A MANUAL ON THE USE OF MUSIC IN RADIO DRAMA

Thesis for the Degree of M. A.
MICHIGAN STATE COLLEGE
Pauline Ruth Sitter
1946

THESIS

This is to certify that the

thesis entitled

"A Manual on the Use of Music in Radio Drama."

presented by

Pauline Ruth Sitter

has been accepted towards fulfillment
of the requirements for

Master of Arts degree in Speech, Dramatics, and Radio

Major professor

Date August 19, 1946

M-795

A MANUAL ON THE USE OF MUSIC IN RADIO DRAMA

By

Pauline Ruth Sitter

A THESIS

Submitted to the School of Graduate Studies of Michigan State College of Agriculture and Applied Science in partial fulfillment of the requirements for the degree of

MASTER OF ARTS

Department of Speech and Dramatics

1946

THESIS

ACKNOWLEDGMENTS

To the many people who have helped me gather the information and write this thesis, I wish to express my sincere appreciation. These include:

Mr. Joe A. Callaway, Instructor, and Mr. Paul D. Bagwell, Head, of the Department of Speech and Dramatics of Michigan State College, for their counsel and advice in choosing the subject for the thesis, in outlining the topic, and in the actual presentation of the material.

The many program directors of large radio stations who answered my letters and told of their policies and of their equipment used in producing music in radio drama.

Mr. George Logan Price of George Logan Price, Incorporated, for the detailed letter that aided in locating many historical facts, and in analyzing the music as it is used on radio dramatic productions.

The music publishing houses and producers of transcribed music for information used in compiling the catalogs of music prepared especially for use in radio drama.

The operating engineers of Radio Station WKAR, and of Radio Station WCAR, for their help in writing the chapter on the description and instructions for the use of the sound truck; especially one who prefers to remain anonymous who helped to prepare the scale used in timing the locations on records of the bridge, mood, and theme music as listed in Chapter VII.

Mr. Raymond Early and Mr. Clarence Edwards, both of the Department of Written and Spoken English, Basic College, of Michigan State College, who offered their assistance in the writing of various chapters.

Last, but by no means least, those whose moral support and understanding helped me through many discouraging days - my parents.

TABLE OF CONTENTS

CHAPTER I

PROCEDURE

During three years of studying radio drama, the writer became aware of a deficiency of material on the use of music in radio drama. Aside from a few references in texts, there were no instructions for choosing music as found on records, or for playing this music in the actual dramatic production. No analysis had been made of the music as it was used in commercial and professional dramas. The few descriptions of the sound truck equipment were not complete or detailed. Likewise, the catalogs of music planned especially for use in radio dramatic productions had not been collected and listed in one source.

Because of these facts, the writer decided to prepare a manual including all the various aspects of the use of music in radio drama. First, a brief historical survey was completed through examination of texts and early editions of periodicals in the radio field. Then the writer prepared an analysis of the present use of music in radio drama. To do this, a motion picture was chosen for its musical variety and musical dramatic effect, and the music as used in this movie was analyzed. This analysis was compared with an analysis of the music as used in several radio dramatic productions, and generalizations concerning the choice of music for dramatic effect were drawn.

The next section of this manual includes a description in detail of the equipment used in playing recorded music in radio drama. Production managers were contacted, their equipment inspected and described, and a practical sound truck planned and illustrated.

Detailed instructions for the use of this equipment were included. The letters sent to obtain pertinent information appear at the end of this chapter.

After discovering the use of music in radio drama in its earliest beginnings, examining the present use of music, and planning a sound truck with directions for its use, the writer considered the problem of choosing music for radio plays. This includes the methods of listening to the recorded music, of choosing the correct music, of spotting the records, and of playing the spots in the dramatic production.

Finally, as supplementary material to aid the person using music in radio drama, the writer compiled a catalog of music as prepared especially for radio dramatic productions. These included lists of music originated in the radio studio, and music originated from records on the turntables. As additional help to the beginner, three albums of recorded music were chosen and cataloged according to the mood, bridge, and theme music appearing in them.

These various sections were combined to make a manual on the use of music in radio drama including a brief historical survey of the use of music in radio dramatic productions, a section on the present use of music, a manual of instructions to be used as a guide in choosing music and making use of the recording and play-back equipment, and catalogs of available music planned especially for radio drama.

The writer completed the work outlined, and the result is the manual which follows. Its value lies in its compact presentation of the various aspects of using music in radio drama and in its being the only known manual of its kind. This manual should be

valuable to school groups studying radio, to radio stations that present dramatic productions, and to other dramatic study groups.

