205	413 TO	420	613 TO	620	14
206	417 TO	421	617 TO	621	14
207	418 TO	429	618 TO	629	14
208	418 TO	429	618 TO	629	14
**** FOR	473 TO	489,	SEE 401 TO	417 ABOVE	****
**** FOR	477 TO	490,	SEE 405 TO	418 ABOVE	****
**** FOR	481 TO	491,	SEE 409 TO	419 ABOVE	****
**** FOR	485 TO	492,	SEE 413 TO	420 ABOVE	****
**** FOR	489 TO	493,	SEE 417 TO	421 ABOVE	****
**** FOR	490 TO	501,	SEE 418 TO	429 ABOVE	****
**** FOR	490 TO	501,	SEE 418 TO	429 ABOVE	****
**** FOR	833 TO	849,	SEE 121 TO	137 ABOVE	****
**** FOR	837 TO	850,	SEE 125 TO	138 ABOVE	****
**** FOR	841 TO	861,	SEE 129 TO	149 ABOVE	****
**** FOR	845 TO	862,	SEE 133 TO	150 ABOVE	****
**** FOR	849 TO	863,	SEE 137 TO	151 ABOVE	****
**** FOR	850 TO	864,	SEE 138 TO	152 ABOVE	****
**** FOR	861 TO	865,	SEE 149 TO	153 ABOVE	****
**** FOR	862 TO	869,	SEE 150 TO	157 ABOVE	****
**** FOR	863 TO	873,	SEE 151 TO	161 ABOVE	****
**** FOR	864 TO	877,	SEE 152 TO	165 ABOVE	****
**** FOR	917 TO	921,	SEE 29 TO	33 ABOVE	****
**** FOR	933 TO	937,	SEE 29 TO	33 ABOVE	****
**** FOR	949 TO	953,	SEE 29 TO	33 ABOVE	****
**** FOR	965 TO	969,	SEE 29 TO	33 ABOVE	****
**** FOR	981 TO	985,	SEE 29 TO	33 ABOVE	****
**** FOR	997 TO	1001,	SEE 29 TO	33 ABOVE	****
**** FOR	1041 TO	1057,	SEE 1 TO	17 ABOVE	****
**** FOR	1045 TO	1058,	SEE 5 TO	18 ABOVE	****
**** FOR	1049 TO	1069,	SEE 9 TO	29 ABOVE	****
**** FOR	1053 TO	1070,	SEE 13 TO	30 ABOVE	****
**** FOR	1057 TO	1071,	SEE 17 TO	31 ABOVE	****
**** FOR	1058 TO	1072,	SEE 18 TO	32 ABOVE	****
**** FOR	1069 TO	1073,	SEE 29 TO	33 ABOVE	****

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 1070 TO 1077,		SEE	30 TO	37 ABOVE	****
**** FOR 1071 TO 1081,		SEE	31 TO	41 ABOVE	****
**** FOR 1072 TO 1085,		SEE	32 TO	45 ABOVE	****

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 6 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT INVERSION
 WAS BEGUN AT 479 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
209	1 TO 18		121 TO 138	14	6
210	1 TO 18		273 TO 290	14	6
211	1 TO 18		833 TO 850	14	6
212	5 TO 29		125 TO 149	14	6
213	5 TO 29		277 TO 301	14	6
214	5 TO 29		837 TO 861	14	6
215	9 TO 30		129 TO 150	14	6
216	9 TO 30		281 TO 302	14	6
217	9 TO 30		841 TO 862	14	6
218	13 TO 31		133 TO 151	14	6
219	13 TO 31		285 TO 303	14	6
220	13 TO 31		845 TO 863	14	6
221	17 TO 32		137 TO 152	14	6
222	17 TO 32		289 TO 304	14	6
223	17 TO 32		849 TO 864	14	6
224	18 TO 33		138 TO 153	14	6
225	18 TO 33		290 TO 305	14	6
226	18 TO 33		850 TO 865	14	6
227	29 TO 37		149 TO 157	14	6
228	29 TO 37		301 TO 309	14	6
229	29 TO 37		861 TO 869	14	6
230	30 TO 41		150 TO 161	14	6
231	30 TO 41		302 TO 313	14	6
232	30 TO 41		862 TO 873	14	6
233	31 TO 45		151 TO 165	14	6
234	31 TO 45		303 TO 317	14	6
235	31 TO 45		863 TO 877	14	6
236	32 TO 49		152 TO 169	14	6
237	32 TO 49		864 TO 881	14	6
238	121 TO 138		1041 TO 1058	14	6
239	125 TO 149		1045 TO 1069	14	6
240	129 TO 150		1049 TO 1070	14	6
241	133 TO 151		1053 TO 1071	14	6
242	137 TO 152		1057 TO 1072	14	6
243	138 TO 153		1058 TO 1073	14	6
244	149 TO 157		1069 TO 1077	14	6
245	150 TO 161		1070 TO 1081	14	6
246	151 TO 165		1071 TO 1085	14	6
**** FOR	273 TO 290,	SEE	121 TO 138	ABOVE ****	
**** FOR	277 TO 301,	SEE	125 TO 149	ABOVE ****	
**** FOR	281 TO 302,	SEE	129 TO 150	ABOVE ****	
**** FOR	285 TO 303,	SEE	133 TO 151	ABOVE ****	
**** FOR	289 TO 304,	SEE	137 TO 152	ABOVE ****	
**** FOR	290 TO 305,	SEE	138 TO 153	ABOVE ****	

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 301 TO 309,	SEE	149 TO 157	ABOVE ****		
**** FOR 302 TO 313,	SEE	150 TO 161	ABOVE ****		
**** FOR 303 TO 317,	SEE	151 TO 165	ABOVE ****		
247 401 TO 418		601 TO 618	14	6	
248 405 TO 419		605 TO 619	14	6	
249 409 TO 420		609 TO 620	14	6	
250 413 TO 421		613 TO 621	14	6	
251 417 TO 429		617 TO 629	14	6	
**** FOR 473 TO 490,	SEE	401 TO 418	ABOVE ****		
**** FOR 477 TO 491,	SEE	405 TO 419	ABOVE ****		
**** FOR 481 TO 492,	SEE	409 TO 420	ABOVE ****		
**** FOR 485 TO 493,	SEE	413 TO 421	ABOVE ****		
**** FOR 489 TO 501,	SEE	417 TO 429	ABOVE ****		
**** FOR 833 TO 850,	SEE	121 TO 138	ABOVE ****		
**** FOR 837 TO 861,	SEE	125 TO 149	ABOVE ****		
**** FOR 841 TO 862,	SEE	129 TO 150	ABOVE ****		
**** FOR 845 TO 863,	SEE	133 TO 151	ABOVE ****		
**** FOR 849 TO 864,	SEE	137 TO 152	ABOVE ****		
**** FOR 850 TO 865,	SEE	138 TO 153	ABOVE ****		
**** FOR 861 TO 869,	SEE	149 TO 157	ABOVE ****		
**** FOR 862 TO 873,	SEE	150 TO 161	ABOVE ****		
**** FOR 863 TO 877,	SEE	151 TO 165	ABOVE ****		
**** FOR 1041 TO 1058,	SEE	1 TO 18	ABOVE ****		
**** FOR 1045 TO 1069,	SEE	5 TO 29	ABOVE ****		
**** FOR 1049 TO 1070,	SEE	9 TO 30	ABOVE ****		
**** FOR 1053 TO 1071,	SEE	13 TO 31	ABOVE ****		
**** FOR 1057 TO 1072,	SEE	17 TO 32	ABOVE ****		
**** FOR 1058 TO 1073,	SEE	18 TO 33	ABOVE ****		
**** FOR 1069 TO 1077,	SEE	29 TO 37	ABOVE ****		
**** FOR 1070 TO 1081,	SEE	30 TO 41	ABOVE ****		
**** FOR 1071 TO 1085,	SEE	31 TO 45	ABOVE ****		

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 7 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT INVERSION
 WAS BEGUN AT 551 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TC	NOTES	TEST	LENGTH
252	1 TO 29		121 TO 149	14	7
253	1 TO 29		273 TO 301	14	7
254	1 TO 29		833 TO 861	14	7
255	5 TO 30		125 TO 150	14	7
256	5 TO 30		277 TO 302	14	7
257	5 TO 30		837 TO 862	14	7
258	9 TO 31		129 TO 151	14	7
259	9 TO 31		281 TO 303	14	7
260	9 TO 31		841 TO 863	14	7
261	13 TO 32		133 TO 152	14	7
262	13 TO 32		285 TO 304	14	7
263	13 TO 32		845 TO 864	14	7
264	17 TO 33		137 TO 153	14	7
265	17 TO 33		289 TO 305	14	7
266	17 TO 33		849 TO 865	14	7
267	18 TO 37		138 TO 157	14	7
268	18 TO 37		290 TO 309	14	7
269	18 TO 37		850 TO 869	14	7
270	29 TO 41		149 TO 161	14	7
271	29 TO 41		301 TO 313	14	7
272	29 TO 41		861 TO 873	14	7
273	30 TO 45		150 TO 165	14	7
274	30 TO 45		302 TO 317	14	7
275	30 TO 45		862 TO 877	14	7
276	31 TO 49		151 TO 169	14	7
277	31 TO 49		863 TO 881	14	7
278	121 TO 149		1041 TO 1069	14	7
279	125 TO 150		1045 TO 1070	14	7
280	129 TO 151		1049 TO 1071	14	7
281	133 TO 152		1053 TO 1072	14	7
282	137 TO 153		1057 TO 1073	14	7
283	138 TO 157		1058 TO 1077	14	7
284	149 TO 161		1069 TO 1081	14	7
285	150 TO 165		1070 TO 1085	14	7
286	401 TO 419		601 TO 619	14	7
287	405 TO 420		605 TO 620	14	7
288	409 TO 421		609 TO 621	14	7
289	413 TO 429		613 TO 629	14	7

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 8 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT INVERSION
 WAS BEGUN AT 570 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
290	1 TO 30		121 TO 150	14	8
291	1 TO 30		273 TO 302	14	8
292	1 TO 30		833 TO 862	14	8
293	5 TO 31		125 TO 151	14	8
294	5 TO 31		277 TO 303	14	8
295	5 TO 31		837 TO 863	14	8
296	9 TO 32		129 TO 152	14	8
297	9 TO 32		281 TO 304	14	8
298	9 TO 32		841 TO 864	14	8
299	13 TO 33		133 TO 153	14	8
300	13 TO 33		285 TO 305	14	8
301	13 TO 33		845 TO 865	14	8
302	17 TO 37		137 TO 157	14	8
303	17 TO 37		289 TO 309	14	8
304	17 TO 37		849 TO 869	14	8
305	18 TO 41		138 TO 161	14	8
306	18 TO 41		290 TO 313	14	8
307	18 TO 41		850 TO 873	14	8
308	29 TO 45		149 TO 165	14	8
309	29 TO 45		301 TO 317	14	8
310	29 TO 45		861 TO 877	14	8
311	30 TO 49		150 TO 169	14	8
312	30 TO 49		862 TO 881	14	8
313	121 TO 150		1041 TO 1070	14	8
314	125 TO 151		1045 TO 1071	14	8
315	129 TO 152		1049 TO 1072	14	8
316	133 TO 153		1053 TO 1073	14	8
317	137 TO 157		1057 TO 1077	14	8
318	138 TO 161		1058 TO 1081	14	8
319	149 TO 165		1069 TO 1085	14	8
320	401 TO 420		601 TO 620	14	8
321	405 TO 421		605 TO 621	14	8
322	409 TO 429		609 TO 629	14	8

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 9 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT INVERSION
 WAS BEGUN AT 589 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
323	1 TO 31		121 TO 151	14	9
324	1 TO 31		273 TO 303	14	9
325	1 TO 31		833 TO 863	14	9
326	5 TO 32		125 TO 152	14	9
327	5 TO 32		277 TO 304	14	9
328	5 TO 32		837 TO 864	14	9
329	9 TO 33		129 TO 153	14	9
330	9 TO 33		281 TO 305	14	9
331	9 TO 33		841 TO 865	14	9
332	13 TO 37		133 TO 157	14	9
333	13 TO 37		285 TO 309	14	9
334	13 TO 37		845 TO 869	14	9
335	17 TO 41		137 TO 161	14	9
336	17 TO 41		289 TO 313	14	9
337	17 TO 41		849 TO 873	14	9
338	18 TO 45		138 TO 165	14	9
339	18 TO 45		290 TO 317	14	9
340	18 TO 45		850 TO 877	14	9
341	29 TO 49		149 TO 169	14	9
342	29 TO 49		861 TO 881	14	9
343	121 TO 151		1041 TO 1071	14	9
344	125 TO 152		1045 TO 1072	14	9
345	129 TO 153		1049 TO 1073	14	9
346	133 TO 157		1053 TO 1077	14	9
347	137 TO 161		1057 TO 1081	14	9
348	138 TO 165		1058 TO 1085	14	9
349	401 TO 421		601 TO 621	14	9
350	405 TO 429		605 TO 629	14	9

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 10 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT INVERSION
 WAS BEGUN AT 607 SECONDS INTO EXECUTION.

PATTERN	NCOTES	RELATED TO	NOTES	TEST	LENGTH
351	1 TO 32		121 TO 152	14	10
352	1 TO 32		273 TO 304	14	10
353	1 TO 32		833 TO 864	14	10
354	5 TO 33		125 TO 153	14	10
355	5 TO 33		277 TO 305	14	10
356	5 TO 33		837 TO 865	14	10
357	9 TO 37		129 TO 157	14	10
358	9 TO 37		281 TO 309	14	10
359	9 TO 37		841 TO 869	14	10
360	13 TO 41		133 TO 161	14	10
361	13 TO 41		285 TO 313	14	10
362	13 TO 41		845 TO 873	14	10
363	17 TO 45		137 TO 165	14	10
364	17 TO 45		289 TO 317	14	10
365	17 TO 45		849 TO 877	14	10
366	18 TO 49		138 TO 169	14	10
367	18 TO 49		850 TO 881	14	10
368	121 TO 152		1041 TO 1072	14	10
369	125 TO 153		1045 TO 1073	14	10
370	129 TO 157		1049 TO 1077	14	10
371	133 TO 161		1053 TO 1081	14	10
372	137 TO 165		1057 TO 1085	14	10
373	401 TO 429		601 TO 629	14	10

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 11 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT INVERSION
 WAS BEGUN AT 625 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
374	1 TO 33		121 TO 153	14	11
375	1 TO 33		273 TO 305	14	11
376	1 TO 33		833 TO 865	14	11
377	5 TO 37		125 TO 157	14	11
378	5 TO 37		277 TO 309	14	11
379	5 TO 37		837 TO 869	14	11
380	9 TO 41		129 TO 161	14	11
381	9 TO 41		281 TO 313	14	11
382	9 TO 41		841 TO 873	14	11
383	13 TO 45		133 TO 165	14	11
384	13 TO 45		285 TO 317	14	11
385	13 TO 45		845 TO 877	14	11
386	17 TO 49		137 TO 169	14	11
387	17 TO 49		849 TO 881	14	11
388	121 TO 153		1041 TO 1073	14	11
389	125 TO 157		1045 TO 1077	14	11
390	129 TO 161		1049 TO 1081	14	11
391	133 TO 165		1053 TO 1085	14	11

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 12 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT INVERSION
 WAS BEGUN AT 642 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
392	1 TO 37		121 TO 157	14	12
393	1 TO 37		273 TO 309	14	12
394	1 TO 37		833 TO 869	14	12
395	5 TO 41		125 TO 161	14	12
396	5 TO 41		277 TO 313	14	12
397	5 TO 41		837 TO 873	14	12
398	9 TO 45		129 TO 165	14	12
399	9 TO 45		281 TO 317	14	12
400	9 TO 45		841 TO 877	14	12
401	13 TO 49		133 TO 169	14	12
402	13 TO 49		845 TO 881	14	12
403	121 TO 157		1041 TO 1077	14	12
404	125 TO 161		1045 TO 1081	14	12
405	129 TO 165		1049 TO 1085	14	12

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 13 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT INVERSION
 WAS BEGUN AT 659 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
406	1 TO 41		121 TO 161	14	13
407	1 TO 41		273 TO 313	14	13
408	1 TO 41		833 TO 873	14	13
409	5 TO 45		125 TO 165	14	13
410	5 TO 45		277 TO 317	14	13
411	5 TO 45		837 TO 877	14	13
412	9 TO 49		129 TO 169	14	13
413	9 TO 49		841 TO 881	14	13
414	121 TO 161		1041 TO 1081	14	13
415	125 TO 165		1045 TO 1085	14	13

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 14 NOTES IN LENGTH --
 EXACT RHYTHM WITH EXACT INVERSION
 WAS BEGUN AT 676 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
416	1 TO 45		121 TO 165	14	14
417	1 TO 45		273 TO 317	14	14
418	1 TO 45		833 TO 877	14	14
419	5 TO 49		125 TO 169	14	14
420	5 TO 49		837 TO 881	14	14
421	121 TO 165		1041 TO 1085	14	14

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 15 NOTES IN LENGTH --
EXACT RHYTHM WITH EXACT INVERSION
WAS BEGUN AT 692 SECONDS INTO EXECUTION.

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
422	1 TO 49		121 TO 169	14	15
423	1 TO 49		833 TO 881	14	15

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 16 NOTES IN LENGTH --
EXACT RHYTHM WITH EXACT INVERSION
WAS BEGUN AT 708 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST LENGTH
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END OF TYPE I LISTING. TOTAL OF 423 PATTERNS LOCATED.

*** TYPE II LISTING ***

HINDEMITH LUDIS TONALIS FUGA NONA IN B-FLAT, BOTTOM VOICE
EXACT RHYTHM WITH EXACT INVERSION

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	1 TO 49	3	15
SUBPATTERN	41 TO 49	5	3
SUBPATTERN	30 TO 32	5	3

*** TEST 14 COMPLETED AT 799 SECONDS INTO EXECUTION ***

TEST REQUESTED 24
UNITS OF DATA PER CARD 16

NOTES	1 THROUGH				16											
	36	0	0	0	38	0	-1	0	38	0	0	0	43	0	-1	0
NOTES	17 THROUGH				32											
	43	33	0	0	0	0	0	0	0	0	0	0	36	38	41	38
NOTES	33 THROUGH				48											
	36	0	0	0	32	0	0	0	31	0	0	0	29	0	0	0
NOTES	49 THROUGH				64											
	28	0	0	0	-1	0	0	0	30	0	0	0	-1	0	0	0
NOTES	65 THROUGH				80											
	33	0	0	0	-1	0	0	0	31	0	0	0	-1	0	0	0
NOTES	81 THROUGH				96											
	30	0	0	0	-1	0	0	0	29	0	0	0	-1	0	0	0
NOTES	97 THROUGH				112											
	28	0	0	0	52	51	52	51	52	0	0	0	52	0	0	0
NOTES	113 THROUGH				128											
	49	0	0	0	-1	0	0	0	49	0	0	0	47	0	-1	0
NOTES	129 THROUGH				144											
	47	0	0	0	42	0	-1	0	42	52	0	0	0	0	0	0
NOTES	145 THROUGH				160											
	0	0	0	0	49	47	44	47	49	0	0	0	53	0	0	0
NOTES	161 THROUGH				176											
	54	0	0	0	56	0	0	0	57	0	0	0	-1	0	0	0
NOTES	177 THROUGH				192											
	45	0	0	0	0	0	0	0	43	0	0	0	0	0	0	0
NOTES	193 THROUGH				208											
	41	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0

NOTES 209 THROUGH 224
 38 0 0 0 -1 0 0 0 0 0 51 0 51 0 -1 0

NOTES 225 THROUGH 240
 0 0 52 0 52 0 -1 0 0 0 49 0 49 0 -1 0

NOTES 241 THROUGH 256
 0 0 50 0 50 0 -1 0 0 0 52 0 52 0 0 0

NOTES 257 THROUGH 272
 53 C 0 0 -1 0 0 0 41 0 0 0 0 0 0 0

NOTES 273 THROUGH 288
 40 0 0 0 38 0 -1 0 38 0 0 0 33 0 -1 0

NOTES 289 THROUGH 304
 33 43 0 0 0 0 0 0 0 0 0 0 40 38 35 38

NOTES 305 THROUGH 320
 40 0 0 0 44 0 0 0 45 0 0 0 47 0 0 0

NOTES 321 THROUGH 336
 49 0 0 0 37 36 37 39 41 0 0 0 42 0 0 0

NOTES 337 THROUGH 352
 43 C 0 0 -1 0 0 0 41 0 0 0 0 0 0 0

NOTES 353 THROUGH 368
 39 C 0 0 0 0 0 0 0 38 0 0 0 0 0 0 0

NOTES 369 THROUGH 384
 37 0 0 0 0 0 0 0 36 0 0 0 0 0 0 0

NOTES 385 THROUGH 400
 35 C 0 0 0 0 0 0 0 33 0 0 0 0 0 0 0

NOTES 401 THROUGH 416
 35 C 0 0 37 0 0 0 38 0 0 0 42 0 0 0

NOTES 417 THROUGH 432
 44 47 44 42 39 0 0 0 0 0 0 0 49 0 -1 0

NOTES 433 THROUGH 448
 0 0 49 0 44 0 0 0 -1 0 44 0 42 0 0 0

NOTES 449 THROUGH 464
 41 0 0 0 0 0 0 0 44 0 0 0 0 0 0 0

NOTES 465 THROUGH 480
 39 C 0 0 -1 0 0 0 28 0 0 0 30 0 0 0

NOTES 481 THROUGH 496
 31 0 0 0 35 0 0 0 37 40 37 35 32 0 0 0

[illegible]

NOTES	785	THROUGH	800													
	0	C	0	0	0	0	0	0	41	0	43	0	46	0	43	0
NOTES	801	THROUGH	816													
	41	C	0	0	0	0	0	0	37	0	0	0	0	0	0	0
NOTES	817	THROUGH	832													
	36	C	0	0	0	0	0	0	34	0	0	0	0	0	0	0
NOTES	833	THROUGH	848													
	33	C	0	0	31	0	-1	0	31	0	0	0	26	0	-1	0
NOTES	849	THROUGH	864													
	26	36	0	0	0	0	0	0	0	0	0	0	33	31	28	31
NOTES	865	THROUGH	880													
	33	C	0	0	37	0	0	0	38	0	0	0	40	0	0	0
NOTES	881	THROUGH	896													
	41	0	0	0	53	55	57	58	60	0	56	0	54	0	49	0
NOTES	897	THROUGH	912													
	46	0	42	0	39	0	35	0	-1	0	0	0	0	0	0	0
NOTES	913	THROUGH	928													
	-1	0	0	0	24	26	29	26	24	0	0	0	-1	0	0	0
NOTES	929	THROUGH	944													
	C	0	0	0	49	51	54	51	49	0	0	0	-1	0	0	0
NOTES	945	THROUGH	960													
	0	0	0	0	23	25	28	25	23	0	0	0	-1	0	0	0
NOTES	961	THROUGH	976													
	0	0	0	0	30	32	35	32	30	0	0	0	-1	0	0	0
NOTES	977	THROUGH	992													
	0	0	0	0	45	47	50	47	45	0	0	0	-1	0	0	0
NOTES	993	THROUGH	1008													
	0	0	0	0	22	24	27	24	22	0	0	0	-1	0	0	0
NOTES	1009	THROUGH	1024													
	44	47	44	42	41	0	0	0	-1	0	0	0	36	0	37	0
NOTES	1025	THROUGH	1040													
	38	0	0	0	0	0	-1	0	43	0	0	0	0	0	-1	0
NOTES	1041	THROUGH	1056													
	36	0	0	0	38	0	-1	0	38	0	0	0	43	0	-1	0
NOTES	1057	THROUGH	1072													
	43	33	0	0	0	0	0	0	0	0	0	0	36	38	41	38

NOTES 1073 THROUGH 1088

36 C 0 0 0 32 0 0 0 31 0 0 0 29 0 0 0

NOTES 1089 THROUGH 1104

27 C 0 0 0 0 0 0 0 25 0 0 0 0 0 0 0

NOTES 1105 THROUGH 1120

24 C 0 0 0 -1 0 0 0 26 0 0 0 -1 0 0 0

NOTES 1121 THROUGH 1136

29 0 0 0 -1 0 0 0 27 0 0 0 -1 0 0 0

NOTES 1137 THROUGH 1152

26 0 0 0 -1 0 0 0 25 0 0 0 -1 0 0 0

NOTES 1153 THROUGH 1168

24 0 0 0 -1 0 0 0 0 0 0 0 0 0 0 0

NOTES 1169 THROUGH 1184

C 0 0 0 0 0 0 0 0 55 0 0 0 0 0 0

NOTES 1185 THROUGH 1185

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THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

SYM DESIGNATES NONRETROGRADABLE (I.E., SYMMETRICAL) RHYTHM.