The following is the form letter that was sent to companies offering transcription and recording services:

MICHIGAN STATE COLLEGE
OF AGRICULTURE AND APPLIED SCIENCE
EAST LANSING

DIVISION OF LIBERAL ARTS
DEPARTMENT OF SPEECH AND DRAMATICS

April 21, 1945

Dear Sir:

I am a graduate student at Michigan State College, majoring in Speech with the emphasis on Radio. The subject of my thesis is "The Use of Music in Radio Drama." This study will be of value to educational institutions who use radio, and to radio stations, commercial and non-commercial.

In the thesis, I plan to include a brief historical survey of the use of music in radio dramatic productions, a section on the present use of music, and a manual of instructions to be used as a guide in choosing music and making use of the recording and play-back equipment. A catalog listing available bridge and background music will also be included, as well as the names and addresses of agencies and organizations offering this service.

To enable me to make a more thorough study, I would appreciate your assistance. At your convenience, will you answer the following questions?

1. Do you have any transcriptions or recordings of bridge or mood music available for general use - commercial or non-commercial?

2. If so, do you have a catalog listing such transcriptions or recordings? If so, will you please send me a copy?

3. Do you have any printed or written instructions on the use of recordings or transcriptions? Any instructions on the use of the turn-tables or recording equipment?

4. Do you have any written or printed material on the early use of music in radio dramatic productions? If so, will you please send me the same?

Any information which you can give me will be greatly appreciated.

Sincerely yours,

Pauline Sitter
Graduate Assistant

The preceding letter was sent to the following companies:

All-Star Radio Productions, Hollywood, California

Allied Record Manufacturing Company, Los Angeles, California

American Broadcasting Company, Seattle, Washington

American Recording Artists, Hollywood, California

American Recording Artists, New York, New York

American Royal Productions, Oakland, California

Arts Recording Studios, New York, New York

Asch Recording Studios, New York, New York

Associated Broadcasting Company, Chicago, Illinois

Associated Broadcasting Company, Limited, Montreal, Canada

Associated Music Publishers, Incorporated, New York, New York

Associated Program Service, New York, New York

Audio-Scriptions, Incorporated, New York, New York

Basch Radio Productions, New York, New York

Basch Radio Productions, Chicago, Illinois

Basch Radio Productions, Cleveland, Ohio

Basch Radio Productions, Boston, Massachusetts

Beck Recording Studios, Minneapolis, Minnesota

Beverly Radio Sales and Service, Chicago, Illinois

Walter Biddick Company, Los Angeles, California

G. C. Bird and Associates, Hollywood, California

Bost Records Company, New York, New York

Broadcast Music, Incorporated (BMI), New York, New York

Broadcasters Mutual Transcription Service, St. Louis, Missouri

Capital Records, Incorporated, Hollywood, California

Central California Broadcasters, Incorporated, Berkeley, California

Chicago Recording Studios, Incorporated, Chicago, Illinois

Clark Phonograph Record Company, Incorporated, Harrison, New Jersey

Columbia Recording Corporation, New York, New York

Columbia Recording Corporation, Hollywood, California

Columbia Recording Corporation, Chicago, Illinois

Commercial Broadcasting Service, Limited, Toronto, Canada

The Compo Company, Limited, Lachine, Quebec, Canada

Co-operative Broadcasting Service, Chicago, Illinois

Damon Transcription Laboratory, Kansas City, Missouri

Decca Records, Incorporated, New York, New York

Disco Recording Company, Incorporated, St. Louis, Missouri

Don Lee Productions, Hollywood, California

Eccles Disc Recordings, Incorporated, Hollywood, California

Charles Eckart Company, Los Angeles, California

Electro-Vox Recording Studios, Hollywood, California

Empire Broadcasting Corporation, New York, New York

Fidelity Recording Studios, Cincinnati, Ohio

Film Associates Company, Dayton, Ohio

Carl Fischer, Incorporated, New York, New York

Frankay and Jackson Recording Studios, Incorporated, New York, New York

Gamble Recording Studio, Chicago, Illinois

General Amusement Corporation, New York, New York

General Amusement Corporation, Chicago, Illinois

General Amusement Corporation, Hollywood, California

General Amusement Corporation, Cincinnati, Ohio

General Sound Corporation, New York, New York

General Sound Corporation, Washington, D. C.

Gennett Records, Richmond, Indiana

Gennett Records, New York, New York

Gennett Records, Los Angeles, California

William Gernannt, New York, New York

Grace Gibson Radio Productions, Hollywood, California

Harry S. Goodman Radio Productions, New York, New York

Harry S. Goodman Radio Productions, Los Angeles, California

Ben Greene Film Productions, New York, New York

Harvey and Howe, Incorporated, Chicago, Illinois

Harvey and Howe, Incorporated, New York, New York

Hollywood Associate Producers, Los Angeles, California

International Artists, Incorporated, Hollywood, California

John Keating, Portland, Oregon

John Keating, Seattle, Washington

Key Recordings, New York, New York

Lang-Worth Feature Programs, Incorporated, New York, New York

C. P. MacGregor, Los Angeles, California

McDonald Recording and Engineering Service, Los Angeles, California

R. U. McIntosh and Associates, Incorporated, North Hollywood, California

Alexander McQueen, Chicago, Illinois

Melodisc Recording Company, Hollywood, California

Melotone Recording Studio, New York, New York

Mercury Recording Studios, Chicago, Illinois

Metropolitan Recording Studios, New York, New York

Charles Michelson Radio Transcriptions, New York, New York

Charles Michelson Radio Transcriptions, Los Angeles, California

Charles Michelson Radio Transcriptions, Richmond, Indiana

Mid-West Transcriptions, Incorporated, Minneapolis, Minnesota

Music City, Hollywood, California

Musicraft Corporation, New York, New York

Mutual Recording Company, Hollywood, California

Muzak Corporation, New York, New York

NBC Radio-Recording Division, New York, New York

NBC Radio-Recording Division, Chicago, Illinois

NBC Radio-Recording Division, Washington, D. C.

NBC Radio-Recording Division, Hollywood, California

NBC Radio-Recording Division, San Francisco, California

National Records Company, New York, New York

National Recording and Film Corporation, Chicago, Illinois

Neblett Radio Productions, Chicago, Illinois

Neff Radio Productions, Detroit, Michigan

Donna Parker Productions, Chicago, Illinois

Pearl-Tone Recording Studios, Des Moines, Iowa

Premier Radio Enterprises, Incorporated, St. Louis, Missouri

George Logan Price, Incorporated, Los Angeles, California

Radio Comics, Incorporated, New York, New York

Radiozark Enterprises, Springfield, Massachusetts

RCA Victor Company, Limited, Montreal, Canada

RCA Victor Company, Limited, Toronto, Canada

RCA Victor Division, New York, New York

RCA Victor Division, Chicago, Illinois

RCA Victor Division, Hollywood, California

Radio Features of America, New York, New York

Radio Producers of Hollywood, Los Angeles, California

Radio Receiving Record Company, Providence, Rhode Island

Radio Receiving Record Company, San Diego, California

Radio Recorders, Los Angeles, California

Radio Recording Studios, New York, New York

Radio Recording Studios, Chicago, Illinois

Royal Recording Company, Berkeley, California

G. Schirmer, Incorporated, New York, New York

Joseph C. Schramm Studios, New Orleans, Louisiana

Edward Sloman Productions, Los Angeles, California

Sound Studios, Incorporated, Washington, D. C.

The Sound Workshop, Los Angeles, California

Speedy-Q-Sound Effects, Los Angeles, California

Standard Radio, Hollywood, California

Standard Radio, Chicago, Illinois

Standard Radio, New York, New York

Standard Radio, Dallas, Texas

Studio and Artists Recorders, Hollywood, California

Technisonic Recording Laboratories, St. Louis, Missouri

Tel-A-Recordings, Incorporated, New York, New York

L. S. Toogood Recording Company, Chicago, Illinois

Transcribed Radio Shows, New York, New York

United Sound Systems, Detroit, Michigan

U. S. Recording Company, Washington, D. C.

Universal Radio Productions, Chicago, Illinois

Universal Recording Company, Incorporated, New York, New York

Thomas J. Valentino, Incorporated, New York, New York

Webber Radio Programs, Des Moines, Iowa

Wiederhold Recording Studios, Louisville, Kentucky

Witte Radio Productions, Los Angeles, California

World Broadcasting System, Incorporated, New York, New York

World Broadcasting System, Incorporated, Chicago, Illinois

World Broadcasting System, Incorporated, Hollywood, California

World High Fidelity Recording, Incorporated, Montreal, Canada

Wyrco Recording Studios, San Antonio, Texas

Frederic W. Ziv Company, Cincinnati, Ohio

Frederic W. Ziv Company, New York, New York

Frederic W. Ziv Company, Hollywood, California

Frederic W. Ziv Company, Cleveland, Ohio

Copies of the following letter were sent to various radio stations, chosen because they originate some of the large-account commercial radio dramatic productions.

MICHIGAN STATE COLLEGE
OF AGRICULTURE AND APPLIED SCIENCE
EAST LANSING

DIVISION OF LIBERAL ARTS
DEPARTMENT OF SPEECH AND DRAMATICS

Dear _____:

I am a graduate student at Michigan State College, majoring in Speech with the emphasis on Radio. The subject of my thesis is "The use of Music in Radio Drama." This study will be of value to educational institutions who use radio, and to radio stations, commercial and non-commercial.

In the thesis, I plan to include a brief historical survey of the use of music in radio dramatic productions, a section on the present use of music, and a manual of instructions to be used as a guide in choosing music and in making use of recording and play-back equipment. A catalog listing available mood and background music will also be included as well as the names and addresses of agencies and organizations offering this service.