*** TYPE I LISTING ***

HINDEMITH LUDIS TONALIS FUGA NJNA IN B-FLAT, BOTTOM VOICE

SEARCH FOR PATTERNS OF 3 NOTES IN LENGTH --
 RHYTHM RETROGRADE W.EXACT RETROGRADE
 WAS BEGUN AT 33 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	1 TO	9	437 TO 445	24	3
2	1 TO	9	509 TO 517	24	3
3	5 TO	13	435 TO 443	24	3
4	5 TO	13	507 TO 515	24	3
5	29 TO	31 (SYM)	418 TO 420	24	3
6	29 TO	31 (SYM)	490 TO 492	24	3
7	29 TO	31 (SYM)	1010 TO 1012	24	3
8	30 TO	32 (SYM)	417 TO 419	24	3
9	30 TO	32 (SYM)	489 TO 491	24	3
10	30 TO	32 (SYM)	918 TO 920	24	3
11	30 TO	32 (SYM)	934 TO 936	24	3
12	30 TO	32 (SYM)	950 TO 952	24	3
13	30 TO	32 (SYM)	966 TO 968	24	3
14	30 TO	32 (SYM)	982 TO 984	24	3
15	30 TO	32 (SYM)	998 TO 1000	24	3
16	30 TO	32 (SYM)	1009 TO 1011	24	3
17	30 TO	32 (SYM)	1070 TO 1072	24	3
18	31 TO	33	413 TO 418	24	3
19	31 TO	33	485 TO 490	24	3
20	32 TO	37	409 TO 417	24	3
21	32 TO	37	481 TO 489	24	3
22	33 TO	41 (SYM)	405 TO 413	24	3
23	33 TO	41 (SYM)	477 TO 485	24	3
24	37 TO	45 (SYM)	161 TO 169	24	3
25	37 TO	45 (SYM)	401 TO 409	24	3
26	37 TO	45 (SYM)	473 TO 481	24	3
27	37 TO	45 (SYM)	873 TO 881	24	3
28	41 TO	49	157 TO 165	24	3
29	41 TO	49	309 TO 317	24	3
30	41 TO	49	869 TO 877	24	3
31	101 TO	103 (SYM)	325 TO 327	24	3
32	101 TO	103 (SYM)	581 TO 583	24	3
33	102 TO	104 (SYM)	582 TO 584	24	3
34	149 TO	151 (SYM)	618 TO 620	24	3
35	150 TO	152 (SYM)	302 TO 304	24	3
36	150 TO	152 (SYM)	617 TO 619	24	3
37	150 TO	152 (SYM)	862 TO 864	24	3
38	151 TO	153	613 TO 618	24	3
39	152 TO	157	609 TO 617	24	3
40	153 TO	161 (SYM)	605 TO 613	24	3
41	157 TO	165 (SYM)	601 TO 609	24	3
42	161 TO	169	1077 TO 1085	24	3

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	301 TO 303,	SEE	149 TO 151 ABOVE	****	
**** FOR	302 TO 304,	SEE	150 TO 152 ABOVE	****	
**** FOR	303 TO 305,	SEE	151 TO 153 ABOVE	****	
**** FOR	304 TO 309,	SEE	152 TO 157 ABOVE	****	
**** FOR	305 TO 313,	SEE	153 TO 161 ABOVE	****	
**** FOR	309 TO 317,	SEE	157 TO 165 ABOVE	****	
**** FOR	325 TO 327,	SEE	101 TO 103 ABOVE	****	
43	393 TO 405		1081 TO 1089	24	3
**** FOR	401 TO 409,	SEE	161 TO 169 ABOVE	****	
44	405 TO 413	(SYM)	1073 TO 1081	24	3
45	409 TO 417		1072 TO 1077	24	3
46	413 TO 418		919 TO 921	24	3
47	413 TO 418		935 TO 937	24	3
48	413 TO 418		951 TO 953	24	3
49	413 TO 418		967 TO 969	24	3
50	413 TO 418		983 TO 985	24	3
51	413 TO 418		999 TO 1001	24	3
52	413 TO 418		1071 TO 1073	24	3
**** FOR	417 TO 419,	SEE	30 TO 32 ABOVE	****	
53	418 TO 420	(SYM)	917 TO 919	24	3
54	418 TO 420	(SYM)	933 TO 935	24	3
55	418 TO 420	(SYM)	949 TO 951	24	3
56	418 TO 420	(SYM)	965 TO 967	24	3
57	418 TO 420	(SYM)	981 TO 983	24	3
58	418 TO 420	(SYM)	997 TO 999	24	3
59	418 TO 420	(SYM)	1069 TO 1071	24	3
60	435 TO 443		1045 TO 1053	24	3
61	437 TO 445		1041 TO 1049	24	3
**** FOR	473 TO 481,	SEE	161 TO 169 ABOVE	****	
**** FOR	477 TO 485,	SEE	405 TO 413 ABOVE	****	
**** FOR	481 TO 489,	SEE	409 TO 417 ABOVE	****	
**** FOR	485 TO 490,	SEE	413 TO 418 ABOVE	****	
**** FOR	489 TO 491,	SEE	30 TO 32 ABOVE	****	
**** FOR	490 TO 492,	SEE	418 TO 420 ABOVE	****	
**** FOR	507 TO 515,	SEE	435 TO 443 ABOVE	****	
**** FOR	509 TO 517,	SEE	437 TO 445 ABOVE	****	
**** FOR	581 TO 583,	SEE	101 TO 103 ABOVE	****	
**** FOR	582 TO 584,	SEE	102 TO 104 ABOVE	****	
**** FOR	601 TO 609,	SEE	41 TO 49 ABOVE	****	
62	605 TO 613	(SYM)	865 TO 873	24	3
63	609 TO 617		864 TO 869	24	3
64	613 TO 618		863 TO 865	24	3
**** FOR	617 TO 619,	SEE	150 TO 152 ABOVE	****	
65	618 TO 620	(SYM)	861 TO 863	24	3
**** FOR	861 TO 863,	SEE	149 TO 151 ABOVE	****	
**** FOR	862 TO 864,	SEE	150 TO 152 ABOVE	****	
**** FOR	863 TO 865,	SEE	151 TO 153 ABOVE	****	
**** FOR	864 TO 869,	SEE	152 TO 157 ABOVE	****	
**** FOR	865 TO 873,	SEE	153 TO 161 ABOVE	****	
**** FOR	869 TO 877,	SEE	157 TO 165 ABOVE	****	
**** FOR	873 TO 881,	SEE	161 TO 169 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST LENGTH
**** FOR 917 TO 919,	SEE	29 TO	31 ABOVE	****
**** FOR 918 TO 920,	SEE	30 TO	32 ABOVE	****
**** FOR 919 TO 921,	SEE	31 TO	33 ABOVE	****
**** FOR 933 TO 935,	SEE	29 TO	31 ABOVE	****
**** FOR 934 TO 936,	SEE	30 TO	32 ABOVE	****
**** FOR 935 TO 937,	SEE	31 TO	33 ABOVE	****
**** FOR 949 TO 951,	SEE	29 TO	31 ABOVE	****
**** FOR 950 TO 952,	SEE	30 TO	32 ABOVE	****
**** FOR 951 TO 953,	SEE	31 TO	33 ABOVE	****
**** FOR 965 TO 967,	SEE	29 TO	31 ABOVE	****
**** FOR 966 TO 968,	SEE	30 TO	32 ABOVE	****
**** FOR 967 TO 969,	SEE	31 TO	33 ABOVE	****
**** FOR 981 TO 983,	SEE	29 TO	31 ABOVE	****
**** FOR 982 TO 984,	SEE	30 TO	32 ABOVE	****
**** FOR 983 TO 985,	SEE	31 TO	33 ABOVE	****
**** FOR 997 TO 999,	SEE	29 TO	31 ABOVE	****
**** FOR 998 TO 1000,	SEE	30 TO	32 ABOVE	****
**** FOR 999 TO 1001,	SEE	31 TO	33 ABOVE	****
**** FOR 1009 TO 1011,	SEE	30 TO	32 ABOVE	****
**** FOR 1010 TO 1012,	SEE	418 TO	420 ABOVE	****
**** FOR 1041 TO 1049,	SEE	1 TO	9 ABOVE	****
**** FOR 1045 TO 1053,	SEE	5 TO	13 ABOVE	****
**** FOR 1069 TO 1071,	SEE	29 TO	31 ABOVE	****
**** FOR 1070 TO 1072,	SEE	30 TO	32 ABOVE	****
**** FOR 1071 TO 1073,	SEE	31 TO	33 ABOVE	****
**** FOR 1072 TO 1077,	SEE	32 TO	37 ABOVE	****
**** FOR 1073 TO 1081,	SEE	33 TO	41 ABOVE	****
**** FOR 1077 TO 1085,	SEE	37 TO	45 ABOVE	****

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 4 NOTES IN LENGTH --
 RHYTHM RETROGRADE W.EXACT RETROGRADE
 WAS BEGUN AT 324 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
66	1 TO 13		435 TO 445	24	4
67	1 TO 13		507 TO 517	24	4
68	29 TO 32	(SYM)	417 TO 420	24	4
69	29 TO 32	(SYM)	489 TO 492	24	4
70	29 TO 32	(SYM)	1009 TO 1012	24	4
71	30 TO 33		413 TO 419	24	4
72	30 TO 33		485 TO 491	24	4
73	31 TO 37		409 TO 418	24	4
74	31 TO 37		481 TO 490	24	4
75	32 TO 41		405 TO 417	24	4
76	32 TO 41		477 TO 489	24	4
77	33 TO 45	(SYM)	401 TO 413	24	4
78	33 TO 45	(SYM)	473 TO 485	24	4
79	37 TO 49	(SYM)	157 TO 169	24	4
80	37 TO 49	(SYM)	869 TO 881	24	4
81	149 TO 152	(SYM)	617 TO 620	24	4
82	150 TO 153		613 TO 619	24	4
83	151 TO 157		609 TO 618	24	4
84	152 TO 161		605 TO 617	24	4
85	153 TO 165	(SYM)	601 TO 613	24	4
**** FOR	301 TO 304,	SEE	149 TO 152	ABOVE ****	
**** FOR	302 TO 305,	SEE	150 TO 153	ABOVE ****	
**** FOR	303 TO 309,	SEE	151 TO 157	ABOVE ****	
**** FOR	304 TO 313,	SEE	152 TO 161	ABOVE ****	
**** FOR	305 TO 317,	SEE	153 TO 165	ABOVE ****	
86	393 TO 409		1077 TO 1089	24	4
87	401 TO 413	(SYM)	1073 TO 1085	24	4
88	405 TO 417		1072 TO 1081	24	4
89	409 TO 418		1071 TO 1077	24	4
90	413 TO 419		918 TO 921	24	4
91	413 TO 419		934 TO 937	24	4
92	413 TO 419		950 TO 953	24	4
93	413 TO 419		966 TO 969	24	4
94	413 TO 419		982 TO 985	24	4
95	413 TO 419		998 TO 1001	24	4
96	413 TO 419		1070 TO 1073	24	4
97	417 TO 420	(SYM)	917 TO 920	24	4
98	417 TO 420	(SYM)	933 TO 936	24	4
99	417 TO 420	(SYM)	949 TO 952	24	4
100	417 TO 420	(SYM)	965 TO 968	24	4
101	417 TO 420	(SYM)	981 TO 984	24	4
102	417 TO 420	(SYM)	997 TO 1000	24	4
103	417 TO 420	(SYM)	1069 TO 1072	24	4
104	435 TO 445		1041 TO 1053	24	4

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 473 TO 485,	SEE	401 TO 413	ABOVE	****	
**** FOR 477 TO 489,	SEE	405 TO 417	ABOVE	****	
**** FOR 481 TO 490,	SEE	409 TO 418	ABOVE	****	
**** FOR 485 TO 491,	SEE	413 TO 419	ABOVE	****	
**** FOR 489 TO 492,	SEE	417 TO 420	ABOVE	****	
**** FOR 507 TO 517,	SEE	435 TO 445	ABOVE	****	
105 601 TO 613	(SYM)	865 TO 877	24		4
106 605 TO 617		864 TO 873	24		4
107 609 TO 618		863 TO 869	24		4
108 613 TO 619		862 TO 865	24		4
109 617 TO 620	(SYM)	861 TO 864	24		4
**** FOR 861 TO 864,	SEE	149 TO 152	ABOVE	****	
**** FOR 862 TO 865,	SEE	150 TO 153	ABOVE	****	
**** FOR 863 TO 869,	SEE	151 TO 157	ABOVE	****	
**** FOR 864 TO 873,	SEE	152 TO 161	ABOVE	****	
**** FOR 865 TO 877,	SEE	153 TO 165	ABOVE	****	
**** FOR 917 TO 920,	SEE	29 TO 32	ABOVE	****	
**** FOR 918 TO 921,	SEE	30 TO 33	ABOVE	****	
**** FOR 933 TO 936,	SEE	29 TO 32	ABOVE	****	
**** FOR 934 TO 937,	SEE	30 TO 33	ABOVE	****	
**** FOR 949 TO 952,	SEE	29 TO 32	ABOVE	****	
**** FOR 950 TO 953,	SEE	30 TO 33	ABOVE	****	
**** FOR 965 TO 968,	SEE	29 TO 32	ABOVE	****	
**** FOR 966 TO 969,	SEE	30 TO 33	ABOVE	****	
**** FOR 981 TO 984,	SEE	29 TO 32	ABOVE	****	
**** FOR 982 TO 985,	SEE	30 TO 33	ABOVE	****	
**** FOR 997 TO 1000,	SEE	29 TO 32	ABOVE	****	
**** FOR 998 TO 1001,	SEE	30 TO 33	ABOVE	****	
**** FOR 1009 TO 1012,	SEE	417 TO 420	ABOVE	****	
**** FOR 1041 TO 1053,	SEE	1 TO 13	ABOVE	****	
**** FOR 1069 TO 1072,	SEE	29 TO 32	ABOVE	****	
**** FOR 1070 TO 1073,	SEE	30 TO 33	ABOVE	****	
**** FOR 1071 TO 1077,	SEE	31 TO 37	ABOVE	****	
**** FOR 1072 TO 1081,	SEE	32 TO 41	ABOVE	****	
**** FOR 1073 TO 1085,	SEE	33 TO 45	ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 5 NOTES IN LENGTH --
 RHYTHM RETROGRADE W.EXACT RETROGRADE
 WAS BEGUN AT 379 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
110	29 TO 33		413 TO 420	24	5
111	29 TO 33		485 TO 492	24	5
112	30 TO 37		409 TO 419	24	5
113	30 TO 37		481 TO 491	24	5
114	31 TO 41		405 TO 418	24	5
115	31 TO 41		477 TO 490	24	5
116	32 TO 45		401 TO 417	24	5
117	32 TO 45		473 TO 489	24	5
118	149 TO 153		613 TO 620	24	5
119	150 TO 157		609 TO 619	24	5
120	151 TO 161		605 TO 618	24	5
121	152 TO 165		601 TO 617	24	5
**** FOR	301 TO 305,	SEE	149 TO 153	ABOVE ****	
**** FOR	302 TO 309,	SEE	150 TO 157	ABOVE ****	
**** FOR	303 TO 313,	SEE	151 TO 161	ABOVE ****	
**** FOR	304 TO 317,	SEE	152 TO 165	ABOVE ****	
122	393 TO 413		1073 TO 1089	24	5
123	401 TO 417		1072 TO 1085	24	5
124	405 TO 418		1071 TO 1081	24	5
125	409 TO 419		1070 TO 1077	24	5
126	413 TO 420		917 TO 921	24	5
127	413 TO 420		933 TO 937	24	5
128	413 TO 420		949 TO 953	24	5
129	413 TO 420		965 TO 969	24	5
130	413 TO 420		981 TO 985	24	5
131	413 TO 420		997 TO 1001	24	5
132	413 TO 420		1069 TO 1073	24	5
**** FOR	473 TO 489,	SEE	401 TO 417	ABOVE ****	
**** FOR	477 TO 490,	SEE	405 TO 418	ABOVE ****	
**** FOR	481 TO 491,	SEE	409 TO 419	ABOVE ****	
**** FOR	485 TO 492,	SEE	413 TO 420	ABOVE ****	
133	601 TO 617		864 TO 877	24	5
134	605 TO 618		863 TO 873	24	5
135	609 TO 619		862 TO 869	24	5
136	613 TO 620		861 TO 865	24	5
**** FOR	861 TO 865,	SEE	149 TO 153	ABOVE ****	
**** FOR	862 TO 869,	SEE	150 TO 157	ABOVE ****	
**** FOR	863 TO 873,	SEE	151 TO 161	ABOVE ****	
**** FOR	864 TO 877,	SEE	152 TO 165	ABOVE ****	
**** FOR	917 TO 921,	SEE	29 TO 33	ABOVE ****	
**** FOR	933 TO 937,	SEE	29 TO 33	ABOVE ****	
**** FOR	949 TO 953,	SEE	29 TO 33	ABOVE ****	
**** FOR	965 TO 969,	SEE	29 TO 33	ABOVE ****	
**** FOR	981 TO 985,	SEE	29 TO 33	ABOVE ****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 997 TO 1001,		SEE	29 TO 33 ABOVE	****	
**** FOR 1069 TO 1073,		SEE	29 TO 33 ABOVE	****	
**** FOR 1070 TO 1077,		SEE	30 TO 37 ABOVE	****	
**** FOR 1071 TO 1081,		SEE	31 TO 41 ABOVE	****	
**** FOR 1072 TO 1085,		SEE	32 TO 45 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 6 NOTES IN LENGTH --
 RHYTHM RETROGRADE W. EXACT RETROGRADE
 WAS BEGUN AT 433 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
137	29 TO 37		409 TO 420	24	6
138	29 TO 37		481 TO 492	24	6
139	30 TO 41		405 TO 419	24	6
140	30 TO 41		477 TO 491	24	6
141	31 TO 45		401 TO 418	24	6
142	31 TO 45		473 TO 490	24	6
143	149 TO 157		609 TO 620	24	6
144	150 TO 161		605 TO 619	24	6
145	151 TO 165		601 TO 618	24	6
**** FOR	301 TO 309,	SEE	149 TO 157 ABOVE	****	
**** FOR	302 TO 313,	SEE	150 TO 161 ABOVE	****	
**** FOR	303 TO 317,	SEE	151 TO 165 ABOVE	****	
146	393 TO 417		1072 TO 1089	24	6
147	401 TO 418		1071 TO 1085	24	6
148	405 TO 419		1070 TO 1081	24	6
149	409 TO 420		1069 TO 1077	24	6
**** FOR	473 TO 490,	SEE	401 TO 418 ABOVE	****	
**** FOR	477 TO 491,	SEE	405 TO 419 ABOVE	****	
**** FOR	481 TO 492,	SEE	409 TO 420 ABOVE	****	
150	601 TO 618		863 TO 877	24	6
151	605 TO 619		862 TO 873	24	6
152	609 TO 620		861 TO 869	24	6
**** FOR	861 TO 869,	SEE	149 TO 157 ABOVE	****	
**** FOR	862 TO 873,	SEE	150 TO 161 ABOVE	****	
**** FOR	863 TO 877,	SEE	151 TO 165 ABOVE	****	
**** FOR	1069 TO 1077,	SEE	29 TO 37 ABOVE	****	
**** FOR	1070 TO 1081,	SEE	30 TO 41 ABOVE	****	
**** FOR	1071 TO 1085,	SEE	31 TO 45 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 7 NOTES IN LENGTH --
 RHYTHM RETROGRADE W. EXACT RETROGRADE
 WAS BEGUN AT 489 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
153	29 TO 41		405 TO 420	24	7
154	29 TO 41		477 TO 492	24	7
155	30 TO 45		401 TO 419	24	7
156	30 TO 45		473 TO 491	24	7
157	149 TO 161		605 TO 620	24	7
158	150 TO 165		601 TO 619	24	7
159	393 TO 418		1071 TO 1089	24	7
160	401 TO 419		1070 TO 1085	24	7
161	405 TO 420		1069 TO 1081	24	7
162	601 TO 619		862 TO 877	24	7
163	605 TO 620		861 TO 873	24	7

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 8 NOTES IN LENGTH --
 RHYTHM RETROGRADE W.EXACT RETROGRADE
 WAS BEGUN AT 505 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
164	29 TO 45		401 TO 420	24	8
165	29 TO 45		473 TO 492	24	8
166	149 TO 165		601 TO 620	24	8
167	393 TO 419		1070 TO 1089	24	8
168	401 TO 420		1069 TO 1085	24	8
169	601 TO 620		861 TO 877	24	8

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 9 NOTES IN LENGTH --
RHYTHM RETROGRADE W.EXACT RETROGRADE
WAS BEGUN AT 522 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
170	393 TO 420		1069 TO 1089	24	9

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 10 NOTES IN LENGTH --
RHYTHM RETROGRADE W.EXACT RETROGRADE
WAS BEGUN AT 538 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
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END OF TYPE I LISTING. TOTAL OF 170 PATTERNS LOCATED.

*** TYPE II LISTING ***

HINDEMITH LUDIS TONALIS FUGA NONA IN B-FLAT, BOTTOM VOICE
 RHYTHM RETROGRADE W.EXACT RETROGRADE

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	393 TO 420	2	9
SUBPATTERN	413 TO 420	8	5
SUBPATTERN	417 TO 420	8	4
SUBPATTERN	413 TO 419	8	4
SUBPATTERN	418 TO 420	8	3
SUBPATTERN	413 TO 418	8	3

*** TEST 24 COMPLETED AT 581 SECONDS INTO EXECUTION ***

TEST REQUESTED 26
UNITS OF DATA PER CARD 16

NOTES	1 THROUGH 16															
	36	0	0	0	38	0	-1	0	38	0	0	0	43	0	-1	0
NOTES	17 THROUGH 32															
	43	33	0	0	0	0	0	0	0	0	0	0	36	38	41	38
NOTES	33 THROUGH 48															
	36	0	0	0	32	0	0	0	31	0	0	0	29	0	0	0
NOTES	49 THROUGH 64															
	28	0	0	0	-1	0	0	0	30	0	0	0	-1	0	0	0
NOTES	65 THROUGH 80															
	33	0	0	0	-1	0	0	0	31	0	0	0	-1	0	0	0
NOTES	81 THROUGH 96															
	30	0	0	0	-1	0	0	0	29	0	0	0	-1	0	0	0
NOTES	97 THROUGH 112															
	28	0	0	0	52	51	52	51	52	0	0	0	52	0	0	0
NOTES	113 THROUGH 128															
	49	0	0	0	-1	0	0	0	49	0	0	0	47	0	-1	0
NOTES	129 THROUGH 144															
	47	0	0	0	42	0	-1	0	42	52	0	0	0	0	0	0
NOTES	145 THROUGH 160															
	0	0	0	0	49	47	44	47	49	0	0	0	53	0	0	0
NOTES	161 THROUGH 176															
	54	0	0	0	56	0	0	0	57	0	0	0	-1	0	0	0
NOTES	177 THROUGH 192															
	45	0	0	0	0	0	0	0	43	0	0	0	0	0	0	0
NOTES	193 THROUGH 208															
	41	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0

NOTES 209 THROUGH 224
 38 0 0 0 -1 0 0 0 0 0 51 0 51 0 -1 0

NOTES 225 THROUGH 240
 0 0 52 0 52 0 -1 0 0 0 49 0 49 0 -1 0

NOTES 241 THROUGH 256
 0 0 50 0 50 0 -1 0 0 0 52 0 52 0 0 0

NOTES 257 THROUGH 272
 53 0 0 0 -1 0 0 0 41 0 0 0 0 0 0 0

NOTES 273 THROUGH 288
 40 0 0 0 38 0 -1 0 38 0 0 0 33 0 -1 0

NOTES 289 THROUGH 304
 33 43 0 0 0 0 0 0 0 0 0 0 40 38 35 38

NOTES 305 THROUGH 320
 40 0 0 0 44 0 0 0 45 0 0 0 47 0 0 0

NOTES 321 THROUGH 336
 49 0 0 0 37 36 37 39 41 0 0 0 42 0 0 0

NOTES 337 THROUGH 352
 43 0 0 0 -1 0 0 0 41 0 0 0 0 0 0 0

NOTES 353 THROUGH 368
 39 0 0 0 0 0 0 0 38 0 0 0 0 0 0 0

NOTES 369 THROUGH 384
 37 0 0 0 0 0 0 0 36 0 0 0 0 0 0 0

NOTES 385 THROUGH 400
 35 0 0 0 0 0 0 0 33 0 0 0 0 0 0 0

NOTES 401 THROUGH 416
 35 0 0 0 37 0 0 0 38 0 0 0 42 0 0 0

NOTES 417 THROUGH 432
 44 47 44 42 39 0 0 0 0 0 0 0 49 0 -1 0

NOTES 433 THROUGH 448
 0 0 49 0 44 0 0 0 -1 0 44 0 42 0 0 0

NOTES 449 THROUGH 464
 41 0 0 0 0 0 0 0 44 0 0 0 0 0 0 0

NOTES 465 THROUGH 480
 39 0 0 0 -1 0 0 0 28 0 0 0 30 0 0 0

NOTES 481 THROUGH 496
 31 0 0 0 35 0 0 0 37 40 37 35 32 0 0 0

NOTES 497 THROUGH 512
 0 0 0 0 42 0 -1 0 0 0 42 0 37 0 0 0

NOTES 513 THROUGH 528
 -1 0 37 0 35 0 0 0 -1 0 33 0 38 0 0 0

NOTES 529 THROUGH 544
 31 0 0 0 -1 0 0 0 33 0 0 0 -1 0 0 0

NOTES 545 THROUGH 560
 36 0 0 0 -1 0 0 0 34 0 0 0 -1 0 0 0

NOTES 561 THROUGH 576
 33 0 0 0 -1 0 0 0 32 0 0 0 -1 0 0 0

NOTES 577 THROUGH 592
 31 0 0 0 55 54 55 54 55 0 0 0 50 0 52 0

NOTES 593 THROUGH 608
 47 0 0 0 -1 0 0 0 54 0 0 0 52 0 0 0

NOTES 609 THROUGH 624
 51 0 0 0 47 0 0 0 45 42 45 47 50 0 0 0

NOTES 625 THROUGH 640
 0 0 0 0 40 0 -1 0 38 0 0 0 0 0 0 0

NOTES 641 THROUGH 656
 36 0 0 0 0 0 0 0 35 0 0 0 0 0 0 0

NOTES 657 THROUGH 672
 33 0 0 0 45 0 0 0 0 0 0 0 43 0 0 0

NOTES 673 THROUGH 688
 41 0 0 0 0 0 0 0 40 0 0 0 0 0 0 0

NOTES 689 THROUGH 704
 38 0 0 0 0 0 0 0 42 0 0 0 38 0 0 0

NOTES 705 THROUGH 720
 37 0 0 0 0 0 0 0 36 0 0 0 0 0 0 0

NOTES 721 THROUGH 736
 35 0 0 0 -1 0 0 0 0 0 0 0 0 0 0 0

NOTES 737 THROUGH 752
 41 0 0 0 0 0 0 0 43 0 0 0 -1 0 0 0

NOTES 753 THROUGH 768
 43 0 0 0 0 0 0 0 48 0 0 0 -1 0 0 0

NOTES 769 THROUGH 784
 48 38 0 0 0 0 0 0 0 0 0 0 0 0 0 0

NOTES 785 THROUGH 800
 0 0 0 0 0 0 0 0 41 0 43 0 46 0 43 0

NOTES 801 THROUGH 816
 41 C 0 0 0 0 0 0 37 0 0 0 0 0 0 0

NOTES 817 THROUGH 832
 36 C 0 0 0 0 0 0 34 0 0 0 0 0 0 0

NOTES 833 THROUGH 848
 33 C 0 0 31 0 -1 0 31 0 0 0 26 0 -1 0

NOTES 849 THROUGH 864
 26 36 0 0 0 0 0 0 0 0 0 0 33 31 28 31

NOTES 865 THROUGH 880
 33 0 0 0 37 0 0 0 38 0 0 0 40 0 0 0

NOTES 881 THROUGH 896
 41 0 0 0 53 55 57 58 60 0 56 0 54 0 49 0

NOTES 897 THROUGH 912
 46 0 42 0 39 0 35 0 -1 0 0 0 0 0 0 0

NOTES 913 THROUGH 928
 -1 C 0 0 24 26 29 26 24 0 0 0 -1 0 0 0

NOTES 929 THROUGH 944
 0 0 0 0 49 51 54 51 49 0 0 0 -1 0 0 0

NOTES 945 THROUGH 960
 0 0 0 0 23 25 28 25 23 0 0 0 -1 0 0 0

NOTES 961 THROUGH 976
 0 0 0 0 30 32 35 32 30 0 0 0 -1 0 0 0

NOTES 977 THROUGH 992
 0 0 0 0 45 47 50 47 45 0 0 0 -1 0 0 0

NOTES 993 THROUGH 1008
 0 0 0 0 22 24 27 24 22 0 0 0 -1 0 0 0

NOTES 1009 THROUGH 1024
 44 47 44 42 41 0 0 0 -1 0 0 0 36 0 37 0

NOTES 1025 THROUGH 1040
 38 0 0 0 0 0 -1 0 43 0 0 0 0 0 -1 0

NOTES 1041 THROUGH 1056
 36 0 0 0 38 0 -1 0 38 0 0 0 43 0 -1 0

NOTES 1057 THROUGH 1072
 43 33 0 0 0 0 0 0 0 0 0 0 36 38 41 38

NOTES 1073 THROUGH 1088

36 0 0 0 32 0 0 0 31 0 0 0 29 0 0 0

NOTES 1089 THROUGH 1104

27 0 0 0 0 0 0 0 25 0 0 0 0 0 0 0

NOTES 1105 THROUGH 1120

24 0 0 0 -1 0 0 0 26 0 0 0 -1 0 0 0

NOTES 1121 THROUGH 1136

29 0 0 0 -1 0 0 0 27 0 0 0 -1 0 0 0

NOTES 1137 THROUGH 1152

26 0 0 0 -1 0 0 0 25 0 0 0 -1 0 0 0

NOTES 1153 THROUGH 1168

24 0 0 0 -1 0 0 0 0 0 0 0 0 0 0 0

NOTES 1169 THROUGH 1184

0 0 0 0 0 0 0 0 55 0 0 0 0 0 0 0

NOTES 1185 THROUGH 1185

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THE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED
FROM THE LISTINGS WHICH FOLLOW --

PATTERNS WHICH ARE REITERATIONS LONGER THAN
FOUR NOTES-IN-LENGTH

* SYM* DESIGNATES NONRETROGRADABLE (I.E., SYMMETRICAL) RHYTHM.

*** TYPE I LISTING ***

HINDEMITH LUDIS TONALIS FUGA NONA IN B-FLAT, BOTTOM VOICE

SEARCH FOR PATTERNS OF 3 NOTES IN LENGTH --
 RHYTHM RETROGRADE W.EXACT RET. INVERSION
 WAS BEGUN AT 34 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
1	29 TO 31	(SYM)	618 TO 620	26	3
2	30 TO 32	(SYM)	150 TO 152	26	3
3	30 TO 32	(SYM)	302 TO 304	26	3
4	30 TO 32	(SYM)	617 TO 619	26	3
5	30 TO 32	(SYM)	862 TO 864	26	3
6	31 TO 33		613 TO 618	26	3
7	32 TO 37		609 TO 617	26	3
8	33 TO 41	(SYM)	605 TO 613	26	3
9	37 TO 45	(SYM)	601 TO 609	26	3
10	41 TO 49		1077 TO 1085	26	3
11	73 TO 89	(SYM)	553 TO 569	26	3
12	73 TO 89	(SYM)	561 TO 577	26	3
13	73 TO 89		701 TO 713	26	3
14	73 TO 89	(SYM)	1129 TO 1145	26	3
15	73 TO 89	(SYM)	1137 TO 1153	26	3
**** FOR	81 TO 97,	SEE	73 TO 89	ABOVE ****	
16	101 TO 103	(SYM)	582 TO 584	26	3
17	102 TO 104	(SYM)	325 TO 327	26	3
18	102 TO 104	(SYM)	581 TO 583	26	3
19	121 TO 129		437 TO 445	26	3
20	121 TO 129		509 TO 517	26	3
21	125 TO 133		435 TO 443	26	3
22	125 TO 133		507 TO 515	26	3
23	149 TO 151	(SYM)	418 TO 420	26	3
24	149 TO 151	(SYM)	490 TO 492	26	3
25	149 TO 151	(SYM)	1010 TO 1012	26	3
26	150 TO 152	(SYM)	417 TO 419	26	3
27	150 TO 152	(SYM)	489 TO 491	26	3
28	150 TO 152	(SYM)	918 TO 920	26	3
29	150 TO 152	(SYM)	934 TO 936	26	3
30	150 TO 152	(SYM)	950 TO 952	26	3
31	150 TO 152	(SYM)	966 TO 968	26	3
32	150 TO 152	(SYM)	982 TO 984	26	3
33	150 TO 152	(SYM)	998 TO 1000	26	3
34	150 TO 152	(SYM)	1009 TO 1011	26	3
35	150 TO 152	(SYM)	1070 TO 1072	26	3
36	151 TO 153		413 TO 418	26	3
37	151 TO 153		485 TO 490	26	3
38	152 TO 157		409 TO 417	26	3
39	152 TO 157		481 TO 489	26	3
40	153 TO 161	(SYM)	405 TO 413	26	3
41	153 TO 161	(SYM)	477 TO 485	26	3

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
42	157 TO 165	(SYM)	401 TO 409	26	3
43	157 TO 165	(SYM)	473 TO 481	26	3
44	157 TO 165	(SYM)	873 TO 881	26	3
45	161 TO 169		309 TO 317	26	3
46	161 TO 169		869 TO 877	26	3
47	185 TO 201	(SYM)	377 TO 393	26	3
48	185 TO 201	(SYM)	673 TO 689	26	3
49	185 TO 201	(SYM)	809 TO 825	26	3
50	193 TO 209		545 TO 561	26	3
51	193 TO 209		669 TO 681	26	3
52	193 TO 209		1121 TO 1137	26	3
53	219 TO 227		237 TO 245	26	3
54	221 TO 229		235 TO 243	26	3
**** FOR	235 TO 243,	SEE	219 TO 227 ABOVE	****	
**** FOR	237 TO 245,	SEE	221 TO 229 ABOVE	****	
55	265 TO 277		443 TO 449	26	3
**** FOR	273 TO 281,	SEE	121 TO 129 ABOVE	****	
**** FOR	277 TO 285,	SEE	125 TO 133 ABOVE	****	
**** FOR	301 TO 303,	SEE	149 TO 151 ABOVE	****	
**** FOR	302 TO 304,	SEE	150 TO 152 ABOVE	****	
**** FOR	303 TO 305,	SEE	151 TO 153 ABOVE	****	
**** FOR	304 TO 309,	SEE	152 TO 157 ABOVE	****	
**** FOR	305 TO 313,	SEE	153 TO 161 ABOVE	****	
**** FOR	309 TO 317,	SEE	157 TO 165 ABOVE	****	
**** FOR	325 TO 327,	SEE	101 TO 103 ABOVE	****	
56	326 TO 328	(SYM)	886 TO 888	26	3
**** FOR	345 TO 361,	SEE	185 TO 201 ABOVE	****	
57	353 TO 369	(SYM)	369 TO 385	26	3
**** FOR	361 TO 377,	SEE	353 TO 369 ABOVE	****	
**** FOR	369 TO 385,	SEE	353 TO 369 ABOVE	****	
58	377 TO 393	(SYM)	633 TO 649	26	3
**** FOR	401 TO 409,	SEE	161 TO 169 ABOVE	****	
59	405 TO 413	(SYM)	865 TO 873	26	3
60	409 TO 417		864 TO 869	26	3
61	413 TO 418		863 TO 865	26	3
**** FOR	417 TO 419,	SEE	30 TO 32 ABOVE	****	
62	418 TO 420	(SYM)	861 TO 863	26	3
63	435 TO 443		837 TO 845	26	3
64	437 TO 445		833 TO 841	26	3
65	443 TO 449		825 TO 837	26	3
**** FOR	473 TO 481,	SEE	161 TO 169 ABOVE	****	
**** FOR	477 TO 485,	SEE	405 TO 413 ABOVE	****	
**** FOR	481 TO 489,	SEE	409 TO 417 ABOVE	****	
**** FOR	485 TO 490,	SEE	413 TO 418 ABOVE	****	
**** FOR	489 TO 491,	SEE	30 TO 32 ABOVE	****	
**** FOR	490 TO 492,	SEE	418 TO 420 ABOVE	****	
**** FOR	507 TO 515,	SEE	435 TO 443 ABOVE	****	
**** FOR	509 TO 517,	SEE	437 TO 445 ABOVE	****	
**** FOR	553 TO 569,	SEE	73 TO 89 ABOVE	****	
**** FOR	561 TO 577,	SEE	73 TO 89 ABOVE	****	
**** FOR	581 TO 583,	SEE	101 TO 103 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	582 TO 584,	SEE	102 TO 104 ABOVE	****	
**** FOR	601 TO 609,	SEE	41 TO 49 ABOVE	****	
66	605 TO 613	(SYM)	1073 TO 1081	26	3
67	609 TO 617		1072 TO 1077	26	3
68	613 TO 618		919 TO 921	26	3
69	613 TO 618		935 TO 937	26	3
70	613 TO 618		951 TO 953	26	3
71	613 TO 618		967 TO 969	26	3
72	613 TO 618		983 TO 985	26	3
73	613 TO 618		999 TO 1001	26	3
74	613 TO 618		1071 TO 1073	26	3
**** FOR	617 TO 619,	SEE	150 TO 152 ABOVE	****	
75	618 TO 620	(SYM)	917 TO 919	26	3
76	618 TO 620	(SYM)	933 TO 935	26	3
77	618 TO 620	(SYM)	949 TO 951	26	3
78	618 TO 620	(SYM)	965 TO 967	26	3
79	618 TO 620	(SYM)	981 TO 983	26	3
80	618 TO 620	(SYM)	997 TO 999	26	3
81	618 TO 620	(SYM)	1069 TO 1071	26	3
**** FOR	633 TO 649,	SEE	185 TO 201 ABOVE	****	
**** FOR	641 TO 657,	SEE	193 TO 209 ABOVE	****	
**** FOR	673 TO 689,	SEE	377 TO 393 ABOVE	****	
**** FOR	705 TO 721,	SEE	73 TO 89 ABOVE	****	
**** FOR	809 TO 825,	SEE	377 TO 393 ABOVE	****	
**** FOR	825 TO 837,	SEE	265 TO 277 ABOVE	****	
**** FOR	833 TO 841,	SEE	121 TO 129 ABOVE	****	
**** FOR	837 TO 845,	SEE	125 TO 133 ABOVE	****	
**** FOR	861 TO 863,	SEE	149 TO 151 ABOVE	****	
**** FOR	862 TO 864,	SEE	150 TO 152 ABOVE	****	
**** FOR	863 TO 865,	SEE	151 TO 153 ABOVE	****	
**** FOR	864 TO 869,	SEE	152 TO 157 ABOVE	****	
**** FOR	865 TO 873,	SEE	153 TO 161 ABOVE	****	
**** FOR	869 TO 877,	SEE	157 TO 165 ABOVE	****	
**** FOR	873 TO 881,	SEE	161 TO 169 ABOVE	****	
**** FOR	917 TO 919,	SEE	29 TO 31 ABOVE	****	
**** FOR	918 TO 920,	SEE	30 TO 32 ABOVE	****	
**** FOR	919 TO 921,	SEE	31 TO 33 ABOVE	****	
**** FOR	933 TO 935,	SEE	29 TO 31 ABOVE	****	
**** FOR	934 TO 936,	SEE	30 TO 32 ABOVE	****	
**** FOR	935 TO 937,	SEE	31 TO 33 ABOVE	****	
**** FOR	949 TO 951,	SEE	29 TO 31 ABOVE	****	
**** FOR	950 TO 952,	SEE	30 TO 32 ABOVE	****	
**** FOR	951 TO 953,	SEE	31 TO 33 ABOVE	****	
**** FOR	965 TO 967,	SEE	29 TO 31 ABOVE	****	
**** FOR	966 TO 968,	SEE	30 TO 32 ABOVE	****	
**** FOR	967 TO 969,	SEE	31 TO 33 ABOVE	****	
**** FOR	981 TO 983,	SEE	29 TO 31 ABOVE	****	
**** FOR	982 TO 984,	SEE	30 TO 32 ABOVE	****	
**** FOR	983 TO 985,	SEE	31 TO 33 ABOVE	****	
**** FOR	997 TO 999,	SEE	29 TO 31 ABOVE	****	
**** FOR	998 TO 1000,	SEE	30 TO 32 ABOVE	****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
**** FOR 999 TO 1001,	SEE	31 TO	33 ABOVE	****	
**** FOR 1009 TO 1011,	SEE	30 TO	32 ABOVE	****	
**** FOR 1010 TO 1012,	SEE	418 TO	420 ABOVE	****	
**** FOR 1069 TO 1071,	SEE	29 TO	31 ABOVE	****	
**** FOR 1070 TO 1072,	SEE	30 TO	32 ABOVE	****	
**** FOR 1071 TO 1073,	SEE	31 TO	33 ABOVE	****	
**** FOR 1072 TO 1077,	SEE	32 TO	37 ABOVE	****	
**** FOR 1073 TO 1081,	SEE	33 TO	41 ABOVE	****	
**** FOR 1077 TO 1085,	SEE	37 TO	45 ABOVE	****	
**** FOR 1129 TO 1145,	SEE	73 TO	89 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 4 NOTES IN LENGTH --
 RHYTHM RETROGRADE W. EXACT RET. INVERSION
 WAS BEGUN AT 323 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
82	29 TO 32	(SYM)	617 TO 620	26	4
83	30 TO 33		613 TO 619	26	4
84	31 TO 37		609 TO 618	26	4
85	32 TO 41		605 TO 617	26	4
86	33 TO 45	(SYM)	601 TO 613	26	4
87	73 TO 97	(SYM)	553 TO 577	26	4
88	73 TO 97	(SYM)	1129 TO 1153	26	4
89	101 TO 104	(SYM)	581 TO 584	26	4
90	121 TO 133		435 TO 445	26	4
91	121 TO 133		507 TO 517	26	4
92	149 TO 152	(SYM)	417 TO 420	26	4
93	149 TO 152	(SYM)	489 TO 492	26	4
94	149 TO 152	(SYM)	1009 TO 1012	26	4
95	150 TO 153		413 TO 419	26	4
96	150 TO 153		485 TO 491	26	4
97	151 TO 157		409 TO 418	26	4
98	151 TO 157		481 TO 490	26	4
99	152 TO 161		405 TO 417	26	4
100	152 TO 161		477 TO 489	26	4
101	153 TO 165	(SYM)	401 TO 413	26	4
102	153 TO 165	(SYM)	473 TO 485	26	4
103	157 TO 169	(SYM)	869 TO 881	26	4
104	185 TO 209		669 TO 689	26	4
105	219 TO 229	(SYM)	235 TO 245	26	4
**** FOR	235 TO 245,	SEE	219 TO 229	ABOVE ****	
106	265 TO 281		437 TO 449	26	4
**** FOR	273 TO 285,	SEE	121 TO 133	ABOVE ****	
**** FOR	301 TO 304,	SEE	149 TO 152	ABOVE ****	
**** FOR	302 TO 305,	SEE	150 TO 153	ABOVE ****	
**** FOR	303 TO 309,	SEE	151 TO 157	ABOVE ****	
**** FOR	304 TO 313,	SEE	152 TO 161	ABOVE ****	
**** FOR	305 TO 317,	SEE	153 TO 165	ABOVE ****	
107	345 TO 369	(SYM)	369 TO 393	26	4
108	401 TO 413	(SYM)	865 TO 877	26	4
109	405 TO 417		864 TO 873	26	4
110	409 TO 418		863 TO 869	26	4
111	413 TO 419		862 TO 865	26	4
112	417 TO 420	(SYM)	861 TO 864	26	4
113	435 TO 445		833 TO 845	26	4
114	437 TO 449		825 TO 841	26	4
**** FOR	473 TO 485,	SEE	401 TO 413	ABOVE ****	
**** FOR	477 TO 489,	SEE	405 TO 417	ABOVE ****	
**** FOR	481 TO 490,	SEE	409 TO 418	ABOVE ****	
**** FOR	485 TO 491,	SEE	413 TO 419	ABOVE ****	