To enable me to make a more thorough study, I would appreciate your assistance. At your convenience, will you answer the following questions?

1. Would you give me a brief description of the layout of your recorded sound equipment? I would like to know the number of turntables you use, if the turntables are equipped with one or two play-back arms for each table, and any further description you are able to give me.

2. How much recorded music do you use for your local dramatic productions? How much do you use on your network shows?

3. What method or methods do you use for spotting a record? Do you use a mechanical spotter? How does it operate? Have you any printed material on the same? If so, would you please send me a copy?

4. Is live music composed especially for each show that uses live music, or do you have a file from which the musicians draw for this purpose? Do you have any scores of such live music available for an outsider to look at? If so, will you send me a few so I may understand what type of thing you do in creating certain moods and bridges?

5. Have you any written or printed material on the use of music in your early dramatic productions? If so, would you send me copies of the same?

6. What is your policy concerning the use of music instead of the actual sound effect; for example: the use of fast "running" music instead of horses' hooves, imagination as opposed to realism?

7. Do you have a copy of the laws governing the list of recordings that may be used in radio dramatic productions; the laws as set up by the unions of musicians and recording companies? If so, will you send me a copy of the same?

Any information which you can give me will be greatly appreciated.

Sincerely yours,

Pauline Sitter
Graduate Assistant

The preceding letter was sent to the following stations:

KFBK, Sacramento, California

KFI, Los Angeles, California

KNX, Los Angeles, California

KPO, San Francisco, California

WTOP, Washington, District of Columbia

WSB, Atlanta, Georgia

WLS, Chicago, Illinois

WGN, Chicago, Illinois

WENR, Chicago, Illinois

WBBM, Chicago, Illinois

WMAQ, Chicago, Illinois

KWKH, Shreveport, Louisiana

WBZ, Boston, Massachusetts

WJR, Detroit, Michigan

WWJ, Detroit, Michigan

WXYZ, Detroit, Michigan

WABC, New York, New York

WEAF, New York, New York

WHN, New York, New York

WJZ, New York, New York

WOR, New York, New York

WGY, Schenectady, New York

WLW, Cincinnati, Ohio

WCKY, Cincinnati, Ohio

KDKA, Pittsburgh, Pennsylvania

On the following page is a copy of the letter that was sent to the organizations of publishers.

MICHIGAN STATE COLLEGE
OF AGRICULTURE AND APPLIED SCIENCE
EAST LANSING

DIVISION OF LIBERAL ARTS
DEPARTMENT OF SPEECH AND DRAMATICS

Dear Sirs:

Enclosed you will find a copy of the form letter that I have sent to several of the recording studios and radio stations in the country. However, I believe you might be able to help me with a few more of the problems that have come up in preparing the thesis.

First, could you send me either a complete list of any publishers whom you represent, or else a list of those publishers who publish music for theme, background, or bridge use in radio dramatic programs? You can see it would be to their advantage if I could list such publishers as well as to my advantage in being able to prepare a more complete thesis.

Also, could you explain to me a bit about the laws or conditions as set up by your organization concerning the use of music on the radio? Do any of these rules govern the use of your music in dramatic productions? Are most of your conditions standard, or do you have individual contracts with the individual stations or networks?

Any information which you can give me will be greatly appreciated.

Sincerely yours,

Pauline Sitter
Graduate Assistant

The preceding letter was sent to the following organizations:

Broadcast Music, Incorporated, New York, New York

American Society of Composers, Authors, and Publishers,
New York, New York

Society of Jewish Composers, Publishers, and Song Writers,
New York, New York

Associated Music Publishers, Incorporated, New York, New York

Reuben H. Connelley Corporation, Chicago, Illinois

Music Publishers Protective Association, Incorporated,
New York, New York

Muzak Corporation, New York, New York

The last letter that was sent was to the various publishers; a copy of it is on the next page.

MICHIGAN STATE COLLEGE
OF AGRICULTURE AND APPLIED SCIENCE
EAST LANSING

DIVISION OF LIBERAL ARTS
DEPARTMENT OF SPEECH AND DRAMATICS

Dear Sir:

At the present time, I am musical director of radio station WCAR, in Pontiac, Michigan. However, I am also working on my M. A. degree at Michigan State College, majoring in Speech with the emphasis in Radio. The subject of my thesis is "The Use of Music in Radio Drama." This study will be of value to educational institutions which use radio, and to radio stations, commercial and non-commercial.

In the thesis, I plan to include a brief historical survey of the use of music in radio dramatic productions, a section on the present use of music, and a manual of instructions to be used as a guide in choosing music and making use of the recording and play-back equipment. A catalog listing available mood and background music will also be included, as well as the names and addresses of agencies and organizations offering this service.

To enable me to make a more thorough study, I would appreciate your assistance. At your convenience, will you answer the following questions?

1. Do you have any scores for music especially composed to be used as bridge or mood music in connection with radio dramatic productions? If so, do you have a catalog listing these scores? Will you please send me a copy of the same?

2. Are these scores, if any, available for general use - commercial or non-commercial?

3. Do you offer a composing service? For example: if a radio dramatic director asked for special music composed to fit a particular script, would you be able to offer the service of composing it for him? If you have this service, would you send a detailed description of the service?

Any information which you can give me will be greatly appreciated.

Sincerely yours,

Pauline Sitter

The preceding letter was sent to the following publishers:

ABC Music Corporation, New York, New York

Acme Music Company, New York, New York

Acme Music Corporation, New York, New York

Affiliated Music Corporation, New York, New York

Ahlert and Lewis Music Publishers, New York, New York

Allen Intercollegiate Music, Incorporated, New York, New York

Allied Music Corporation, New York, New York

Allied Music Corporation, Cincinnati, Ohio

American Academy of Music, Incorporated, New York, New York

Apollo Music Company, New York, New York

D. Appleton Century Company, New York, New York

Augsburg Publishing House, Minneapolis, Minnesota

Ball Music Publishing Company, Hollywood, California

Beacon Music Company, New York, New York

Bell Music Company, Chicago, Illinois

Bell Tone Music Publishing Company, New York, New York

Blake, Whitney, Music Publisher, New York, New York

Boston Music Company, Boston, Massachusetts

Broadway Music Corporation, New York, New York

California Music Publishers, Hollywood, California

Century Music Publishing Company, New York, New York

Chappell and Company, New York, New York

Cine-Mart Publishing Company, Hollywood, California

Clef Music Company, New York, New York

M. M. Cole Publishing House, Chicago, Illinois

Colonial Music Publishing Company, New York, New York

Composers Press, Incorporated, New York, New York

Concord Music Publishing Company, Incorporated, New York, New York

Crawford Music Corporation, New York, New York

D. S. Publishing Company, New York, New York

Joe Davis Music Company, Incorporated, New York, New York

Oliver Ditson Company, Incorporated, Philadelphia, Pennsylvania

Dixie Music Publishing Company, New York, New York

Embassy Music Corporation, New York, New York

Embee Music, Incorporated, New York, New York

Emcee Publishing Company, Beverly Hills, California

Empire Music Publishing Company, New York, New York

Leo Feist, Incorporated, New York, New York

Fine Songs, New York, New York

Carl Fischer, Incorporated, New York, New York

J. Fischer and Brother, New York, New York

Ford Music, Incorporated, New York, New York

Gordon, Kaufman and Real, Incorporated, New York, New York

Gotham Music Service, Incorporated, New York, New York

Hall and McCreary Company, Chicago, Illinois

Hall-Mack Company, Winona Lake, Indiana

Hall Music Company, Maryville, Tennessee

Hampton Publications, Incorporated, New York, New York

Harmony House, New York, New York

Herald Publishing House, Independence, Missouri

Hitchcock Publishing Company, New York, New York

Hoffman Company, Chicago, Illinois

Hollywood Music Sales, Hollywood, California

Hummel Publishing Company, Cincinnatus, New York

Independent Music Publishers, New York, New York

Keller, Berkeley, California

Leo D. Keller, Rochester, New York

Lang-Worth Publications, Incorporated, New York, New York

Leeds Music Corporation, New York, New York

Liberty Music Publishers, Hollywood, California

London Music Corporation, New York, New York

Lyon and Healy, Incorporated, Chicago, Illinois

Madison Music Company, New York, New York

Edward B. Marks, Music Corporation, New York, New York

Master Music Publishers, New York, New York

McLean Music Company, Dayton, Ohio

Mercury Music Corporation, New York, New York

Metro Music Company, New York, New York

Metropolitan Music Company, New York, New York

Metropolitan Music Publishers, Detroit, Michigan

Mike-Tunes, Chicago, Illinois

Mills Music, Incorporated, New York, New York

Modern Standard Music Company, Chicago, Illinois

Music City Copyrights, Hollywood, California

Music Service Company, Boston, Massachusetts

Mutual Music Society, Incorporated, New York, New York

National Music Company, Chicago, Illinois

New Era Music Corporation, New York, New York

Paramount Music Corporation, New York, New York

Pro-Art Publications, New York, New York

Pro-Musica Publishing Company, Hollywood, California

Process Music Publications, Chicago, Illinois

Radio Music Publishers, Chicago, Illinois

Radiotunes, Incorporated, New York, New York

Record Music Publishing Company, New York, New York

Remick Music Corporation, New York, New York

Robbins Music Corporation, New York, New York

Royal Music Publishing Company, New York, New York