PATTERN	NCES	RELATED TO	NOTES	TEST	LENGTH
**** FOR	489 TO 492,	SEE	417 TO 420 ABOVE	****	
**** FOR	507 TO 517,	SEE	435 TO 445 ABOVE	****	
**** FOR	553 TO 577,	SEE	73 TO 97 ABOVE	****	
**** FOR	581 TO 584,	SEE	101 TO 104 ABOVE	****	
115	601 TO 613	(SYM)	1073 TO 1085	26	4
116	605 TO 617		1072 TO 1081	26	4
117	609 TO 618		1071 TO 1077	26	4
118	613 TO 619		918 TO 921	26	4
119	613 TO 619		934 TO 937	26	4
120	613 TO 619		950 TO 953	26	4
121	613 TO 619		966 TO 969	26	4
122	613 TO 619		982 TO 985	26	4
123	613 TO 619		998 TO 1001	26	4
124	613 TO 619		1070 TO 1073	26	4
125	617 TO 620	(SYM)	917 TO 920	26	4
126	617 TO 620	(SYM)	933 TO 936	26	4
127	617 TO 620	(SYM)	949 TO 952	26	4
128	617 TO 620	(SYM)	965 TO 968	26	4
129	617 TO 620	(SYM)	981 TO 984	26	4
130	617 TO 620	(SYM)	997 TO 1000	26	4
131	617 TO 620	(SYM)	1069 TO 1072	26	4
**** FOR	633 TO 657,	SEE	185 TO 209 ABOVE	****	
**** FOR	825 TO 841,	SEE	265 TO 281 ABOVE	****	
**** FOR	833 TO 845,	SEE	121 TO 133 ABOVE	****	
**** FOR	861 TO 864,	SEE	149 TO 152 ABOVE	****	
**** FOR	862 TO 865,	SEE	150 TO 153 ABOVE	****	
**** FOR	863 TO 869,	SEE	151 TO 157 ABOVE	****	
**** FOR	864 TO 873,	SEE	152 TO 161 ABOVE	****	
**** FOR	865 TO 877,	SEE	153 TO 165 ABOVE	****	
**** FOR	869 TO 881,	SEE	157 TO 169 ABOVE	****	
**** FOR	917 TO 920,	SEE	29 TO 32 ABOVE	****	
**** FOR	918 TO 921,	SEE	30 TO 33 ABOVE	****	
**** FOR	933 TO 936,	SEE	29 TO 32 ABOVE	****	
**** FOR	934 TO 937,	SEE	30 TO 33 ABOVE	****	
**** FOR	949 TO 952,	SEE	29 TO 32 ABOVE	****	
**** FOR	950 TO 953,	SEE	30 TO 33 ABOVE	****	
**** FOR	965 TO 968,	SEE	29 TO 32 ABOVE	****	
**** FOR	966 TO 969,	SEE	30 TO 33 ABOVE	****	
**** FOR	981 TO 984,	SEE	29 TO 32 ABOVE	****	
**** FOR	982 TO 985,	SEE	30 TO 33 ABOVE	****	
**** FOR	997 TO 1000,	SEE	29 TO 32 ABOVE	****	
**** FOR	998 TO 1001,	SEE	30 TO 33 ABOVE	****	
**** FOR	1009 TO 1012,	SEE	417 TO 420 ABOVE	****	
**** FOR	1069 TO 1072,	SEE	29 TO 32 ABOVE	****	
**** FOR	1070 TO 1073,	SEE	30 TO 33 ABOVE	****	
**** FOR	1071 TO 1077,	SEE	31 TO 37 ABOVE	****	
**** FOR	1072 TO 1081,	SEE	32 TO 41 ABOVE	****	
**** FOR	1073 TO 1085,	SEE	33 TO 45 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 5 NOTES IN LENGTH --
 RHYTHM RETROGRADE W. EXACT RET. INVERSION
 WAS BEGUN AT 411 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
132	29 TO 33		613 TO 620	26	5
133	30 TO 37		609 TO 619	26	5
134	31 TO 41		605 TO 618	26	5
135	32 TO 45		601 TO 617	26	5
136	149 TO 153		413 TO 420	26	5
137	149 TO 153		485 TO 492	26	5
138	150 TO 157		409 TO 419	26	5
139	150 TO 157		481 TO 491	26	5
140	151 TO 161		405 TO 418	26	5
141	151 TO 161		477 TO 490	26	5
142	152 TO 165		401 TO 417	26	5
143	152 TO 165		473 TO 489	26	5
144	265 TO 285		435 TO 449	26	5
**** FOR	301 TO 305,	SEE	149 TO 153	ABOVE ****	
**** FOR	302 TO 309,	SEE	150 TO 157	ABOVE ****	
**** FOR	303 TO 313,	SEE	151 TO 161	ABOVE ****	
**** FOR	304 TO 317,	SEE	152 TO 165	ABOVE ****	
145	401 TO 417		864 TO 877	26	5
146	405 TO 418		863 TO 873	26	5
147	409 TO 419		862 TO 869	26	5
148	413 TO 420		861 TO 865	26	5
149	435 TO 449		825 TO 845	26	5
**** FOR	473 TO 489,	SEE	401 TO 417	ABOVE ****	
**** FOR	477 TO 490,	SEE	405 TO 418	ABOVE ****	
**** FOR	481 TO 491,	SEE	409 TO 419	ABOVE ****	
**** FOR	485 TO 492,	SEE	413 TO 420	ABOVE ****	
150	601 TO 617		1072 TO 1085	26	5
151	605 TO 618		1071 TO 1081	26	5
152	609 TO 619		1070 TO 1077	26	5
153	613 TO 620		917 TO 921	26	5
154	613 TO 620		933 TO 937	26	5
155	613 TO 620		949 TO 953	26	5
156	613 TO 620		965 TO 969	26	5
157	613 TO 620		981 TO 985	26	5
158	613 TO 620		997 TO 1001	26	5
159	613 TO 620		1069 TO 1073	26	5
**** FOR	825 TO 845,	SEE	265 TO 285	ABOVE ****	
**** FOR	861 TO 865,	SEE	149 TO 153	ABOVE ****	
**** FOR	862 TO 869,	SEE	150 TO 157	ABOVE ****	
**** FOR	863 TO 873,	SEE	151 TO 161	ABOVE ****	
**** FOR	864 TO 877,	SEE	152 TO 165	ABOVE ****	
**** FOR	917 TO 921,	SEE	29 TO 33	ABOVE ****	
**** FOR	933 TO 937,	SEE	29 TO 33	ABOVE ****	
**** FOR	949 TO 953,	SEE	29 TO 33	ABOVE ****	

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
****	FOR 965 TO 969,	SEE	29 TO 33	ABOVE	****
****	FOR 981 TO 985,	SEE	29 TO 33	ABOVE	****
****	FOR 997 TO 1001,	SEE	29 TO 33	ABOVE	****
****	FOR 1069 TO 1073,	SEE	29 TO 33	ABOVE	****
****	FOR 1070 TO 1077,	SEE	30 TO 37	ABOVE	****
****	FOR 1071 TO 1081,	SEE	31 TO 41	ABOVE	****
****	FOR 1072 TO 1085,	SEE	32 TO 45	ABOVE	****

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 6 NOTES IN LENGTH --
 RHYTHM RETROGRADE W.EXACT RET. INVERSION
 WAS BEGUN AT 499 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
160	29 TO 37		609 TO 620	26	6
161	30 TO 41		605 TO 619	26	6
162	31 TO 45		601 TO 618	26	6
163	149 TO 157		409 TO 420	26	6
164	149 TO 157		481 TO 492	26	6
165	150 TO 161		405 TO 419	26	6
166	150 TO 161		477 TO 491	26	6
167	151 TO 165		401 TO 418	26	6
168	151 TO 165		473 TO 490	26	6
**** FOR	301 TO 309,	SEE	149 TO 157 ABOVE	****	
**** FOR	302 TO 313,	SEE	150 TO 161 ABOVE	****	
**** FOR	303 TO 317,	SEE	151 TO 165 ABOVE	****	
169	401 TO 418		863 TO 877	26	6
170	405 TO 419		862 TO 873	26	6
171	409 TO 420		861 TO 869	26	6
**** FOR	473 TO 490,	SEE	401 TO 418 ABOVE	****	
**** FOR	477 TO 491,	SEE	405 TO 419 ABOVE	****	
**** FOR	481 TO 492,	SEE	409 TO 420 ABOVE	****	
172	601 TO 618		1071 TO 1085	26	6
173	605 TO 619		1070 TO 1081	26	6
174	609 TO 620		1069 TO 1077	26	6
**** FOR	861 TO 869,	SEE	149 TO 157 ABOVE	****	
**** FOR	862 TO 873,	SEE	150 TO 161 ABOVE	****	
**** FOR	863 TO 877,	SEE	151 TO 165 ABOVE	****	
**** FOR	1069 TO 1077,	SEE	29 TO 37 ABOVE	****	
**** FOR	1070 TO 1081,	SEE	30 TO 41 ABOVE	****	
**** FOR	1071 TO 1085,	SEE	31 TO 45 ABOVE	****	

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 7 NOTES IN LENGTH --
 RHYTHM RETROGRADE W.EXACT RET. INVERSION
 WAS BEGUN AT 587 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
175	29 TO 41		605 TO 620	26	7
176	30 TO 45		601 TO 619	26	7
177	149 TO 161		405 TO 420	26	7
178	149 TO 161		477 TO 492	26	7
179	150 TO 165		401 TO 419	26	7
180	150 TO 165		473 TO 491	26	7
181	401 TO 419		862 TO 877	26	7
182	405 TO 420		861 TO 873	26	7
183	601 TO 619		1070 TO 1085	26	7
184	605 TO 620		1069 TO 1081	26	7

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 8 NOTES IN LENGTH --
 RHYTHM RETROGRADE W.EXACT RET. INVERSION
 WAS BEGUN AT 603 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
185	29 TO 45		601 TO 620	26	8
186	149 TO 165		401 TO 420	26	8
187	149 TO 165		473 TO 492	26	8
188	401 TO 420		861 TO 877	26	8
189	601 TO 620		1069 TO 1085	26	8

*** TYPE I LISTING CONTINUED ***

SEARCH FOR PATTERNS OF 9 NOTES IN LENGTH --
RHYTHM RETROGRADE W.EXACT RET. INVERSION
WAS BEGUN AT 619 SECONDS INTO EXECUTION.

PATTERN	NOTES	RELATED TO	NOTES	TEST	LENGTH
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END OF TYPE I LISTING. TOTAL OF 189 PATTERNS LOCATED.

*** TYPE II LISTING ***

HINDEMITH LUDIS TONALIS FUGA NONA IN B-FLAT, BOTTOM VOICE
RHYTHM RETROGRADE W.EXACT RET. INVERSION

	LOCATION OF FIRST OCCURRENCE	TOTAL NUMBER OF OCCURRENCES	LENGTH OF PATTERN
ORIGINAL PATTERN	601 TO 620	2	8
SUBPATTERN	613 TO 620	8	5
SUBPATTERN	617 TO 620	8	4
SUBPATTERN	613 TO 619	8	4
SUBPATTERN	618 TO 620	8	3
SUBPATTERN	613 TO 618	8	3
ORIGINAL PATTERN	401 TO 420	2	8
ORIGINAL PATTERN	149 TO 165	3	8
SUBPATTERN	150 TO 152	11	3
ORIGINAL PATTERN	29 TO 45	2	8
SUBPATTERN	30 TO 32	5	3

**** TEST 26 COMPLETED AT 693 SECONDS INTO EXECUTION ****

APPENDIX C

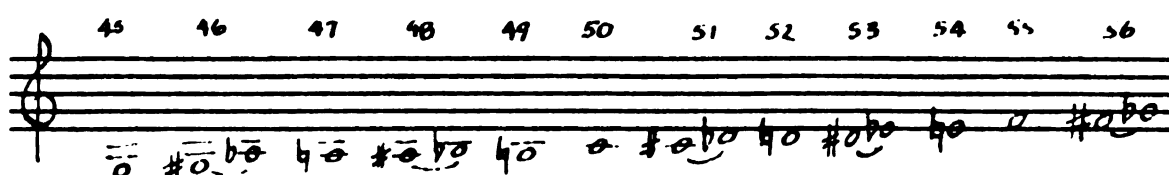
**Procedure for Converting the Musical
Score to Computer Input Data.**

**Source Listing
of the Music Analysis Program.**

Procedure for converting the musical score to computer input data

The method used for translating musical notation into a form suitable for computer input was designed so that the task could be accomplished in as short a period of time and with as simple a procedure as possible. Since this study measures only limited aspects of pitch and rhythmic content, a relatively simple encoding system was designed which permits the user to encode only the essential pitch and rhythm variables needed for the computer processing. The system does not provide methods for encoding other musical information (such as phrasing, dynamics, and articulation) not needed for this study. Since the computer program was designed to measure pitch and rhythmic elements either together or separately, the encoding process was also designed so that either element could be encoded independently, thereby allowing the user to save a considerable amount of encoding and computer processing time whenever the pitch or rhythmic relationships were analyzed separately. The following description of the encoding process shows how the music notation was translated into a numeric representation and how this representation was punched onto data cards.

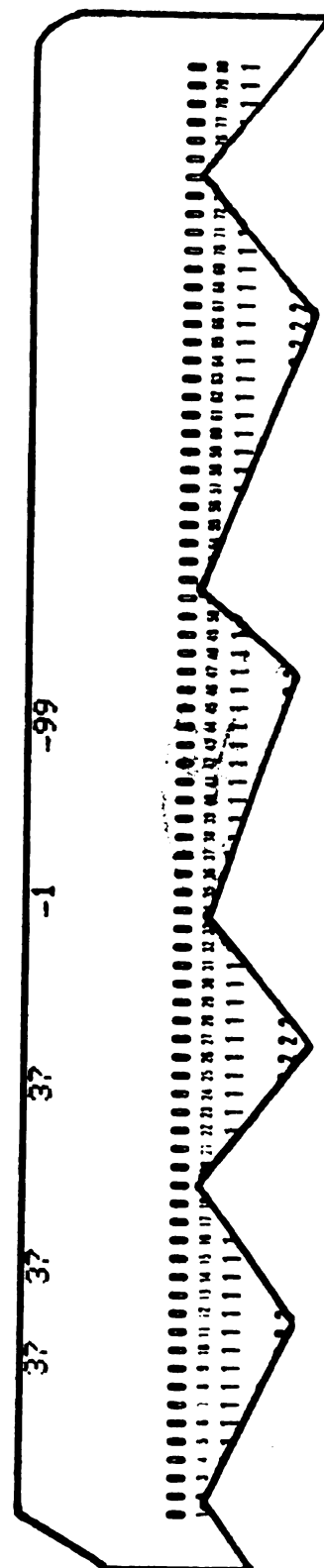
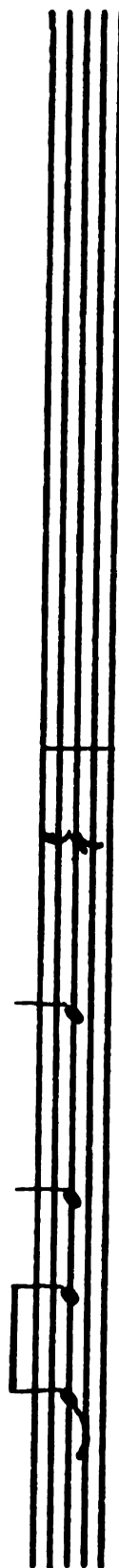
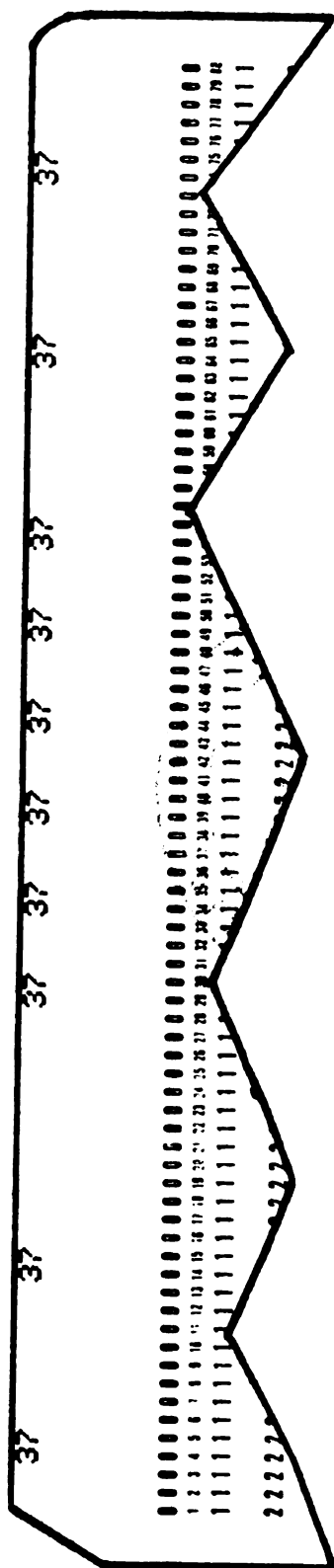
The numeric system used to represent pitch required that every semitone within the range of the piano keyboard be assigned to its own numeric representation. The pitch middle-C was arbitrarily assigned the number 50 with numeric assignments for the other semitones assigned sequentially in the following manner:



The numeric representation for each pitch was unaffected by the chromatic designation used. For instance, G above middle-C retained its numeric designation 57 even if the pitch was notated in the score as F double-sharp or A double-flat above middle-C. The following music excerpt is shown with the appropriate pitch designations shown above each note-head. (Tied note-heads only need to be indicated once.) These representations were then transferred to the punched card sequentially from left to right in the manner shown:

The designation -99 was placed at the end of the data to indicate the end of the excerpt. Longer melodic excerpts can be encoded in the same manner with the numeric data punched on to a continuous succession of data cards. The representation of the melody shown above does not reflect the rhythm of the original melody and therefore would only be appropriate for use with Tests 0 through 8.

The system used to designate rhythm was a graphical one, whereby the attack-point for each pitch was separated from the next successive attack-point by a number of physical units proportional to the rhythmic duration separating the two attack-points. The smallest rhythmic duration contained in the musical excerpt was assigned to the unit of division to be used on the data card, thereby providing a graphical representation of any rational rhythm. For the following example, each data card was divided into sixteen units with each unit representing one eighth-note duration:



Since this encoding process was designed to represent rhythm only, the actual numeric values punched upon the cards were not important; however, the location of these values upon the data card was all-important. (Any positive integer between 11 and 98 may be used to designate rhythm alone. For the example shown above, the value 37 was arbitrarily chosen.)

It was also possible to indicate rests by punching the numeric value -1 (minus one) in the rhythmic unit which represented the point where the rest began. The indication of rests is optional when using Test 9, and Tests 11 through 18, but is necessary for Test 10, and Tests 19 through 26. If the music example used above was re-written to include a rest (for purposes of illustration), it would be encoded in the following manner:

The method for encoding both pitch and rhythm data required that the process for encoding pitch alone and the process for encoding rhythm alone be combined, as is illustrated in the following example:

The first system of the musical score for 'The Rose Tree' consists of a single staff. It begins with a treble clef and a key signature of one sharp (F#). The melody is written in a simple, folk-like style. The first measure contains a half note G4. The second measure contains a half note A4. The third measure contains a half note B4. The fourth measure contains a half note C5. The fifth measure contains a half note B4. The sixth measure contains a half note A4. The seventh measure contains a half note G4. The eighth measure contains a half note F#4. The ninth measure contains a half note E4. The tenth measure contains a half note D4. The eleventh measure contains a half note C4. The twelfth measure contains a half note B3. The thirteenth measure contains a half note A3. The fourteenth measure contains a half note G3. The fifteenth measure contains a half note F#3. The sixteenth measure contains a half note E3. The seventeenth measure contains a half note D3. The eighteenth measure contains a half note C3. The nineteenth measure contains a half note B2. The twentieth measure contains a half note A2. The system ends with a double bar line.

[illegible]

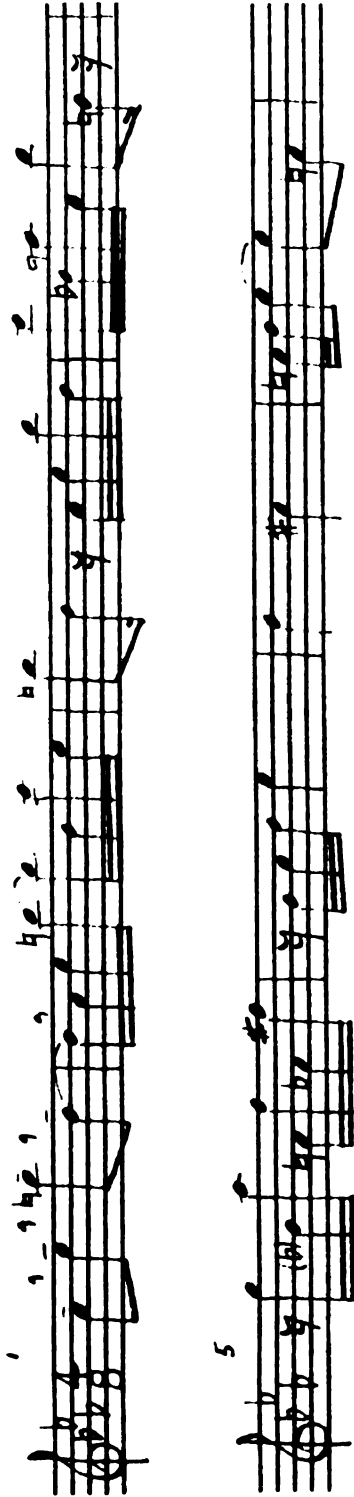
The nature of the encoding system can be more easily understood if the user remembers that the computer program locates pitch patterns by comparing the value of consecutive numeric designations regardless of their placement upon the data card; it locates rhythmic patterns by measuring the distance separating consecutive attack-points regardless of their numeric (pitch) content. The program is capable of performing these operations either independently or simultaneously depending upon the test used.

The system for representing rhythm is well suited to visual checking for errors, since the placement of attack-points on the data cards provides a visual representation of the rhythm. While such a system is easy enough that anyone familiar with the fundamentals of music can use it, it is limited in one important respect: it lacks provisions for encoding irrational rhythms. In other words, rhythms which do not evenly subdivide within the prevailing meter cannot be represented with this system.

In order to complete preparation of the data, the user must place two additional data cards before the cards containing the pitch and/or rhythm data. The first card specifies the title of the musical excerpt to be analyzed. The second card contains two numeric values: the first value indicates either the maximum number of rhythmic units to be found on the cards which follow (when using Tests 9 through 26), or the maximum number of pitches to be punched on any card which follows (when using Tests 0 through 8); the second value indicates which test is to be conducted. These two values are punched so that they appear right-justified to columns 10 and 20, respectively.

The following music examples by Bach and Stravinsky illustrate

how both rhythm and pitch content of the scores were translated into numeric representation and prepared for submission as input data. Each printed line beneath the double-ruling represents the content of one punched card.