Royal Music Publisher, Hollywood, California

E. C. Schirmer Music Company, Boston, Massachusetts

G. Schirmer, Incorporated, New York, New York

The Arthur P. Schmidt Company, Boston, Massachusetts

Sesac, Incorporated, New York, New York

Shubert Music Publishing Corporation, New York, New York

Superior Music, Incorporated, New York, New York

Symbolic Music Publishing Company, Bronx, New York

Syndicate Music Publishers, Incorporated, Hollywood, California

Tele-Mus Publishing Company, Hollywood, California

Televise Music Company, Chicago, Illinois

Tempo Music, Incorporated, New York, New York

Top Music Publishers, New York, New York

Trans-America Music Publishers, Hollywood, California

United States Music, Incorporated, Long Island, New York

Universal Music Sales, Chicago, Illinois

University Music Company, University City, Missouri

Urban Publications, New York, New York

Victoria Publishing Company, New York, New York

Waldorf Music Company, New York, New York

Warner Studio, Jefferson City, Missouri

Webster Music Company, Hollywood, California

Wemar Music Corporation, New York, New York

M. Witmark and Sons, New York, New York

B. F. Wood and Company, Boston, Massachusetts

Wright Publishing Company, Los Angeles, California

York Music Corporation, New York, New York

CHAPTER II

HISTORICAL BACKGROUND

Music, used as themes, bridges, and backgrounds, is an integral part of every radio dramatic production. Therefore, a manual has been compiled for the benefit of the beginning operator, to aid him in choosing and using music for a radio play.

In 1907, the Westinghouse Electric and Manufacturing Company owned and operated two stations in and near Pittsburgh. The programs consisted largely of phonograph recordings, talks, and baseball and football scores. The broadcasts were heard by the few people who owned receiving sets.

The first permanent radio broadcasting station in the world was established by Westinghouse on November 2, 1920, with the call letters of KDKA. The first successful program over KDKA was a broadcast of the returns of the presidential election in 1920. Soon afterward other types of programs were initiated, and this eventually led to radio drama.

The first dramatic show ever broadcast over the air was a one-act play entitled "Friend Mary." The following is the review of that program as taken from the Radio Broadcasting News of February 24, 1923:

> For the first time in the history of Pittsburgh Radio, a one-act play was broadcasted. The play, a play on Lincoln, "Friend Mary," was heard through the Pittsburgh Post Studio, of Station KDKA, on the evening of February 12, 1923.
>
> The four character sketch, which is a production of the department of drama of the Carnegie Institute of Technology, was written by the director of the department of drama and was acted by students of the department.

> This play is one of the finest that has ever been produced by Carnegie Tech drama students and it has such merit that it has won a place among the acts at the Davis Theater, where it was presented the week of February 12, as a feature act.
>
> "Friend Mary" - written by Thomas Wood Stevens, and described as a Lincoln Episode, tells of the love affairs of Mary Owens, whose married name is Mrs. Vinyard, with The Great Emancipator.
>
> In the play, Mary Owens tells her daughter, Jessie, of the letters written to her in her youth by Lincoln and the fact that she may publish them in a New York newspaper in order to keep the editor from printing a garbled account of the episode. Just as she is about to turn the letters over to the newspaper reporter, the ringing of bells announce the assassination of Lincoln.
>
> The scene is laid in Mrs. Vinyard's home in Missouri, April 15, 1865.
>
> The play was produced under the direction of Chester Wallace and the following actors completed the cast: Mrs. Vinyard (Mary Owens), Marguerite Harmon; Jessie, her daughter, Dorothy Shell; Judge Parsons, Harry Mervic; Mr. Flint, correspondent for the New York "Herald," Phillip R. Thorn. [1.]

According to Franklin A. Tooke, program manager of radio station KDKA, no musical bridges were used on this broadcast of the play "Friend Mary."

> In this program no musical bridges were used. Apparently the introduction of music to set moods, change scenes, or establish characters was introduced later. [2.]

The use of music probably had not been thought of or considered feasible. The play was probably produced exactly as on the stage without even an attempt at adaptation in writing.

---

1. "One Act Play Broadcast for First Time," Radio Broadcasting News, (February 24, 1923).

2. Franklin A. Tooke, Program Manager, Station KDKA, Pittsburgh, Pennsylvania, in a letter to the writer, (November 1, 1945).

While trying to determine the exact time of the introduction of music to radio drama, the writer found several references to dramatic productions, with no mention of music. As late as January, 1924, in the Radio Broadcast, there appeared a photograph of the Grand Guignol Players of France on tour in the United States. There is no evidence of any music used in their broadcasts.[3.]

In the June, 1924, issue of Radio Broadcast, dissatisfaction in the method of presentation of plays on the radio is voiced:

> .... It may be that the giving of plays by radio will sometime prove a practical method of producing drama, but at present, to some of us, it presents difficulties that make for dissatisfaction. WGY at Schenectady put on the comedy "Snowball" about a month ago, and although it came through clear, with every accent in speech plainly brought out, it all seemed fragmentary and confused. Like grand opera, drama appeals to more than the sense of hearing. It seems as if it were overstraining the resources of the radio to expect effective results when either opera or drama is broadcast. But perhaps time will bring out developments along these lines that will astonish us. Indeed, nothing is impossible of execution of which the human mind can conceive. [4.]

A few months later, another article in this same vein appeared:

> We have heard a great deal about the violence done to the sales of popular songs when they are sent out over the radio channels - without a suitable royalty. Now we have the same reaction in the case of plays sent out from the broadcasting studio. And as we read the opinion of Mr. Edward Childs Carpenter, the president of the American Dramatists, we are inclined to believe as he does, an effect the loquacious attorney for the American Society of Composers, Authors, and Publishers was quite unable to produce.

---

3. Radio Broadcast, (January, 1924), 245.

4. "Dramatic Celebrities," Radio Broadcast, (June, 1924), 126.

> Says Mr. Carpenter - "Radio is after all, but hearing the words of a play. A play is written to be performed. Without actors any play is bound to lose its effectiveness. The appeal of any play is in the action and the staging, and no play has really been properly presented nor has the integrity of the author's idea been presented without the complete presentation in a theater, with production, costumes, scenery, lights, and the other elements that go to cast the atmospheric spell intended by the playwright ... It is not at all impossible that radio will evolve a technique all of its own in the matter of dramatic production." 5.

Then, only a month later, another article was written emphasizing the same theme:

> .... It is realized at once that a good deal of alteration must be made in the ordinary play before it is suited to radio broadcasting. Gestures, scenery, lighting, and all such artifices are of no avail. The intonation of the voice must be developed to the limit as the only way of projecting the atmosphere of the scene to the radio listeners. New noise-producing pieces of apparatus have been called upon to help out the listeners' imagination. The broadcast director has a real task to carry his radio audience along with him as the melodrama unfolds itself ... 6.

From the above quotation, we see that sound effects were in use at that time, but no mention was made of music as an aid to the listeners' imagination. We must assume that it was not in use although the directors were searching for a suitable medium to make the radio drama a complete and understandable production.

The records of the first actual use of music in radio drama are not found in any publication available to the writer. However, it probably began in May, 1925, when a program using connective narration with music was broadcast from KDKA, Pittsburgh.

---

5. "The Radio Drama Needs a New Technique," Radio Broadcast, (August, 1924), 302.

6. "WGY Finishes Its Dramatic Season," Radio Broadcast, (September, 1924), 405-6.

> .... For some time it has been evident that radio must evolve a better method of presentation for its programs.
>
> It was this kind of reasoning that led to one of the distinct innovations in radio, a dramatic program presenting music and theme in a form of continuity which holds many possibilities ... [7].

This program was designed primarily to connect a series of songs, but the narration consisted of a fictional story. This was the first step toward the use of music in radio dramatic productions.

It was not until March, 1926, that any mention of music in a radio play appeared. At that time, a set of rules was printed for a new radio drama contest:

> Radio will not allow any sly stage business. Glances, asides and business with props cannot be put over, to the radio audience. Entrances and exits must in some way be told in the action of the play. Just as the movies brought about the new drama and a new way of presenting it, so will radio. Sounds will be the principal vehicle. Bells of all sorts, church, dinner telephone, house and others can be used to advantage. Rain, storms, musical backgrounds, horses, airplanes, automobiles, all have sounds which can be duplicated and will lend life to the words and action of the radio play ... [8].

In October, 1926, the first available mention of music in connection with radio dramatic productions appeared:

> The use of phonographic records for material hearkens back to the earliest days of broadcasting. However, WGN managed to revive this ancient method in an interesting manner making use of the same idea that prompted their series of "Old Time Prize Fight." Four former Presidents, Theodore Roosevelt, Warren G. Harding, Woodrow Wilson, and William Howard Taft were the speakers on the program. The speeches were recorded many years ago by the Victor Company.

---

7. "New Fashions in Radio Programs," Radio Broadcast, (May, 1925), 83.

8. "Wanted: A Radio Shakespeare," Radio Broadcast, (March, 1926), 578.