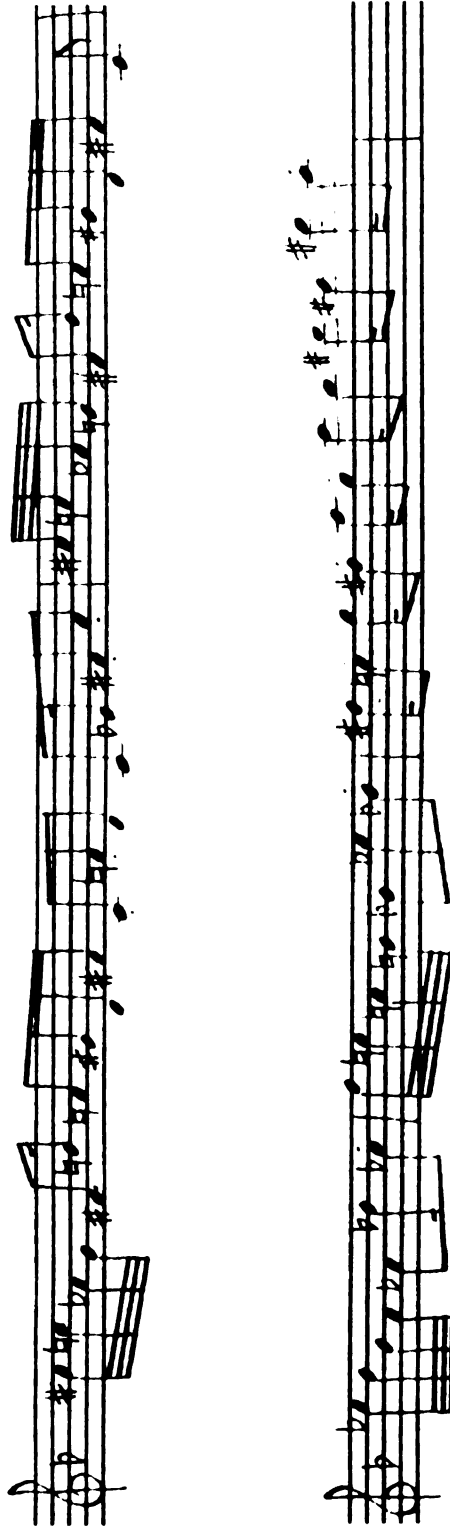


Card Column Numbers

title units; test meas. 1, 2 meas. 3, 4 meas. 5, 6 meas. 7, 8 end of data	IGOR STRAVINSKY		SYMPHONY OF PSALMS, SECOND MOVEMENT																	
	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80				
		16		14																
	62	65		73			64			62	65	73		64	74	65				
	73	64	-1	62	65	65	73	64	74	63	71	62	72		61	-1				
		69	60	70	59	67	58	68	-1	60	62	64	65							
	64				63				62	64	65				59					
	-99																			

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 New Version copyright 1948 by Boosey & Hawkes, Inc., New York
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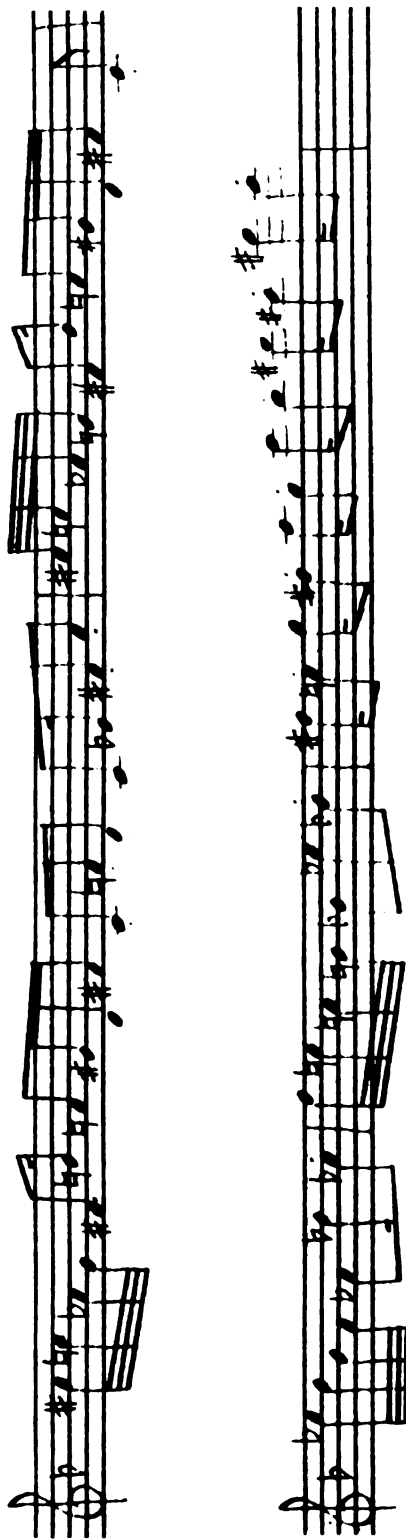
The following music excerpt by Messiaen was encoded in two ways. The excerpt is first shown encoded so that only the pitch content of the musical score is represented on the punched card. This method of representation was designed to be used by the analyst who wishes to analyze the data with tests which analyze pitch content only (Tests 0 through 8). The second method of encoding illustrates how both pitch and rhythm content are represented on the punched card. This method of representation must be used if the analyst wishes to analyze the data with tests which analyze rhythm content (Tests 9 through 26); it may also be used with Tests 0 through 8 as well.



		Card Column Numbers																	
title																			
unit; test																			
card	1	63	62	58	57	56	61	59	58	52	56	50	57	52	50	53			
card	2	56	59	63	62	58	57	56	61	59	58	52	56	50	65	64			
card	3	60	59	58	63	61	67	66	62	61	60	65	63	68	66	69			
card	4	68	71	69	74	73	77	75	80	79	-99								

'LES ANGES' FROM 'LA NATIVITE DU SEIGNEUR' BY OLIVIER MESSIAEN

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Card Column Numbers

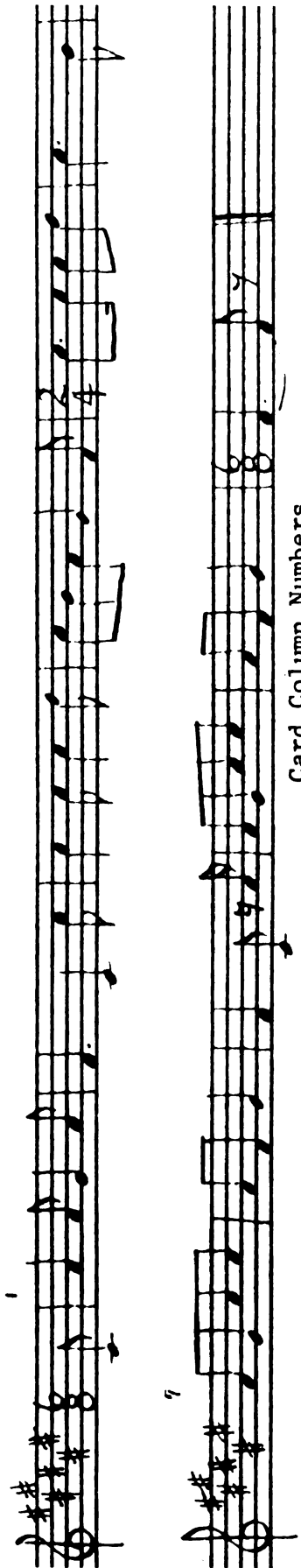
title	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
unit; test				12												
card 1	63	62	58	57	56				61	59					58	
card 2	52		56		50				57			52				
card 3	50				53		56			59					63	62
card 4	58	57	56				61		59			58			52	
card 5	56		50				65	64	60	59					63	
card 6	61				67	66	62	61	60			65			63	
card 7			68		66				69		68				71	
card 8	69						73				77					
card 9	80		79		74		-99					75				

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Owners and Publishers. Used by permission.

There is one additional feature of the encoding system which was designed to facilitate the coding of music which contains a change of meter. This feature allows the user to change the number of notes or rhythmic units to be read from each data card. This change is accomplished by placing a special card before the cards which contain the new number of notes or rhythmic units per card. This special card is indicated by the number -88 punched in columns 3 through 5 followed by the new unit number which is punched right-justified to column 10 on the same card.¹

The example found on the following page illustrates the procedure. The melody begins in $\frac{6}{8}$ meter with the smallest duration being the sixteenth-note. In order to place the content of one measure to a card, it is necessary to assign the unit equal to the sixteenth-note and code twelve of these units (or one measure) to each data card. At measure five, the meter changes to $\frac{2}{4}$; in order to continue punching the content of one measure to each card, the card containing the numbers: -88 8 is placed in the data deck to reduce the number of units to be read from the cards which follow to eight. At measure twelve, $\frac{6}{8}$ meter is re-established and the card containing the numbers: -88 12 causes the program to read another twelve units of data from the following card.

¹Unit values must always be greater than zero and less than seventeen. When raising the unit value from one (1) to a greater value, two identical cards of this type must be included to accomplish the change.




Card Column Numbers

	5	10	15	20	25	30	35	40	45	50	55
title											
unit; test		12									
pick-up beat				0							
meas. 1	60				60		58				51
meas. 2	56						51				60
meas. 3	63				63		63				60
meas. 4	63		62		60		58				65
change of unit	-88	8									56
meas. 5	63			63	63		65				
meas. 6	63						62				
meas. 7	60				63		63				
meas. 8	48		58		58						
meas. 9	56		56								
meas. 10	60		58		51		-1	60			
meas. 11	60		56		63		63				
change of unit	-88	12									
meas. 12	56										
end of data	-99										-1

Robert W. Ottman, Music for Sight Singing, 2nd ed., © 1967, p. 205.
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Source Listing for the Music Analysis Program

```
// JOB ZILCH,STECH T=10
// CPTICN LINK
// CPTICN DECK
// ACTION NCAUTO
// PHASE FILER,ROOT
// INCLUDE ILFIBCOM
// INCLUDE ILFFINT
// INCLUDE ILFADCON
// INCLUDE ILFFIOCS
// INCLUDE ILFUNTAB
// INCLUDE IJJCPD1
// INCLUDE ILFFEXIT
// INCLUDE TIMER
// EXEC FFORTAN
```



IBM 360/40 Control Cards

[illegible]


```

C      1  TEST  TONAL CONTOUR (ORIGINAL)  ROOT 37
C      2  TEST  EXACT CONTOUR (ORIGINAL)  ROOT 38
C      3  TEST  TONAL INVERSION           ROOT 39
C      4  TEST  EXACT INVERSION           ROOT 40
C      5  TEST  TONAL RETROGRADE         ROOT 41
C      6  TEST  EXACT RETROGRADE         ROOT 42
C      7  TEST  TONAL RETROGRADE INVERSION  ROOT 43
C      8  TEST  EXACT RETROGRADE INVERSION  ROOT 44
C      9  TEST  RHYTHM ONLY              ROOT 45
C     10  TEST  RHYTHM RETROGRADE ONLY    ROOT 46
C     11  TEST  RHYTHM WITH TONAL CONTOUR (ORIGINAL)  ROOT 47
C     12  TEST  RHYTHM WITH EXACT CONTOUR (ORIGINAL)  ROOT 48
C     13  TEST  RHYTHM WITH TONAL INVERSION  ROOT 49
C     14  TEST  RHYTHM WITH EXACT INVERSION  ROOT 50
C     15  TEST  RHYTHM WITH TONAL RETROGRADE  ROOT 51
C     16  TEST  RHYTHM WITH EXACT RETROGRADE  ROOT 52
C     17  TEST  RHYTHM WITH TONAL RETROGRADE INVERSION  ROOT 53
C     18  TEST  RHYTHM WITH EXACT RETROGRADE INVERSION  ROOT 54
C     19  TEST  RHYTHM RETROGRADE WITH TONAL CONTOUR (ORIGINAL)  ROOT 55
C     20  TEST  RHYTHM RETROGRADE WITH EXACT CONTOUR (ORIGINAL)  ROOT 56
C     21  TEST  RHYTHM RETROGRADE WITH TONAL INVERSION  ROOT 57
C     22  TEST  RHYTHM RETROGRADE WITH EXACT INVERSION  ROOT 58
C     23  TEST  RHYTHM RETROGRADE WITH TONAL RETROGRADE  ROOT 59
C     24  TEST  RHYTHM RETROGRADE WITH EXACT RETROGRADE  ROOT 60
C     25  TEST  RHYTHM RETROGRADE WITH TONAL RETROGRADE INVERSION  ROOT 61
C     26  TEST  RHYTHM RETROGRADE WITH EXACT RETROGRADE INVERSION  ROOT 62
C     27  TEST  RHYTHM RETROGRADE WITH EXACT RETROGRADE INVERSION  ROOT 63
C     28  TEST  RHYTHM RETROGRADE WITH EXACT RETROGRADE INVERSION  ROOT 64
C     29  TEST  RHYTHM RETROGRADE WITH EXACT RETROGRADE INVERSION  ROOT 65
C     30  TEST  RHYTHM RETROGRADE WITH EXACT RETROGRADE INVERSION  ROOT 66
C     31  TEST  RHYTHM RETROGRADE WITH EXACT RETROGRADE INVERSION  ROOT 67
C     32  TEST  RHYTHM RETROGRADE WITH EXACT RETROGRADE INVERSION  ROOT 68
C     33  TEST  RHYTHM RETROGRADE WITH EXACT RETROGRADE INVERSION  ROOT 69
C     34  TEST  RHYTHM RETROGRADE WITH EXACT RETROGRADE INVERSION  ROOT 70
C     35  TEST  RHYTHM RETROGRADE WITH EXACT RETROGRADE INVERSION  ROOT 71
C     36  TEST  RHYTHM RETROGRADE WITH EXACT RETROGRADE INVERSION  ROOT 72

```

```

C      INTO CORE.  WHEN A NEW SUBROUTINE IS CALLED INTO CORE, THE
C      SUBROUTINE PREVIOUSLY IN CORE IS OVERWRITTEN.
C
C*****
C      IBM 360 OVERLAY CONTROL CARDS
C
C      IFILE = 3
C      CALL OPSYS('LOAD','FILEB100')
C      CALL START
C      CALL OPSYS('LOAD','FILEB150')
C      CALL IVAL
C      1 IF(KPHAS.EQ.1) CALL OPSYS('LOAD','FILEB200')
C        IF(KPHAS.EQ.1) CALL NOTEB
C        IF(DIGIT.GT.LIMIT) GO TO 2
C        IF(KPHAS.EQ.2) CALL OPSYS('LOAD','FILEB600')
C        IF(KPHAS.EQ.2) CALL NOTEC
C        IF(IFILE.EQ.1) CALL OPSYS('LOAD','FILEB300')
C        IF(IFILE.EQ.1) CALL HEDIN
C        IF(IFILE.EQ.2) GO TO 2
C        IFILE = 0
C        GO TO 1
C      2 CALL OPSYS('LOAD','FILEB400')
C        CALL FINISH
C        CALL OPSYS('LOAD','FILEB500')
C        CALL SIFT
C        STOP
C        END
C
C      PHASE FILEB100.*
C      // EXEC FFORTRAN

```

```

ROOT 73
ROOT 74
ROOT 75
*****ROOT 76
ROOT 77
ROOT 78
ROOT 79
ROOT 80
ROOT 81
ROOT 82
ROOT 83
ROOT 84
ROOT 85
ROOT 86
ROOT 87
ROOT 88
ROOT 89
ROOT 90
ROOT 91
ROOT 92
ROOT 93
ROOT 94
ROOT 95
ROOT 96
ROOT 97
ROOT 98
ROOT 99
ROOT 100
ROOT 101

```

```

SUBROUTINE START
INTEGER ASTOR,BSSTOR,TESTA,TESTB,TESTC,TESTD,SWITCH,SPECEK,TSTOP,ID,
IUNIT,BETA(10),NOTE(5000),LIB(05000),TEST,DIGIT
DOUBLE PRECISION LTITLE(1J),LTEST(10),ALPHA(30)
COMMON/A/IFILE,TEST,KPHAS,DIGIT,LIMIT
DATA ALPHA/8HTCNAL CO.8HNTJR (O.8HRIGINAL),8HEXACT CO.8HNTOUR (C,STRT
18HRIGINAL),8HTONAL IN.8HVE<SION .8H
18H ,8HTONAL RE.8HT<GRADE.8H
18H ,8HTONAL RE.8HT. INVER,8HSION
18HSION ,8HRHYTHM .8H
18HE /
DATA BETA /4HEXAC.4HT <.4HHYT4.4HM W.4HITH ,4HRHYT.4HHM R,
14METRO.4HGRAD.4HE W./
DATA LDGT,J.KEY,LASTOR,LBACK,LIMPR,LP.LQ,LR,LS,
ILSEQ,LSUB,LFLAG,LTALLY,LTOTAL,LLX,LPZ,NDIGIT,SPECEK,SWITCH,
LTESTDIF,LT,LV,LW,LX,LG,KDGT,JUNCT/
11.1.0.0.1.0.0.0.0.0.2.1.0.0.1.1.6.0.3.382436.0.0.0.0.0.0/
*****
THE SIZE OF 'NOTE' ARRAY MAY BE INCREASED OR DECREASED SO THAT
IT WILL BE OF EQUAL OR GREATER SIZE THAN THE AMOUNT OF MUSIC
INPUT DATA TO BE ANALYZED.
THE SIZE OF 'LIB' ARRAY MUST BE LARGE ENOUGH TO STORE THE PATTERN
INFORMATION GENERATED BY THE PROGRAM. THE MAXIMUM SIZE OF THIS
ARRAY NEEDED FOR ANY GIVEN ANALYSIS MAY BE DETERMINED BY
ACTIVATING STATEMENT NUMBER 264 OF SUBROUTINE 'NOTER'.
LIMIT VALUE MUST BE EQUAL SIZE OF LIB ARRAY SHOWN IN INTEGER
TYPE STATEMENT ABOVE.
NOTE VALUE MUST BE EQUAL SIZE OF NOTE ARRAY SHOWN IN INTEGER
TYPE STATEMENT ABOVE.
LPOR DETERMINES PRINT FORMAT USED. SFT LPOR TO 16 FOR

```

```

C      FULL PRINT OUTPUT.  SET 'LPQR' TO 0 (ZERO) FOR ELIMINATION
C      CF SOME PAGE HEADINGS.
C      IBM 'TIMER' FUNCTION RETURNS COMPUTER CLOCK TIME CALCULATED IN
C      SIXTIETHS OF A SECOND.  VARIABLE 'LTIME' IS SUBTRACTED
C      FROM LATER TIME CHECKS TO DETERMINE ELAPSED EXECUTION TIME.
C
C      LIMIT = 5000
C      NT = 5000
C      CALL TIMER(LTIME)
C      LPQR = 16
C
C*****
C      REWIND 4
C      REWIND 5
C      REWIND 6
C      REWIND 7
C      REWIND 8
C
C      DIGIT = 1
C      KPHAS = 1
C      TEST = -2
C      DO 1 I=1,NT
C          1 NOTE(I) = 0
C
C      READ(1,44) LTITLE
C      READ(1,38) UNIT,TEST
C      WRITE(3,37)
C      WRITE(3,52) LTITLE,TEST,UNIT
C
C      IF(UNIT.GE.01.AND.UNIT.LE.16) GO TO 3
C          2 WRITE(3,54)
C          CALL EXIT

```

37 STRT
 38 STRT
 39 STRT
 40 STRT
 41 STRT
 42 STRT
 43 STRT
 44 STRT
 45 STRT
 46 STRT
 47 STRT
 48 STRT
 49 STRT
 50 STRT
 51 STRT
 52 STRT
 53 STRT
 54 STRT
 55 STRT
 56 STRT
 57 STRT
 58 STRT
 59 STRT
 60 STRT
 61 STRT
 62 STRT
 63 STRT
 64 STRT
 65 STRT
 66 STRT
 67 STRT
 68 STRT
 69 STRT
 70 STRT
 71 STRT
 72 STRT

C	3	IF(TEST.GE.OO.AND.TEST.LE.26) GO TO 4	STRT 73
		WRITE(3,55)	STRT 74
		CALL EXIT	STRT 75
C	4	KX = UNIT	STRT 76
		K = UNIT	STRT 77
		WRITE(6,44) LTITLE	STRT 78
		WRITE(6,41) LT,LT,LT,LT,LT	STRT 79
	5	READ(1,39) (NOTE(I),I=J,K)	STRT 80
		IF(NOTE(J).EQ.(-88)) GO TO 9	STRT 81
		DC 6 KK=J,K	STRT 82
		IF(KK.GT.NT) GO TO 7	STRT 83
		IF(NOTE(KK).EQ.(-99)) GO TO 7	STRT 84
		IF(NOTE(KK).EQ.99999) JUNCT = 1	STRT 85
	6	CONTINUE	STRT 86
		IF(UNIT.EQ.1) WRITE(3,50) J,NOTE(J)	STRT 87
		IF(UNIT.GE.2) WRITE(3,51) J,K	STRT 88
		IF(UNIT.GE.2.AND.UNIT.LT.16) WRITE(3,40)	STRT 89
		IF(UNIT.EQ.16) WRITE(3,36)	STRT 90
		J = J + KX	STRT 91
		K = K + KX	STRT 92
		GO TO 5	STRT 93
C	7	IF(UNIT.EQ.1) WRITE(3,50) J,NOTE(J)	STRT 94
		IF(UNIT.GE.2) WRITE(3,51) J,KK	STRT 95
		IF(UNIT.GE.2.AND.UNIT.LT.16) WRITE(3,40)	STRT 96
		IF(UNIT.EQ.16) WRITE(3,36)	STRT 97
		IF(KK.LE.NT) GO TO 8	STRT 98
		WRITE(3,56)	STRT 99
		CALL EXIT	STRT 100
C	8	K = K - KX	STRT 101
		MASTB = KK - 1	STRT 102
		TSTOR = TEST	STRT 103
		GO TO 10	STRT 104
			STRT 105
			STRT 106
			STRT 107
			STRT 108

```

C
9 IF(UNIT.EQ.1) READ(1.39)  NOTE(J),NOTE(J+1)
  KA = NOTE(J+1)
  WRITE(3.53) KA
  IF(KA.GT.16) GO TO 2
  IF(KA.LT.1) GO TO 2
  J = K + 1 - UNIT
  K = J + KA - 1
  KX = KA
  UNIT = KA
  GO TO 5
C
C
C
C
      THE FOLLOWING LOOP CHECKS FOR MIS-PUNCHED DATA.
10 DO 11 L=1,MASTB
  IF(NOTE(L).EQ.(-1).AND.NOTE(L+1).EQ.00) NOTE(L+1) = (-1)
  LN = NOTE(L)
  IF(LN.EQ.(-1)) GO TO 11
  IF(LN.EC.00) GO TO 11
  IF(LN.EQ.99999) GO TO 11
  IF(LN.LE.99.AND.LN.GE.10) GO TO 11
  LG = 1
  WRITE(3.49) L
11 CONTINUE
  IF(LG.EC.1) CALL EXIT
  WRITE(5) LTITLE,NOTE
  IF(TEST.LE.10) GO TO 17
  IF(TEST.GE.11.AND.TEST.LE.18) GO TO 14
  LR = 6
  LS = 10
  IF(TEST.GE.23) GO TO 12
  KEY = 1
  GO TO 13
12 KEY = (-1)
  LLX = 10

```

STRT 109
STRT 110
STRT 111
STRT 112
STRT 113
STRT 114
STRT 115
STRT 116
STRT 117
STRT 118
STRT 119
STRT 120
STRT 121
STRT 122
STRT 123
STRT 124
STRT 125
STRT 126
STRT 127
STRT 128
STRT 129
STRT 130
STRT 131
STRT 132
STRT 133
STRT 134
STRT 135
STRT 136
STRT 137
STRT 138
STRT 139
STRT 140
STRT 141
STRT 142
STRT 143
STRT 144

```

      LBACK = (-1)
13  TEST = TEST - 18
      KTES = 10
      GC TO 18
14  LR = 1
      LS = 5
      IF(TEST.LE.14) GO TO 15
      LBACK = (-1)
      KEY = 1
      GO TO 16
15  KEY = (-1)
      LLX = 9
16  TEST = TEST - 10
      KTES = 9
      GC TO 18
C
17  LO = TEST * 3
      LP = LO - 2
      WRITE(4) (ALPHA(LN),LN=LP,LQ)
      IF(TEST.GE.9) LLX = TEST
      IF(TEST.GE.5) LBACK = (-1)
      IF(TEST.EQ.9) LBACK = 1
      GO TO 19
C
18  LO = TEST * 3
      LP = LO - 2
      WRITE(4) (BETA(LT),LT=LR,LS),(ALPHA(LN),LN=LP,LQ)
C
19  REWIND 4
      READ(4) LTEST
      REWIND 4
      WRITE(5) TSTOR,KEY,TESTDIF,LTEST,LTIME,LPOR
      REWIND 5
C
      LT = 0
      ASTOR = 1

```

STRT 145
 STRT 146
 STRT 147
 STRT 148
 STRT 149
 STRT 150
 STRT 151
 STRT 152
 STRT 153
 STRT 154
 STRT 155
 STRT 156
 STRT 157
 STRT 158
 STRT 159
 STRT 160
 STRT 161
 STRT 162
 STRT 163
 STRT 164
 STRT 165
 STRT 166
 STRT 167
 STRT 168
 STRT 169
 STRT 170
 STRT 171
 STRT 172
 STRT 173
 STRT 174
 STRT 175
 STRT 176
 STRT 177
 STRT 178
 STRT 179
 STRT 180


```

20 IF(NOTE(ASTOR).GT.00) GO TO 21
   ASTOR = ASTOR + 1
   GO TO 20

21 LT = ASTOR
22 LT = LT + 1
   IF(NOTE(LT).LE.00) GO TO 22
   LV = LV + 1
   IF(LV.EQ.LSUB) GO TO 23
   GO TO 22

23 BSTOR = LT
   TESTA = BSTOR
   LW = TESTA
24 LW = LW + 1
   IF(NOTE(LW).LE.00) GO TO 24
   LX = LX + 1
   IF(LX.EQ.LSUB) GO TO 25
   GO TO 24

25 TESTB = LW
   LASTOR = ASTOR
26 IF(TSTOR.EQ.00) GO TO 35
   WRITE(3.48)
   IF(TSTOR.EQ.9) GO TO 27
   IF(TSTOR.EQ.10) GO TO 27
   WRITE(3.45)
   GO TO 28

27 WRITE(3.46)
   GO TO 30

28 GO TO(29,30,29,30,29,30,29,30,30,30).TEST
29 WRITE(3.47)
30 IF(TSTOR.EQ.10) GO TO 31
   GO TO 32

31 WRITE(3.43)
32 IF(TSTOR.GE.19) GO TO 33
   GO TO 34

33 WRITE(3.43)

```

C

```

STRT 181
STRT 182
STRT 183
STRT 184
STRT 185
STRT 186
STRT 187
STRT 188
STRT 189
STRT 190
STRT 191
STRT 192
STRT 193
STRT 194
STRT 195
STRT 196
STRT 197
STRT 198
STRT 199
STRT 200
STRT 201
STRT 202
STRT 203
STRT 204
STRT 205
STRT 206
STRT 207
STRT 208
STRT 209
STRT 210
STRT 211
STRT 212
STRT 213
STRT 214
STRT 215
STRT 216

```

```

34 IF(TSTOR.LT.15) GO TO 35
   IF(TSTOR.GT.22) GO TO 35
   WRITE(3,42)
C
35 WRITE(4) MASTB,NOTE,LIB,ASTOR,8STOR,TESTA,NNNB,LL,LZ,LBACK,KTES,
   ITSTB,TESTDIF,SWITCH,SPECEK,LFLAG,LPZ,LTIME,LTEST,KDGT,LDGT,LLL,
   ITSTCR,LASTOR,LHOLD,LLX,LSJB,LTOTAL,NNN,KEY,NDIGIT,LTALLY,LIMPR,
   ILPOR,JUNCT
   REWIND 4
   RETURN
C
36 FORMAT(39X,16I3)
37 FORMAT(1H1,/)
38 FORMAT(8I10)
39 FCRMAT(16I5)
40 FORMAT(34X,16I4)
41 FORMAT(10X,5I10)
42 FORMAT(34X,55HLISTING MAY INCLUDE SOME CROSS-REFERENCES TO STATEMENT
   INTS./,36X,51HNOT PREVIOUSLY SHOWN. IGNORE THESE CROSS-REFERENCE,
   1/,36X,11HSTATEMENTS./)
43 FCRMAT(34X,61H*SYM* DESIGNATES NONRETROGRADABLE (I.E., SYMMETRICAL
   1) RHYTHM./)
44 FORMAT(10A8)
45 FORMAT(41X,43HPATTERNS WHICH ARE REITERATIONS LONGER THAN,/,
   142X,20HFOUR NOTES-IN-LENGTH,/)
46 FORMAT(40X,42HPATTERNS WHICH CONTAIN AN UNDEFINED RHYTHM,/)
47 FORMAT(40X,39HPATTERNS WHICH LACK CHANGE-OF-DIRECTION,/)
48 FORMAT(//,34X,48HTHE FOLLOWING TYPES OF PATTERN HAVE BEEN DELETED,
   1/,36X,33HFROM THE LISTINGS WHICH FOLLOW --,/)
49 FORMAT(40X,39H*** ILLEGAL PITCH VALUE AT OR NEAR NOTE,15,4H ***)
50 FORMAT(34X,4HNOTE,15,110)
51 FORMAT(/,34X,5HNOTES,15,8H THROUGH,15)
52 FORMAT(/,34X,13(1H*),34H MUSIC MELODIC PATTERN ANALYSIS ,
   113(1H*), ///,25X,10A8,///,40X,15HTEST REQUESTED ,14,/,40X,
   123HUNITS OF DATA PER CARD .14,///,40X,37HCOMPUTER REFERENCE NUMB
   IER ASSIGNMENT ,/)
STRT 217
STRT 218
STRT 219
STRT 220
STRT 221
STRT 222
STRT 223
STRT 224
STRT 225
STRT 226
STRT 227
STRT 228
STRT 229
STRT 230
STRT 231
STRT 232
STRT 233
STRT 234
STRT 235
STRT 236
STRT 237
STRT 238
STRT 239
STRT 240
STRT 241
STRT 242
STRT 243
STRT 244
STRT 245
STRT 246
STRT 247
STRT 248
STRT 249
STRT 250
STRT 251
STRT 252

```

```

53 FORMAT(/,46X,33HUNITS OF DATA PER CARD CHANGED TO,15)      STRT 253
54 FORMAT(/,34X,57HUNSPECIFIED OR ILLEGAL UNIT VALUE. EXECUTION TERMSTRT 254
    INATED.) STRT 255
55 FORMAT(/,34X,57HUNSPECIFIED OR ILLEGAL TEST VALUE. EXECUTION TERMSTRT 256
    INATED.) STRT 257
56 FORMAT(/,34X,58HINPUT DATA EXCEEDS NOTE ARRAY SIZE. EXECUTION TERSTRT 258
    MINATED.,// ,37X,43HONE OF THE FOLLOWING CHANGES MUST BE MADE--,/STRT 259
    1/,37X,45H1) AMOUNT OF INPJT DATA MUST BE REDUCED, OR,.,//,37X, STRT 260
    161H2) SIZE OF 'NOTE' AND 'LIB' ARRAYS CONTAINED IN SUBROUTINES , STRT 261
    1/,42X,55HMUST BE INCREASED. (IF ARRAY SIZES ARE INCREASED, MORE, STRT 262
    1/,42X,56HEXECUTION TIME WILL BE REQUIRED. RESET 'NT' AND 'LIMIT',STRT 263
    1/,42X,55H VARIABLES CONTAINED IN 'START' SUBROUTINE TO CORRESPOND, STRT 264
    1/,42X,19HTO SIZE OF ARRAYS.)) STRT 265
    END STRT 266

```

```

PHASE FILEB150,FILEB100
// EXEC FFORTRAN

```



```

C
IF(NOTE(I).EQ.(-99)) GO TO 10
IF(NOTE(I).LE.00) GO TO 4
IF(NOTE(I).GE.999) GO TO 2
LTESTB = NOTE(I)
C
INTVAL = LTESTA - LTESTB
IF((J.EQ.1.OR.J.EQ.3).AND.INTVAL.GT.24) GO TO 9
IF(J.LE.2.AND.INTVAL.LT.(-24)) GO TO 9
IF(INTVAL.GT.24) GO TO 3
IF(INTVAL.LT.(-24)) GO TO 3
IF(INTVAL.EQ.00) GO TO 8
GO TO (7,5,6),J
5 IF(INTVAL) 7,3,3
6 IF(INTVAL) 3,3,7
7 INT = IABS(INTVAL)
C
SCOREBOARD
KSUB = INT + 1
SKOR(KSUB) = SKOR(KSUB) + 1.
GO TO 3
8 SKOR(1) = SKOR(1) + 1.
GO TO 3
9 SKOR(26) = SKOR(26) + 1.
GO TO 3
C
CONVERSION TO FLOATING POINT MODE
C
10 DO 11 M = 1,26
11 LSKOR(M) = SKOR(M)
C
XXL = 0.
DO 12 M = 1,26
12 XXL = XXL + SKOR(M)
IF(J.GT.1) XXL = XXL - (SKOR(1))
C
PERCENTAGE COMPUTATIONS
C
IVAL 37
IVAL 38
IVAL 39
IVAL 40
IVAL 41
IVAL 42
IVAL 43
IVAL 44
IVAL 45
IVAL 46
IVAL 47
IVAL 48
IVAL 49
IVAL 50
IVAL 51
IVAL 52
IVAL 53
IVAL 54
IVAL 55
IVAL 56
IVAL 57
IVAL 58
IVAL 59
IVAL 60
IVAL 61
IVAL 62
IVAL 63
IVAL 64
IVAL 65
IVAL 66
IVAL 67
IVAL 68
IVAL 69
IVAL 70
IVAL 71
IVAL 72

```

```

C      IF(XXL.LE.00) GO TO 14
      DO 13 M = 1,26
      13 SKOR(M) = (SKOR(M)/XXL) * 100.0
C
      14 WRITE(3,36)
      WRITE(3,31) LTITLE
      GO TO (15,16,17), J
C
      15 WRITE(3,30)
      GO TO 18
      16 WRITE(3,33)
      GO TO 18
      17 WRITE(3,32)
      18 WRITE(3,34)
C
      DO 19 LL = 1,24
      KK = LL + 1
      19 WRITE(3,38) LAMMA(LL).LSKOR(KK).SKOR(KK)
C
      IF(J.GT.1) GO TO 20
      WRITE(3,35) LSKOR(1).SKOR(1)
      20 WRITE(3,37) LSKOR(26).SKOR(26)
      21 LX = XXL
      GO TO (22,23,24), J
      22 WRITE(3,40) LX
      GO TO 25
      23 WRITE(3,41) LX
      GO TO 25
      24 WRITE(3,42) LX
      25 CONTINUE
C
      26 CONTINUE
C
      CALL TIMER(JX)
      JX=(JX-LTIME)/60

```

IVAL 73
 IVAL 74
 IVAL 75
 IVAL 76
 IVAL 77
 IVAL 78
 IVAL 79
 IVAL 80
 IVAL 81
 IVAL 82
 IVAL 83
 IVAL 84
 IVAL 85
 IVAL 86
 IVAL 87
 IVAL 88
 IVAL 89
 IVAL 90
 IVAL 91
 IVAL 92
 IVAL 93
 IVAL 94
 IVAL 95
 IVAL 96
 IVAL 97
 IVAL 98
 IVAL 99
 IVAL 100
 IVAL 101
 IVAL 102
 IVAL 103
 IVAL 104
 IVAL 105
 IVAL 106
 IVAL 107
 IVAL 108

```

IF(TSTOR.EQ.00) GO TO 27
WRITE(3,36)
WRITE(3,43)
WRITE(3,31) LTITLE
IF(LPQR.GT.15.AND.TSTOR.LE.10) WRITE(3,44) TESDIF.(LTEST(KB).
1KB=1,3)
IF(LPQR.GT.15.AND.TSTOR.GT.10) WRITE(3,45) TESDIF,LTEST
IF(LPQR.GT.15) WRITE(3,46) JX
IF(LPQR.LE.15) WRITE(3,47)
GO TO 28

27 IF(TEST.EQ.00) WRITE(3,39) TEST,JX
IF(TEST.EQ.00) WRITE(3,36)
IF(TEST.EQ.00) CALL EXIT
28 REWIND 5
RETURN

C
C
C
C
29 STATEMENT NUMBER UNUSED.
30 FCRMAT(46X,35HASCENDING AND DESCENDING INTERVALS*)
31 FORMAT(25X,10A8,/)
32 FORMAT(53X,20HDESCENDING INTERVALS)
33 FORMAT(53X,19HASCENDING INTERVALS)
34 FCRMAT(46X,34H(INCLUDING ENHARMONIC EQUIVALENTS).///.56X,
15HTOTAL,16X,10HPERCENTAGE,/.53X,11HOCCURRENCES,12X,
113HCF OCCURRENCE,/)
35 FORMAT(34X,10HUNISON ,13X,15,19X,F6.2)
36 FORMAT(1H1,/)
37 FCRMAT(34X,10HINTERVALS ,13X,15,19X,F6.2,/.36X,13HEXCEEDING TWC,/,IVAL 138
136X,7HOCTAVES,/)
38 FORMAT(34X, A8,12X,15,19X,F6.2)
39 FORMAT(//,34X,10H*** TEST,13,13H COMPLETED AT,15,29H SECONDS INTIVAL 141
10 EXECUTION ***)
40 FCRMAT(53X,16,18H INTERVALS COUNTED,////////,34X,18H#INCLUDING UNIVAL 143
1SONS)
IVAL 109
IVAL 110
IVAL 111
IVAL 112
IVAL 113
IVAL 114
IVAL 115
IVAL 116
IVAL 117
IVAL 118
IVAL 119
IVAL 120
IVAL 121
IVAL 122
IVAL 123
IVAL 124
IVAL 125
IVAL 126
IVAL 127
IVAL 128
IVAL 129
IVAL 130
IVAL 131
IVAL 132
IVAL 133
IVAL 134
IVAL 135
IVAL 136
IVAL 137
IVAL 138
IVAL 139
IVAL 140
IVAL 141
IVAL 142
IVAL 143
IVAL 144

```

```

41 FORMAT(53X,16.28H ASCENDING INTERVALS COUNTED) IVAL 145
42 FORMAT(53X,16.29H DESCENDING INTERVALS COUNTED) IVAL 146
43 FCRMAT(54X,22H*** TYPE I LISTING ***,/) IVAL 147
44 FORMAT(44X,22HSEARCH FOR PATTERNS OF ,13.20H NOTES IN LENGTH -- , IVAL 148
    1/.53X,3A8) IVAL 149
45 FORMAT(44X,23HSEARCH FOR PATTERNS OF ,13.20H NOTES IN LENGTH -- , IVAL 150
    1/.44X,10A8) IVAL 151
46 FORMAT(45X,12HWAS BEGUN AT,15.24H SECONDS INTO EXECUTION.,//, IVAL 152
    134X,60HPATTERN NOTES RELATED TO NOTES TEST LENGTIVAL 153
    1H,/) IVAL 154
47 FCRMAT(//, IVAL 155
    134X,60HPATTERN NOTES RELATED TO NOTES TEST LENGTIVAL 156
    1H,/) IVAL 157
    END IVAL 158

```

```

PHASE FILEB200.FILEB100
// EXEC FFORTAN

```



```

SUBROUTINE NOTEB
INTEGER OLDLIM,ASTOR,BSTOR,TESTA,TESTB,TESTDIF,SWITCH,SPECEK,TSTOR,NOTB
1TO,YHOLD,TEST,DIGIT,AS,BS,TA,TB,TESTC
DIMENSION NOTE(5000),LIB(5000)
DOUBLE PRECISION LTEST(10),LETA(2)
COMMON/A/IFILE,TEST,KPHAS,DIGIT,LIMIT
DATA LETA/8H      .8H (SYM) /
DATA INDEXG,KP,NRR/1.2,1/

      IF(IFILE.EQ.00) GO TO 57
      IF(LFLAG.EQ.2) GO TO 39
      READ(4)  MASTB,NOTE,LIB,ASTOR,BSTOR,TESTA,NNNB,LL,LZ,LBACK,KTES,
1TESTB,TESTDIF,SWITCH,SPECEK,LFLAG,LPZ,LTIME,LTEST,KDGT,LDGT,LLL,
ITSTOR,LASTOR,LHOLD,LLX,LSJB,LTOTAL,NNN,KEY,NDIGIT,LTALLY,LIMPR,
ILPOR,JUNCT
      REWIND 4
1  IF(DIGIT.EQ.1) GO TO 29
   IF(LASTOR.EQ.ASTOR) GO TO 28

      SWITCH = 0
      SPECEK = 0
      JAS = 0
      JBS = 0
      LDIGIT = DIGIT - 1

      LLG = 1
      IF(TESDIF.GT.3) LLG = LHOLD + 1

      IF(LLG.GT.LDIGIT) GO TO 27
      DO 26 NNNB = LLG,LDIGIT
      IF(LIB(NNNB).LT.00) GO TO 26

2  LPZ = (+1)
   IF(SPECEK.EQ.00) GO TO 3

```

NOTB 37
 NOTB 38
 NOTB 39
 NOTB 40
 NOTB 41
 NOTB 42
 NOTB 43
 NOTB 44
 NOTB 45
 NOTB 46
 NOTB 47
 NOTB 48
 NOTB 49
 NOTB 50
 NOTB 51
 NOTB 52
 NOTB 53
 NOTB 54
 NOTB 55
 NOTB 56
 NOTB 57
 NOTB 58
 NOTB 59
 NOTB 60
 NOTB 61
 NOTB 62
 NOTB 63
 NOTB 64
 NOTB 65
 NOTB 66
 NOTB 67
 NOTB 68
 NOTB 69
 NOTB 70
 NOTB 71
 NOTB 72

```

    NSTORA = LIB(LL)
    GO TO 4
3  NSTCRA = LIB(NNNB)
4  NSTORB = NSTORA
   IF(NSTORA.GT.00) GO TO 5
   LPZ = (-1)
   NSTORB = NSTORB * (-1)
   NSTORA = NSTORB

C
5  LA = NSTORB/(10**6)
   NSTORB = LA * (10**6)
   LTEMP = NSTORA - NSTORB
   LB = LTEMP/(10**2)
   TD = LTEMP - (LB * (10**2))
   TD = TD - 1
   AS = LA
   TA = LB
   IF(LPZ.EQ.(-1)) BS = LB
   LX = 0
   LV = 0
   LT = AS
   IF(LPZ.EQ.(-1)) GO TO 8

C
6  LT = LT + 1
   IF(NOTE(LT).LE.00) GO TO 6
   LV = LV + 1
   IF(LV.EQ.TD) GO TO 7
   GO TO 6
7  BS = LT
   GO TO 9
8  TA = BS
9  LSUB = TD
   LW = TA
10 LW = LW + 1
   IF(NOTE(LW).LE.00) GO TO 10
   LX = LX + 1

```



```

      IF(LX.EC.LSUR) GO TO 11
      GO TO 10
11  TB = LW
      IF(JFLAG.EQ.(-1)) GO TO 4J
      IF(JAS.NE.AS) GO TO 12
      IF(JBS.EQ.BS) GO TO 26
C
      12 NNN = AS
      LTD = TESDIF - 1
      LLA = 0
      LLB = 0
      LLC = 0
      LLD = 0
C
      DO 16 L=1,LTD
      LLL = L - 1
      INDEX8 = 1
      GO TO 119
C
      13 IF(TEST.GE.9) GO TO 15
      INDXC = 1
      GC TO 104
C
      14 IF(LOOP.EQ.00) GO TO 25
      IF(TSTOR.LE.8) GO TO 16
      IF(KEY.EQ.1) GO TO 16
C
      15 NX = MA - MB
      NY = MC - MD
      IF(NX.NE.NY) GO TO 25
      16 CONTINUE
C
      IF(TESDIF.GT.3) GO TO 17
      LASS = ASTOR * (10**6)
      LBSS = BSTOR * (10**2)
      LIB(DIGIT) = (LASS + LBSS + TESDIF) * (-1)

```

NOTB 73
NOTB 74
NOTB 75
NOTB 76
NOTB 77
NOTB 78
NOTB 79
NOTB 80
NOTB 81
NOTB 82
NOTB 83
NOTB 84
NOTB 85
NOTB 86
NOTB 87
NOTB 88
NOTB 89
NOTB 90
NOTB 91
NOTB 92
NOTB 93
NOTB 94
NOTB 95
NOTB 96
NOTB 97
NOTB 98
NOTB 99
NOTB 100
NOTB 101
NOTB 102
NOTB 103
NOTB 104
NOTB 105
NOTB 106
NOTB 107
NOTB 108

```

C      DIGIT = DIGIT + 1
      IF(DIGIT.GT.LIMIT) GO TO 129

      17 IF(TSTOR.LT.9) SWITCH = 50
         IF(KEY.LT.1) GO TO 18
         IF(ASTOR.EQ.AS) GO TO 27
         SWITCH = 50
         WRITE(5) SPECEK,ASTOR,BSTOR,AS,BS,TESDIF,SPECEK
         GO TO 27

      18 INDEXG = 2
         GO TO 70

C      19 IF(TSTOR.LT.9) GO TO 23
         IF(ASTOR.EQ.AS) GO TO 24
         MB = BSTOR
         MD = BS
         20 MB = MB + 1
            IF(NCTE(MB).NE.OO) GO TO 21
            GO TO 20

C      21 MD = MD + 1
         IF(MD.GT.(MASTB+1)) GO TO 24
         IF(NOTE(MD).NE.OO) GO TO 22
         GO TO 21

C      22 NX = BS - MD
         NY = BSTOR - MB
         IF(NX.NE.NY) GO TO 25
         23 WRITE(3,131) ASTOR,ASTOR,AS,BS
         24 INDEXG = 1
            SWITCH = 50
            GO TO 27

C      25 INDEXG = 1
         JAS = AS
         JBS = BS

```

NOTB 109
 NOTB 110
 NOTB 111
 NOTB 112
 NOTB 113
 NOTB 114
 NOTB 115
 NOTB 116
 NOTB 117
 NOTB 118
 NOTB 119
 NOTB 120
 NOTB 121
 NOTB 122
 NOTB 123
 NOTB 124
 NOTB 125
 NOTB 126
 NOTB 127
 NOTB 128
 NOTB 129
 NOTB 130
 NOTB 131
 NOTB 132
 NOTB 133
 NOTB 134
 NOTB 135
 NOTB 136
 NOTB 137
 NOTB 138
 NOTB 139
 NOTB 140
 NOTB 141
 NOTB 142
 NOTB 143
 NOTB 144

C	26 CONTINUE	NCTB 145
	27 SPECEK = 6	NOTB 146
	LASTOR = ASTOR	NOTB 147
C	28 IF(SWITCH.EQ.50) GO TO 32	NOTB 148
	29 INDEX = 1	NOTB 149
	GO TO 58	NOTB 150
	30 TESTA = TESTA + 1	NOTB 151
	TESTB = TESTB + 1	NOTB 152
	INDEXD = 1	NOTB 153
	GO TO 113	NOTB 154
	31 IF(TESTB.GT.MASTB) GO TO 42	NOTB 155
	GO TO 1	NCTB 156
C	32 IF(TESDIF.GT.3) GO TO 37	NCTB 157
	ASTOR = ASTOR + 1	NOTB 158
	BSTOR = BSTOR + 1	NOTB 159
	TESTB = 1	NOTB 160
	INDEXD = 2	NOTB 161
	GO TO 113	NOTB 162
	33 IF(DIGIT.EQ.1) LASTOR = ASTOR	NOTB 163
	TESTA = BSTOR	NOTB 164
C	LX = 0	NOTB 165
	LW = TESTA	NOTB 166
	34 LW = LW + 1	NOTB 167
	IF(LW.GT.MASTB) GO TO 36	NOTB 168
	IF(NOTE(LW).LE.00) GO TO 34	NOTB 169
	LX = LX + 1	NOTB 170
	IF(LX.EC.LSUB) GO TO 35	NOTB 171
	GO TO 34	NOTB 172
	35 TESTB = LW	NCTB 173
	GO TO 1	NOTB 174
C	36 LSUB = 1	NCTB 175
		NOTB 176
		NOTB 177
		NOTB 178
		NOTB 179
		NOTB 180

```

      LHOLD = DIGIT - 1
      GC TO 56

37  LFLAG = 2
      IF(TESDIF.GT.5) GO TO 38
      IF(ASTOR.EQ.AS) GO TO 38
      LASS = ASTOR * (10**6)
      LBSS = BSTOR * (10**2)
      LIB(DIGIT) = (LASS + LBSS + TESSDIF) * (-1)
      DIGIT = DIGIT + 1
      IF(DIGIT.GT.LIMIT) GO TO 129
38  IF(LL.EQ.LHOLD) GO TO 53
      LZ = LL + 1
      LSUB = 1
39  DO 52 LL=LZ,LHOLD
      JFLAG = (-1)
      GO TO 2
40  JFLAG = 1
      BSTOR = BS + 1
      TESTB = 1
      IF(LPZ.NE.(-1)) GO TO 44
      ASTOR = AS
      INDEXD = 3
      GO TO 113
41  IF(BSTOR.GT.MASTB) GO TO 51
      TESTA = BSTOR
      LSUB = TESSDIF - 1
      LX = 0
      LW = TESTA
42  LW = LW + 1
      IF(LW.GT.MASTB) GO TO 51
      IF(NOTE(LW).LE.00) GO TO 42
      LX = LX + 1
      IF(LX.EQ.LSUB) GO TO 43
      GO TO 42
43  TESTB = LW

```

```

NCTB 181
NCTB 182
NCTB 183
NCTB 184
NCTB 185
NCTB 186
NCTB 187
NCTB 188
NCTB 189
NCTB 190
NCTB 191
NCTB 192
NCTB 193
NCTB 194
NCTB 195
NCTB 196
NCTB 197
NCTB 198
NCTB 199
NCTB 200
NCTB 201
NCTB 202
NCTB 203
NCTB 204
NCTB 205
NCTB 206
NCTB 207
NCTB 208
NCTB 209
NCTB 210
NCTB 211
NCTB 212
NCTB 213
NCTB 214
NCTB 215
NCTB 216

```

```

C
  LASTOR = 0
  LFLAG = 1
  GO TO 1

      44 ASTCR = AS
        BSTR = BS + 1
        LSUB = 1
        IF(LBACK.EQ.1) GO TO 45
        TESTA = TA - 1
        TESTB = TB
        GO TO 46
      45 TESTA = TA
        TESTB = TB + 1
      46 INDEXD = 4
        GO TO 113
      47 IF(BSTOR.GT.TESTA) GO TO 51
        IF(TESTB.GT.MASTB) GO TO 51
        MA = BS
        MB = BSTOR
        IF(LBACK.EQ.1) GO TO 48
        MC = TA
        MD = TESTA
        GO TO 49
      48 MC = TB
        MD = TESTB

C
      49 INDEX = 2
        GC TC 58
      50 GO TO 52
      51 LIB(LL) = (-10)
      52 CONTINUE

C
      53 LC = 0
        LQ3 = LL
        LQ4 = DIGIT -- 1

C
NOTB 217
NOTB 218
NOTB 219
NOTB 220
NOTB 221
NOTB 222
NOTB 223
NOTB 224
NOTB 225
NOTB 226
NOTB 227
NOTB 228
NOTB 229
NOTB 230
NOTB 231
NOTB 232
NOTB 233
NOTB 234
NOTB 235
NOTB 236
NOTB 237
NOTB 238
NOTB 239
NOTB 240
NOTB 241
NOTB 242
NOTB 243
NOTB 244
NOTB 245
NOTB 246
NOTB 247
NOTB 248
NOTB 249
NOTB 250
NOTB 251
NOTB 252

```



```

NOTB 253
NOTB 254
NOTB 255
NOTB 256
NOTB 257
NOTB 258
NOTB 259
NOTB 260
C*****
C TO DETERMINE THE MINIMUM SIZE OF 'LIB' ARRAY NEEDED FOR ANY
C   GIVEN COMPUTER RUN. ACTIVATE THE FOLLOWING WRITE STATEMENT.
C   IF(TESDIF.EQ.4) WRITE (3,132) L04
C*****
C
C   LHHOLD = LC
C   DIGIT = LC + 1
C
C   56 IFILE = 1
C   57 IF(IFILE.EQ.1) GO TO 128
C     READ(4) LTOTAL,LLX,LBACK,LPZ,TESDIF,NNN,JFLAG,LIMPR,
C     1LTALLY,NDIGIT,LDGT,LTIME,TSTOR,MASTB,LPQR,LTEST,KEY,ASTOR,
C     1LHOLD,KTES,SWITCH,SPECK,ASTOR,TESTA,TESTB,KDGT,JUNCT
C     REWIND 4
C     READ(7) NOTE,LIB
C     REWIND 7
C     LZ = 1
C     GO TO 39
C
C   58 LTALLY = LTALLY + 1
C
C     LLA = 0
C     LLB = 0
C     LLC = 0
C     LLD = 0
C
C   DO 65 LXY = 1,LSUB

```

```

IF(LSUB.EQ.1) GO TO 59
LLL = LXY - 1
C
INDEXB = 2
GO TO 119
59 IF(TSTOR.EQ.9) GO TO 61
IF(TSTOR.EQ.10) GO TO 61
INDEXC = 2
GO TO 104
C
60 IF(LOOP.EQ.00) GO TO 99
IF(KEY.GT.00) GO TO 65
IF(TSTOR.LT.9) GO TO 65
C
61 NX = MA - MB
IF(LLX.NE.10) GO TO 64
62 MC = MC + 1
IF(NOTE(MC).NE.00) GO TO 63
GO TO 62
63 MD = MD + 1
IF(MD.GT.MASTB) GO TO 99
IF(NOTE(MD).NE.00) GO TO 64
GO TO 63
64 NY = MC - MD
IF(LLX.EQ.10) NY = NY * (-1)
IF(NX.NE.NY) GO TO 99
65 CONTINUE
C
IF(KEY.GT.00) GO TO 69
IF(TSTOR.LT.9) GO TO 69
MB = BSTOR
MD = TESTB
IF(LLX.EQ.10) MD = TESTA
66 MB = MB + 1
IF(NOTE(MB).NE.00) GO TO 57
GO TO 66
NOTB 289
NOTB 290
NOTB 291
NOTB 292
NOTB 293
NOTB 294
NOTB 295
NOTB 296
NOTB 297
NOTB 298
NOTB 299
NOTB 300
NOTB 301
NOTB 302
NOTB 303
NOTB 304
NOTB 305
NOTB 306
NOTB 307
NOTB 308
NOTB 309
NOTB 310
NOTB 311
NOTB 312
NOTB 313
NOTB 314
NOTB 315
NOTB 316
NOTB 317
NOTB 318
NOTB 319
NOTB 320
NOTB 321
NOTB 322
NOTB 323
NOTB 324

```

[illegible]

```

C
C
C
C
      AMBIGUOUS RHYTHM FILTER
74 JTT = BSTOR
   JTT = JTT + 1
75 IF(NOTE(JTT).GT.00) GO TO 76
   JTT = JTT + 1
   GO TO 75
76 MSTR = JTT
   LTT = ASTOR
   LOFF = 0
77 LBY = LTT
   LTT = LTT + 1
78 IF(LTT.GT.MSTR) GO TO 104
   IF(NOTE(LTT).GT.00) GO TO 79
   LTT = LTT + 1
   GO TO 78
79 IF(LOFF.EQ.1) GO TO 80
   MJX = LTT - LBY
   LOFF = 1
80 MJQ = LTT - LBY
   IF(MJO.EQ.MJX) GO TO 77
   IF(TSTOR.EQ.9) GO TO 92
   GO TO 84

      NON-RETROGRADABLE RHYTHM FILTER
C
C
C
C
81 LTT = BSTOR + 1
82 IF(NOTE(LTT).GT.00) GO TO 83
   LTT = LTT + 1
   GO TO 82
83 MSTR = LTT
84 LLK = 0
   MJQ = TESTA

```

```

NOTB 361
NOTB 362
NOTB 363
NOTB 364
NOTB 365
NOTB 366
NOTB 367
NOTB 368
NOTB 369
NOTB 370
NOTB 371
NOTB 372
NOTB 373
NOTB 374
NOTB 375
NOTB 376
NOTB 377
NOTB 378
NOTB 379
NOTB 380
NOTB 381
NOTB 382
NOTB 383
NOTB 384
NOTB 385
NOTB 386
NOTB 387
NOTB 388
NOTB 389
NOTB 390
NOTB 391
NOTB 392
NOTB 393
NOTB 394
NOTB 395
NOTB 396

```

```

IF(SPECEK.EQ.00) MJQ = AS
NRR = 1
DO 85 LK = ASTOR,MSTOR
LTT = ASTOR + LLK
LTTT = MJQ + LLK
IF(NOTE(LTT).EQ.00.AND. NOTE(LTTT).NE.00) GO TO 86
IF(NOTE(LTT).NE.00.AND. NOTE(LTTT).EQ.00) GO TO 86
LLK = LLK + 1
85 CONTINUE
NRR = 2
86 IF(TSTOR.EQ.10) GO TO 92
LTTT = TSTOR - 18
GO TO (71,92,71,92,71,92,71,92). LTTT

C
C
C
C
      TRILL FILTER
87 IF(TESDIF.LT.5) GO TO 91
LTT = ASTOR
LOFF = 0
88 INDEXE = 2
GO TO 100
89 IF(LOFF.EQ.1) GO TO 90
MJX = NOTE(LBY) - NOTE(LTT)
LOFF = 1
GO TO 88
90 MJX = MJX * (-1)
MJQ = NOTE(LBY) - NOTE(LTT)
IF(MJQ.EQ.MJX) GO TO 88
91 IF(TSTOR.GE.19) GO TO 81
GO TO (71,92,71,92,71,92,71,92). TEST

C
92 IF(INDEXG.EQ.2) GO TO 19
C
93 IF(JUNCT.EQ.00) GO TO 96
DO 94 LBY = ASTOR,BSTOR

```

```

NOTB 397
NOTB 398
NOTB 399
NOTB 400
NOTB 401
NOTB 402
NOTB 403
NOTB 404
NOTB 405
NOTB 406
NOTB 407
NOTB 408
NOTB 409
NOTB 410
NOTB 411
NOTB 412
NOTB 413
NOTB 414
NOTB 415
NOTB 416
NOTB 417
NOTB 418
NOTB 419
NOTB 420
NOTB 421
NOTB 422
NOTB 423
NOTB 424
NOTB 425
NOTB 426
NOTB 427
NOTB 428
NOTB 429
NOTB 430
NOTB 431
NOTB 432

```

```

          IF(NOTE(LBX).EQ.99999) GO TO 98
          94 CONTINUE
          DC 95 LBX = TESTA,TESTB
          IF(NOTE(LBX).EQ.99999) GO TO 98
          95 CONTINUE
C
          96 KDGT = KDGT + 1
             KP = 1
             WRITE(3,130) KDGT,ASTOR,BSTOR,LETA(NRR),TESTA,TESTB,TSTOR,TESDIF
             IF(LFA.EQ.6) WRITE(6,132) ASTOR,BSTOR,TESTA,TESTB,TESDIF
             GO TO 98
          97 WRITE(5) LDGT,ASTOR,BSTOR,TESTA,TESTB,TESDIF,SPECEK
C
          98 LOGT = LOGT + 1
             DIGIT = DIGIT + 1
             IF(DIGIT.GT.LIMIT) GO TO 129
C
          99 GO TO (30,50), INDEX
C
          100 LBY = LTT
             LTT = LTT + 1
          101 IF(LTT.GT.BSTOR) GO TO 104
             IF(NOTE(LTT).GT.00) GO TO 102
             LTT = LTT + 1
             GO TO 101
          102 GO TO (73,89), INDEXE
C
          103 IF(INDEXG.EQ.2) GO TO 24
             GO TO 98
C
          104 LOOP = 0
             LA = NOTE(MA)
             LB = NOTE(MB)
             LC = NOTE(MC)
             LD = NOTE(MD)
C

```

```

NOTB 433
NOTB 434
NOTB 435
NOTB 436
NOTB 437
NOTB 438
NOTB 439
NOTB 440
NOTB 441
NOTB 442
NOTB 443
NOTB 444
NOTB 445
NOTB 446
NOTB 447
NOTB 448
NOTB 449
NOTB 450
NOTB 451
NOTB 452
NOTB 453
NOTB 454
NOTB 455
NOTB 456
NOTB 457
NOTB 458
NOTB 459
NOTB 460
NOTB 461
NOTB 462
NOTB 463
NOTB 464
NOTB 465
NOTB 466
NOTB 467
NOTB 468

```

```

C      GO TO (106,108,105,107,100,108,105,107), TEST
      105 IF(SPECEK.EQ.6) GO TO 109
      106 IF(LA.EC.LB.AND.LC.EQ.LD) GO TO 111
      IF(LA.LT.LB.AND.LC.LT.LD) GO TO 111
      IF(LA.GT.LB.AND.LC.GT.LD) GO TO 111
      GO TO 112
C
      107 IF(SPECEK.EQ.6) GO TO 110
      108 NX = LA - LB
      NY = LC - LD
      IF(NX.EQ.NY) GO TO 111
      GO TO 112
C
      109 IF(LA.EQ.LB.AND.LC.EQ.LD) GO TO 111
      IF(LA.LT.LB.AND.LC.GT.LD) GO TO 111
      IF(LA.GT.LB.AND.LC.LT.LD) GO TO 111
      GO TO 112
C
      110 NX = LB - LA
      NY = LC - LD
      IF(SPECEK.EQ.00) NY = NY * (-1)
      IF(NX.EQ.NY) GO TO 111
      GO TO 112
C
      111 LOOP = 1
      112 GO TO (14,60), INDEXC
      113 INC = 1
      IF(LSUB.EQ.1.AND.LBACK.EQ.(-1)) INC = (-1)
C
      114 IF(TESTB.GT.MASTB) GO TO 118
      IF(NOTE(TESTB).GT.00) GO TO 115
      TESTB = TESTB + 1
      GO TO 114
C
      115 IF(TESTA.LT.1) GO TO 116

```

NOTB 469
 NOTB 470
 NOTB 471
 NOTB 472
 NOTB 473
 NOTB 474
 NOTB 475
 NOTB 476
 NOTB 477
 NOTB 478
 NOTB 479
 NOTB 480
 NOTB 481
 NOTB 482
 NOTB 483
 NOTB 484
 NOTB 485
 NOTB 486
 NOTB 487
 NOTB 488
 NOTB 489
 NOTB 490
 NOTB 491
 NOTB 492
 NOTB 493
 NOTB 494
 NOTB 495
 NOTB 496
 NOTB 497
 NOTB 498
 NOTB 499
 NOTB 500
 NOTB 501
 NOTB 502
 NOTB 503
 NOTB 504

```

      IF(NOTE(TESTA).GT.00) GO TO 116
      TESTA = TESTA + INC
      GO TO 115
C
      116 IF(NOTE(ASTOR).GT.00) GO TO 117
      ASTOR = ASTOR + 1
      GO TO 116
C
      117 IF(BSTOR.GT.MASTB) GO TO 118
      IF(NOTE(BSTOR).GT.00) GO TO 118
      BSTOR = BSTOR + 1
      GO TO 117
C
      118 GO TO (31,33,41,47). INDEXD
      119 INC = 1
C
      MA = ASTOR + LLL + LLA
      MB = ASTOR + LLL + LLB + 1
C
      120 IF(NOTE(MA).GT.00) GO TO 121
      LLA = LLA + 1
      MA = ASTOR + LLL + LLA
      GO TO 120
C
      121 IF(NOTE(MB).GT.00) GO TO 122
      LLB = LLB + 1
      MB = ASTOR + LLL + LLB + 1
      GO TO 121
C
      122 IF(LBACK.EQ.(+1)) GO TO 123
      INC = (-1)
      IF(SPECEK.EQ.00) INC = 1
      TESTC = TESTB
      IF(SPECEK.EQ.6) LLL = LLL * (-1)
      GO TO 124
      123 TESTC = TESTA
      124

```

NOTB 505
 NOTB 506
 NOTB 507
 NOTB 508
 NOTB 509
 NOTB 510
 NOTB 511
 NOTB 512
 NOTB 513
 NOTB 514
 NOTB 515
 NOTB 516
 NOTB 517
 NOTB 518
 NOTB 519
 NOTB 520
 NOTB 521
 NOTB 522
 NOTB 523
 NOTB 524
 NOTB 525
 NOTB 526
 NOTB 527
 NOTB 528
 NOTB 529
 NOTB 530
 NOTB 531
 NOTB 532
 NOTB 533
 NOTB 534
 NOTB 535
 NOTB 536
 NOTB 537
 NOTB 538
 NOTB 539
 NOTB 540


```

124 IF(SPECEK.EQ.00) TESTC = 4S
    MC = TESTC + LLL + LLC
    MD = TESTC + LLL + LLD + INC
C
125 IF(NOTE(MC).GT.00) GO TO 126
    LLC = LLC + INC
    MC = TESTC + LLL + LLC
    GO TO 125
C
126 IF(NOTE(MD).GT.00) GO TO 127
    LLD = LLD + INC
    MD = TESTC + LLL + LLD + INC
    GO TO 126
C
127 GO TO (13,59), INDEXB
128 IF(KEY.EQ.1) GO TO 129
    IF(KP.EC.2) LPQR = 00
129 WRITE(4) LTOTAL,LLX,LBACK,LPZ,TESDIF,VNN,JFLAG,LIMPR,
    1LTALLY,NDIGIT,LDGT,LTIME,ISTOR,MASTB,LPOR,LTEST,KEY,ASTOR,
    1LHOLD,KTES,SWITCH,SPECEK,ASTOR,TESTA,TESTB,KDGT,JUNCT
    REWIND 4
    WRITE(7) NOTE,LIB
    REWIND 7
    RETURN
C
130 FORMAT(34X,15,3X,15,3H TO,15,2X,A8,15,3H TO,15,4X,13,17)
131 FORMAT(34X,8H*** FOR,15,3H TO,15,1H,.6X,3HSEE,15,3H TO,15,11H ABCNOTB 567
    1VE ***)
132 FORMAT(10X,5I10)
    END

```

```

PHASE FILEB300.FILEB100
// EXEC FFORTRAN

```

```

NOTB 541
NOTB 542
NOTB 543
NOTB 544
NOTB 545
NOTB 546
NOTB 547
NOTB 548
NOTB 549
NOTB 550
NOTB 551
NOTB 552
NOTB 553
NOTB 554
NOTB 555
NOTB 556
NOTB 557
NOTB 558
NOTB 559
NOTB 560
NOTB 561
NOTB 562
NOTB 563
NOTB 564
NOTB 565
NOTB 566
NOTB 567
NOTB 568
NOTB 569
NOTB 570

```

1 HEAD
2 HEAD
3 HEAD
4 HEAD
5 HEAD
6 HEAD
7 HEAD
8 HEAD
9 HEAD
10 HEAD
11 HEAD
12 HEAD
13 HEAD
14 HEAD
15 HEAD
16 HEAD
17 HEAD
18 HEAD
19 HEAD
20 HEAD
21 HEAD
22 HEAD
23 HEAD
24 HEAD
25 HEAD
26 HEAD
27 HEAD
28 HEAD
29 HEAD
30 HEAD
31 HEAD
32 HEAD
33 HEAD
34 HEAD
35 HEAD
36 HEAD

```

SUBROUTINE HEDING
  INTEGER TEST,DIGIT,TSTOR,TESTDIF,ASTOR,BSTOR,TESTA,TESTB,
  1 SWITCH,SPECEK
  DCUBLE PRECISION LTEST(10)
  CCMCN/A/IFILE,TEST,KPHAS,DIGIT,LIMIT
C
  READ(4) LTOTAL,LLX,LBACK,Lpz,TESTDIF,NNN,JFLAG,LIMPR,
  1LTALLY,NDIGIT,LDGT,LTIME,TSTOR,MASTB,LPOR,LTEST,KEY,ASTOR,
  1LHCLD,KTES,SWITCH,SPECEK,BSTOR,TESTA,TESTB,KDGT,JUNCT
  REWIND 4
C
  IF(KPHAS.EQ.2) GO TO 1
  JTALLY = LDGT - NDIGIT
  IF(JTALLY.EQ.00) IFILE = 2
  1 IF(ASTOR.EQ.362436) GO TO 7
  IF(IFILE.EQ.2.AND.KEY.EQ.1) GO TO 6
  IF(IFILE.EQ.2) GO TO 7
  IF(KEY.EQ.1.AND.KPHAS.EQ.2) GO TO 2
  NDIGIT = LDGT
  TESTDIF = TESTDIF + 1
  2 IF(KEY.EQ.1.AND.KPHAS.EQ.1) GO TO 6
  3 IF(LPOR .GT.15) WRITE(3,8)
  IF(LPOR .GT.15) WRITE(3,9)
  IF(TSTOR.GT.10) GO TO 4
  IF(LPOR.GT.15) WRITE(3,10)   TESTDIF,(LTEST(KB),KB=1,3)
  GO TO 5
  4 IF(LPOR.GT.15) WRITE(3,11)   TESTDIF,LTEST
  5 CALL TIMER(LY)
  LY=(LY-LTIME)/60
  IF(LPOR.GT.15) WRITE(3,12)   LY
  GO TO 7
  6 IF(KEY.LE.0) GO TO 7
  IF(JTALLY.GT.1) GO TO 7
  IF(KPHAS.EQ.2) GO TO 7
  IFILE = 0
  KPHAS = 2

```

```

JTALLY = 2
LTOTAL = 0
LLX = KTES
LBACK = LBACK * (-1)
LPZ = 0
TESDIF = 3
NNN = 3
JFLAG = 362436
WRITE(5) JFLAG,JFLAG,JFLAG,JFLAG,JFLAG,JFLAG,JFLAG
REWIND 5
GC TO 3
7 LIMPR = 0
WRITE(4) LTOTAL,LLX,LBACK,LPZ,TESDIF,NNN,JFLAG,LIMPR,
1LTALLY,NDIGIT,LOGT,LTIME,ISTOR,MASTB,LPQR,LTEST,KEY,ASTOR,
1LHOLD,KTES,SWITCH,SPECEK,ASTOR,TESTA,TESTB,KDGT,JUNCT
REWIND 4
C
8 FORMAT(1H1,/)
9 FORMAT(48X,32H*** TYPE I LISTING CONTINUED ***,/)
10 FORMAT(44X,22HSEARCH FOR PATTERNS OF, 13,20H NOTES IN LENGTH -- ,
1/,53X,3A8)
11 FORMAT(44X,23HSEARCH FOR PATTERNS OF, 13,20H NOTES IN LENGTH -- ,
1/,44X,10A8)
12 FORMAT(45X,12HWAS BEGUN AT,15,24H SECONDS INTO EXECUTION.,//,
134X,60HPATTERN      NOTES      RELATED TO      NOTES      TEST LENGTH
1H,/)
RETURN
END

PHASE FILEB600,FILEB100
// EXEC FFORTRAN

```

```

HEAD 37
HEAD 38
HEAD 39
HEAD 40
HEAD 41
HEAD 42
HEAD 43
HEAD 44
HEAD 45
HEAD 46
HEAD 47
HEAD 48
HEAD 49
HEAD 50
HEAD 51
HEAD 52
HEAD 53
HEAD 54
HEAD 55
HEAD 56
HEAD 57
HEAD 58
HEAD 59
HEAD 60
HEAD 61
HEAD 62
HEAD 63
HEAD 64

```

```

SUBROUTINE NOTEC
  INTEGER TEST,DIGIT,TESDIF,ASTOR,BSTOR,TESTA,TESTB,TESTC,TSTOR,
  SWITCH,SPECEK
  DIMENSION NOTE(5000)
  DCUBLE PRECISION LTEST(10),LETA(2)
  DATA LETA/8H      .8H  (SYM) /
  DATA KP/2/
  DATA JPK/-1/
  COMMON/A/IFILE,TEST,KPHAS,DIGIT,LIMIT

  READ(4)  LTOTAL,LLX,LBACK,LPZ,TESDIF,NNN,JFLAG,LIMPR,
  1LTALLY,NDIGIT,LDGT,LTIME,TSTOR,MASTB,LPOR,LTEST,KEY,ASTOR,
  1LHOLD,KTES,SWITCH,SPECEK,BSTOR,TESTA,TESTB,KDGT,JUNCT
  REWIND 4
  REAC(7) NOTE
  REWIND 7
  NRR = 1
  JTALLY = 0
  IF(LPZ.EQ.00) GO TO 1
  IF(IFILE.EQ.00) GO TO 2
  1 READ(5)  LDGT,ASTOR,BSTOR,TESTA,TESTB,TESDIF,SPECEK
  IF(LDGT.EQ.362436) GO TO 47
  IFILE = 1
  IF(TESDIF.NE.NNN) GO TO 47
  2 NNN = TESDIF
  LSUB = TESDIF - 1
  LTALLY = LTALLY + 1

  LLA = 0
  LLB = 0
  LLC = 0
  LLD = 0

  DO 14  L = 1,LSUB,1
  LLL = L - 1
  INC = 1

```

NOTC 1
NOTC 2
NOTC 3
NOTC 4
NOTC 5
NOTC 6
NOTC 7
NOTC 8
NOTC 9
NOTC 10
NOTC 11
NOTC 12
NOTC 13
NOTC 14
NOTC 15
NOTC 16
NOTC 17
NOTC 18
NOTC 19
NOTC 20
NOTC 21
NOTC 22
NOTC 23
NOTC 24
NOTC 25
NOTC 26
NOTC 27
NOTC 28
NOTC 29
NOTC 30
NOTC 31
NOTC 32
NOTC 33
NOTC 34
NOTC 35
NOTC 36

```

MA = ASTOR + LLL + LLA
MB = ASTOR + LLL + LLB + 1
3 IF(NOTE(MA).GT.00) GO TO 4
LLA = LLA + 1
MA = ASTOR + LLL + LLA
GO TO 3
4 IF(NOTE(MB).GT.00) GO TO 5
LLB = LLB + 1
MB = ASTOR + LLL + LLB + 1
GO TO 4
5 IF(LBACK.EQ.(+1)) GO TO 6
INC = (-1)
TESTC = TESTB
LLL = LLL * (-1)
GO TO 7
6 TESTC = TESTA
7 MC = TESTC + LLL + LLC
MD = TESTC + LLL + LLD + INC
C
8 IF(NOTE(MC).GT.00) GO TO 9
LLC = LLC + INC
MC = TESTC + LLL + LLC
GO TO 8
C
9 IF(NOTE(MD).GT.00) GO TO 10
LLD = LLD + INC
MD = TESTC + LLL + LLD + INC
GO TO 9
10 NX = MA - MB
IF(LLX.NE.10) GO TO 13
11 MC = MC + 1
IF(NOTE(MC).NE.00) GO TO 12
GO TO 11
12 MD = MD + 1
IF(NOTE(MD).NE.00) GO TO 13
GO TO 12

```

NOTC 37
NOTC 38
NOTC 39
NOTC 40
NOTC 41
NOTC 42
NOTC 43
NOTC 44
NOTC 45
NOTC 46
NOTC 47
NOTC 48
NOTC 49
NOTC 50
NOTC 51
NOTC 52
NOTC 53
NOTC 54
NOTC 55
NOTC 56
NOTC 57
NOTC 58
NOTC 59
NOTC 60
NOTC 61
NOTC 62
NOTC 63
NOTC 64
NOTC 65
NOTC 66
NOTC 67
NOTC 68
NOTC 69
NOTC 70
NOTC 71
NOTC 72


```

13 NY = MC - MD
   IF(LLX.EQ.10) NY = NY * (-1)
   IF(NX.NE.NY) GO TO 1
14 CONTINUE
   MB = BSTOR
   MD = TESTB
   IF(LLX.EQ.10) MD = TESTA
15 MB = MB + 1
   IF(NOTE(MB).NE.00) GO TO 16
   GO TO 15
16 MD = MD + 1
   IF(MD.GT.(MASTB+1)) GO TO 1
   IF(NOTE(MD).NE.00) GO TO 17
   GO TO 16
17 NX = TESTB - MD
   IF(LLX.EQ.10) NX = TESTA - MD
   NY = BSTOR - MB
   IF(NX.NE.NY) GO TO 1
18 GO TC (35,35,35,35,35,35,35,22,22),TEST
                                     C
                                     C
                                     C
CONTOUR FILTER
19 KLJ = 0
   CLK = 0
   KLL = 0
   LTT = ASTOR
20 INDEXE = 1
   GO TO 44
21 IF(NOTE(LBY).LT.NOTE(LTT)) KLJ = KLJ + 1
   IF(NOTE(LBY).GT.NOTE(LTT)) CLK = CLK + 1
   IF(NOTE(LBY).EQ.NOTE(LTT)) KLL = KLL + 1
   IF(KLJ.EQ.00.AND.KLK.EQ.00) GO TO 20
   IF(KLJ.EQ.00.AND.KLL.EQ.00) GO TO 20
   IF(KLK.EQ.00.AND.KLL.EQ.00) GO TO 20
   GO TO 40
                                     C

```

```

C
C
C
      AMBIGUOUS RHYTHM FILTER
22 JTT = BSTOR + 1
23 IF(NOTE(JTT).GT.00) GO TO 24
   JTT = JTT + 1
   GO TO 23
24 MSTOR = JTT
   LTT = ASTOR
   LOFF = 0
25 LBY = LTT
   LTT = LTT + 1
26 IF(LTT.GT.MSTOR) GO TO 1
   IF(NOTE(LTT).GT.00) GO TO 27
   LTT = LTT + 1
   GO TO 26
27 IF(LOFF.EQ.1) GO TO 28
   MJX = LTT - LBY
   LOFF = 1
28 MJQ = LTT - LBY
   IF(MJQ.EQ.MJX) GO TO 25
   GO TO 32

      NON-RETROGRADABLE RHYTHM FILTER
C
C
C
C
29 LTT = BSTOR + 1
30 IF(NOTE(LTT).GT.00) GO TO 31
   LTT = LTT + 1
   GO TO 30
31 MSTOR = LTT
32 LLK = 0
   NRR = 1
   DO 33 LK = ASTOR.MSTOR
   LTT = ASTOR + LLK
   LTTT = TESTA + LLK

```

```

NOTC 109
NOTC 110
NOTC 111
NOTC 112
NOTC 113
NOTC 114
NOTC 115
NOTC 116
NOTC 117
NOTC 118
NOTC 119
NOTC 120
NOTC 121
NOTC 122
NOTC 123
NOTC 124
NOTC 125
NOTC 126
NOTC 127
NOTC 128
NOTC 129
NOTC 130
NOTC 131
NOTC 132
NOTC 133
NOTC 134
NOTC 135
NOTC 136
NOTC 137
NOTC 138
NOTC 139
NOTC 140
NOTC 141
NOTC 142
NOTC 143
NOTC 144

```



```

IF(NOTE(LTT).NE.OO.AND. N3TE(LTTT).EQ.OO) GO TO 34
IF(NOTE(LTT).EQ.OO.AND. N3TE(LTTT).NE.OO) GO TO 34
LLK = LLK + 1
33 CONTINUE
NRR = 2
34 LTTT = TSTOR - 18
GO TO (19,40,19,40,19,40,19,40).LTTT

C
C
C
C
TRILL FILTER
35 IF(TESDIF.LT.5) GO TO 39
LTT = ASTOR
LOFF = 0
36 INDEXE = 2
GO TO 44
37 IF(LCFF.EQ.1) GO TO 38
MJX = NOTE(LBY) - NOTE(LTT)
LOFF = 1
GO TO 36
38 MJX = MJX * (-1)
MJQ = NOTE(LBY) - NOTE(LTT)
IF(MJQ.EQ.MJX) GO TO 36
39 IF(TSTOR.GE.19) GO TO 29
GO TO (19,40,19,40,19,40,19,40). TEST
40 LIMPR = LIMPR + 1
KP = 1
IF(JUNCT.EQ.OO) GO TO 43
DO 41 LBX = ASTOR,BSTOR
IF(NOTE(LBX).EQ.99999) GO TO 1
41 CONTINUE
DO 42 LBX = TESTA,TESTB
IF(NOTE(LBX).EQ.99999) GO TO 1
42 CONTINUE
43 JTALLY = JTALLY + 1
WRITE(6,51) ASTOR,BSTOR,TESTA,TESTB,TESTDIF

```

```

NOTC 145
NOTC 146
NOTC 147
NOTC 148
NOTC 149
NOTC 150
NOTC 151
NOTC 152
NOTC 153
NOTC 154
NOTC 155
NOTC 156
NOTC 157
NOTC 158
NOTC 159
NOTC 160
NOTC 161
NOTC 162
NOTC 163
NOTC 164
NOTC 165
NOTC 166
NOTC 167
NOTC 168
NOTC 169
NOTC 170
NOTC 171
NOTC 172
NOTC 173
NOTC 174
NOTC 175
NOTC 176
NOTC 177
NOTC 178
NOTC 179
NOTC 180

```

```

      IF(SPECEK.EQ.6) LTOTAL = LTOTAL + 1
      IF(SPECEK.EQ.6) WRITE(3,44) LTOTAL,ASTOR,BSTOR,LETA(NRR),TESTA,
1TESTB,TSTOR,TESDIF
      IF(SPECEK.EQ.6) JPK = 1
      IF(SPECEK.EQ.00.AND.JPK.EQ.1) WRITE(3,50) ASTOR,BSTOR,TESTA,TESTB
      GO TO 1
C
      44 LBY = LTT
      LTT = LTT + 1
      45 IF(LTT.GT.BSTOR) GO TO 1
      IF(NOTE(LTT).GT.00) GO TO 46
      LTT = LTT + 1
      GO TO 45
      46 GO TO (21,37), INDEXE
C
      47 LPZ = 2
      IF(KP.EQ.2) LPOR = 00
      IF(LOGT.NE.362436) GO TO 48
      KDGT = LTOTAL
      IFILE = 2
      KPHAS = 1
      48 WRITE(4) LTOTAL,LLX,LBACK,LPZ,TESDIF,NNN,JFLAG,LIMPR,
1LTALLY,NDIGIT,LDGT,LTIME,TSTOR,MASTB,LPOR,LTEST,KEY,ASTOR,
1LHOLD,KTES,SWITCH,SPECEK,ASTOR,TESTA,TESTB,KDGT,JUNCT
      REWIND 4
      RETURN
C
      49 FORMAT(34X,I5,3X,I5,3H TO,I5,2X,A8,I5,3H TO,I5,4X,I3,I7)
      50 FORMAT(34X,8H**** FOR,I5,3H TO,I5,1H,.6X,3HSEE,I5,3H TO,I5,11H ABONOTC
1VE ****)
      51 FCRRMAT(10X,5I10)
      END
      PHASE FILEB400,FILEB100
      // EXEC FFORTRAN

```

NOTC 181

NOTC 182

NOTC 183

NOTC 184

NOTC 185

NOTC 186

NOTC 187

NOTC 188

NOTC 189

NOTC 190

NOTC 191

NOTC 192

NOTC 193

NOTC 194

NOTC 195

NOTC 196

NOTC 197

NOTC 198

NOTC 199

NOTC 200

NOTC 201

NOTC 202

NOTC 203

NOTC 204

NOTC 205

NOTC 206

NOTC 207

NOTC 208

NOTC 209

NOTC 210

NOTC 211

NOTC 212

```

SUBROUTINE FINISH
  INTEGER TEST,DIGIT,PRINT,ASTOR,BSTOR,TESTA,TESTB,TESDIF,
  1EFIL,TSTOR,SWITCH,SPECEK
  COMMON/A/IFILE,TEST,KPHAS,DIGIT,LIMIT
  DOUBLE PRECISION LTITLE(1J),LTEST(10)
  DATA EFILE,MM,LCLOSE,LTHOLD,LL,PRINT,J,MEAS,INC/
  1878787,0.0,3.0,70.1,0.0/
C
  READ(4) LTOTAL,LLX,LBACK,LPIZ,TESDIF,NNN,JFLAG,LIMPR,
  1LTALLY,NDIGIT,LDGT,LTIME,TSTOR,MASTB,LPQR,LTEST,KEY,ASTOR,
  1LHOLD,KTES,SWITCH,SPECEK,BSTOR,TESTA,TESTB,KDGT,JUNCT
  REWIND 4
C
  IF(DIGIT.GT.LIMIT) WRITE(3,4)
  WRITE(3,5) KDGT
  IF(LDGT.EQ.00) CALL EXIT
C
  REWIND 5
  1 BACKSPACE 6
  READ (6,7) ASTOR,BSTOR,TESTA,TESTB,TESDIF
  IF(ASTOR.EQ.382436) GO TO 2
  IF(LTHOLD.LT.TESDIF) LTHOLD = TESDIF
  IF(LCLOSE.NE.1) LTES = TESDIF
  LCLOSE = 1
  IF(LTES.NE.TESDIF) MM = 1
  BACKSPACE 6
  WRITE (5,7) ASTOR,BSTOR,TESTA,TESTB,TESDIF
  GO TO 1
  2 WRITE(5,7) EFILE,EFILE,EFILE,EFILE,EFILE
  IF(MM.NE.00) GO TO 3
C
  WRITE(3,6)
  CALL TIMER(LY)
  LY=(LY-LTIME)/60
  WRITE(3,8) TSTOR,LY
  CALL EXIT
  FNSH 1
  FNSH 2
  FNSH 3
  FNSH 4
  FNSH 5
  FNSH 6
  FNSH 7
  FNSH 8
  FNSH 9
  FNSH 10
  FNSH 11
  FNSH 12
  FNSH 13
  FNSH 14
  FNSH 15
  FNSH 16
  FNSH 17
  FNSH 18
  FNSH 19
  FNSH 20
  FNSH 21
  FNSH 22
  FNSH 23
  FNSH 24
  FNSH 25
  FNSH 26
  FNSH 27
  FNSH 28
  FNSH 29
  FNSH 30
  FNSH 31
  FNSH 32
  FNSH 33
  FNSH 34
  FNSH 35
  FNSH 36

```

```

C      3 REWIND 6          LTITLE
      REAC(6,9)          LTITLE
      WRITE(4) LTITLE,LTEST,PRINT,EFILE,LL,TSTOR,LTIME,LY,LTHOLD
      REWIND 4
      RETURN
C
      4 FORMAT(/,34X,59HPATTERN DATA EXCEEDS LIB ARRAY SIZE.  EXECUTION TEFNSH
      1RMINATED.,// ,37X,43HONE OF THE FOLLOWING CHANGES MUST BE MADE--,/FNSH
      1/,37X,45H1) AMOUNT OF INPUT DATA MUST BE REDUCED, OR,./FNSH
      1/,37X,54H2) SIZE OF 'LIB' ARRAY CONTAINED IN SUBROUTINES MUST,
      1/,42X,48HBE INCREASED. (IF ARRAY SIZE IS INCREASED, MORE,
      1/,42X,47HEXECUTION TIME WILL BE REQUIRED.  RESET 'LIMIT',
      1/,42X,55H VARIABLES CONTAINED IN 'START' SUBROUTINE TO CORRESPOND,
      1/,42X,18HTO SIZE OF ARRAY.))FNSH
      5 FORMAT(///,35X, 34HEND OF TYPE I LISTING.  TOTAL OF,15,18H PFNSH
      1PATTERNS LOCATED.)FNSH
      6 FORMAT(///,34X,61HALL PATTERNS HAVE SAME LENGTH.  NO TYPE II L9STFNSH
      1ING GENERATED.)FNSH
      7 FORMAT(10X,5110)FNSH
      8 FORMAT(/,34X,6H**** .13.13H COMPLETED AT,15,29H SECONDS INTO EXEFNSH
      1CUTION ****)FNSH
      9 FORMAT(10A8)FNSH
      END

```

```

      PHASE FILEB500,FILEB100
      // EXEC FFORTRAN

```

```

SUBROUTINE SIFT
  INTEGER EFILE,ASTOR,BSTOR,TESTA,TESTB,TESTC,TESTD,TESTE,TESTF,TESTG,TESTH,TESTI,TESTJ,TESTK,TESTL,TESTM,TESTN,TESTO,TESTP,TESTQ,TESTR,TESTS,TESTT,TESTU,TESTV,TESTW,TESTX,TESTY,TESTZ
  1AHOLD,BHOLD,CHOLD,DHOLD,EHOLD,FHOLD,GHOLD,HHOLD,IHOLD,JHOLD,KHOLD,LHOLD,MHOLD,NHOLD,OHOLD,PHOLD,QHOLD,RHOLD,SHOLD,THOLD,UHOLD,VHOLD,WHOLD,XHOLD,YHOLD,ZHOLD
  CMMCN/A/IFILE,TEST,KPHAS,DIGIT,LIMIT
  DOUBLE PRECISION LTITLE(14),LTEST(10)

  C
  READ(4) LTITLE,LTEST,PRINT,EFILE,LL,TSTOR,LTIME,LY,LTHOLD
  REWIND 4

  C
  WRITE(3,14) LTITLE,LTEST

  C
  1 REWIND 5
  2 LCCOUNT = 0
  READ(5,15) AHOLD,BHOLD,LTD
  IF(LTD.LT.LTHOLD) GO TO 12
  IF(LL.EC.00) GO TO 4

  C
  REWIND 4
  DO 3 M = 1,LL
  READ(4) EHOLD,FHOLD
  IF(AHOLD.EQ.EHOLD.AND.BHOLD.EQ.FHOLD) GO TO 2
  3 CONTINUE

  C
  4 READ(5,13) ASTOR,BSTOR
  IF(ASTOR.EQ.EFILE) GO TO 12
  IF(ASTOR.NE.AHOLD) GO TO 5
  IF(BSTOR.NE.BHOLD) GO TO 5
  LCCOUNT = LCCOUNT + 1
  GO TO 4

  C
  5 LT = LCCOUNT + 2
  WRITE(3,17) AHOLD,BHOLD,LT,LTD

  C
  WRITE(4) AHOLD,BHOLD
  LL = LL + 1

```

1 SIFT
 2 SIFT
 3 SIFT
 4 SIFT
 5 SIFT
 6 SIFT
 7 SIFT
 8 SIFT
 9 SIFT
 10 SIFT
 11 SIFT
 12 SIFT
 13 SIFT
 14 SIFT
 15 SIFT
 16 SIFT
 17 SIFT
 18 SIFT
 19 SIFT
 20 SIFT
 21 SIFT
 22 SIFT
 23 SIFT
 24 SIFT
 25 SIFT
 26 SIFT
 27 SIFT
 28 SIFT
 29 SIFT
 30 SIFT
 31 SIFT
 32 SIFT
 33 SIFT
 34 SIFT
 35 SIFT
 36 SIFT

```

C      BACKSPACE 5
      LTPCNT = 0
      LTALLY = 0
6     READ(5,15)  CHOLD,DHOLD,TESTDIF
      LTPCNT = LTPCNT + 1
      IF(CHOLD.EQ.EFILE) GO TO 12

C      7 READ(5,13)  ASTOR,BSTOR
      LTPCNT = LTPCNT + 1
      IF(ASTOR.EQ.EFILE) GO TO 11
      IF(ASTOR.NE.CHOLD) GO TO 8
      IF(BSTOR.NE.DHOLD) GO TO 3
      LTALLY = LTALLY + 1
      GO TO 7

C      8 LKA = LTALLY - LCOUNT
      IF(LKA.LT.2) GO TO 9
      IF(CHOLD.GT.AHOLD.AND.DHOLD.LE.BHOLD) GO TO 10
      IF(CHOLD.GE.AHOLD.AND.DHOLD.LT.BHOLD) GO TO 10
9     BACKSPACE 5
      LTPCNT = LTPCNT - 1
      GO TO 6

C      10 LT = LTALLY + 2
      WRITE(3,18) CHOLD,DHOLD,LT,TESTDIF
      GO TO 9

C      11 WRITE(3,19)
      GO TO 1

C      12 CALL TIMER(LY)
      LY = (LY-LTIME)/60
      WRITE(3,16)  TSTOR,LY
      RETURN

C
SIFT 37
SIFT 38
SIFT 39
SIFT 40
SIFT 41
SIFT 42
SIFT 43
SIFT 44
SIFT 45
SIFT 46
SIFT 47
SIFT 48
SIFT 49
SIFT 50
SIFT 51
SIFT 52
SIFT 53
SIFT 54
SIFT 55
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SIFT 62
SIFT 63
SIFT 64
SIFT 65
SIFT 66
SIFT 67
SIFT 68
SIFT 69
SIFT 70
SIFT 71
SIFT 72

```

C	13	FORMAT(10X,7I10)	SIFT	73
	14	FORMAT(1H1,///.52X,23H** TYPE II LISTING **.,//.25X,10A8./,34X, 110A8.//.57X,8HLOCATION,9X,5HTOTAL,8X,6HLENGTH./, 1 57X,8HOF FIRST,7X,9HNUMBER OF,8X,2HOF./, 1 56X,10HOCCURRENCE,5X,11HOCCURRENCES,5X,7HPATTERN,//)	SIFT	74
	15	FORMAT(10X,2I10,20X,I10)	SIFT	75
	16	FORMAT(//,34X,10H*** TEST,13,13H COMPLETED AT,15,29H SECONDS INTS	SIFT	76
	10	EXECUTION ***./,1H1)	SIFT	77
	17	FORMAT(34X,16HORIGINAL PATTERN,3X,15,3H TO,15,6X,15,11X,13,/))	SIFT	78
	18	FORMAT(40X,10HSUBPATTERN, 3X,15,3H TO,15,6X,15,11X,13)	SIFT	79
	19	FORMAT(//)	INTSIFT	80
		END	SIFT	81
			SIFT	82
			SIFT	83
			SIFT	84
			SIFT	85


```

// EXEC LNKED
// EXEC

```

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