> Listeners were asked to imagine themselves on the moonlit steps of the Capitol in Washington on the evening of July 4. The great military bands of the country furnished a realistic background of music (also by means of records). The cheers of the multitude, presumably gathered about the Capitol steps, could be heard. Then passed in ghostly review the three departed statesmen. Roosevelt gave his famous address on "The Farmer and the Business Man," in the forceful, staccato, hoarse-voiced manner that made him famous. Next, President Wilson, with his perfect enunciation and thoughtful deep-voiced tone, delivered an "Address to the Farmers." The slow leisurely voice of the late William Harding was heard in his famous "Address at Hoboken on the Return for Burial of 5212 American soldiers, sailors, marines and nurses," given on May 23, 1921. The one living ex-president, William Howard Taft, repeated his "Labor and Capitol" address, given originally in September, 1912. [9]

This production not only used music, but used it in much the same manner in which it is used today. The cheering crowd is typical of many of our productions, likewise the military band music in the background. However, in contrast to contemporary practices, no mention was made of a theme to "frame" the production, or of musical bridges between scenes or speeches.

Since October, 1926, music has been improved through constant use, and is now being used successfully to aid in creating dramatic effects.

---

9. "An Effective Use of the Phonograph in Broadcasting," Radio Broadcast, (October, 1926), 491-92.

CHAPTER III

AN ANALYSIS OF THE PRESENT USE OF MUSIC

Before completing an analysis of how music is being used at the present time, the writer would like to mention the contribution radio has made to music. Just as music has contributed to the development of radio dramatics, the reverse is also true. The use of music in movies is closely related to the use of music in radio drama. It is used as themes to open and close the production, as bridges between scenes (transitional or straight), and as background settings to maintain a mood or emotion. To attain these ends, musical scores are written especially for individual productions; some of the old classics have been revived, altered somewhat, and popularized; and new effects in orchestration have been discovered and used. An examination of the use of music in a movie and in a few radio productions will serve to illustrate these points.

"Mrs. Parkington," a movie starring Greer Garson and Walter Pidgeon, and produced by Metro-Goldwyn-Mayer, is a story of an innocent Western girl who married Mr. Parkington, a man from New York. The play opened in New York when Mrs. Parkington was an old lady. She had inherited all of her husband's wealth when he died. Mrs. Parkington had made her will to divide her estate equally between her children. One of them, a son, revealed that he was an embezzler, and that the only way to save the family name was for Mrs. Parkington to change her will and give him all of her money.

When Mrs. Parkington was confronted with this fact, she began to tell the story of her life. She told how, as a girl, her

mother kept roomers in their home in a Western mining town. Mr. Parkington took a room and the daughter waited on him as if she worshipped him. On the day that her mother was killed in an explosion, Mr. Parkington persuaded the girl to marry him and to return to New York with him.

In New York, Mr. Parkington's previous mistress was assigned the task of making a "lady" of Mrs. Parkington. The tutor did this and also helped Mr. Parkington plan and build the new home for the bride.

Shortly after the Parkingtons moved into their new home, they invited all the "high-society" people to a large party. Since Mr. Parkington was a man who upheld his principles and was hard to deal with because he was unbending in his decisions, and since Mrs. Parkington was only an orphan from the West, very few guests came to the party. Those few left within a few minutes of their arrival, so the party was turned over to the hired help.

A baby was still-born before other children were born to the Parkingtons. One daughter married an Englishman and lived on his estate.

After all these facts of the life of Mrs. Parkington were revealed, the scene shifted again to the story of the embezzlement and the request for Mrs. Parkington's money. When he was refused, the embezzler tried to commit suicide, but failed in the attempt. Mrs. Parkington did finally change her decision and the movie ended with her consent to save the family name by turning over to her son all of her wealth.

This movie was orchestrated in original by Bronislaw Kaper. The melodic and sweet tune of "I'll Take You Home Again, Kathleen" supplied the theme for much of the music; it was done sometimes in wild confusion, sometimes in straight melody, and sometimes in ethereal chimes. Every climactic scene in the movie was musically backed with appropriate music. The opening was set for Christmas Eve with the familiar "Jingle Bells" fading into "Silent Night" as sung by a group of carollers, all in contrast with the entrance of the neurotic Mrs. Parkington; by contrast the music added to the character setting.

For a later scene, that of the marriage proposal, the music was gay, soft, but pompous - a type of music that must have been specifically composed for the occasion because the mood of the music changed with the mood of the action in the play. The music led to the parting scene in the Western town and to the arrival in New York. Mendelssohn's Wedding March was played for the scene in the Royal Suite of the New York hotel. This last, the wedding march, was orchestrated in the strings of the orchestra, led into the solo violinist as shown on the screen by the serenader, and then the music picked up the original use of "I'll Take You Home Again, Kathleen" for a love scene. In "Mrs. Parkington," as in most movies, the strings were used almost exclusively for all love scenes.

When Mrs. Parkington's son revealed his criminal act, the music was sinister with no identifying melody; it alternately built and faded in intensity and volume to follow the rising and falling action of plot. It built to the shot of the gun when the embezzler tried to commit suicide.

When Mrs. Parkington was presented with a new house, and she was hesitant about approving it, the music again had no melody, but was happy and a little hesitant with a smooth fade into the piano version of the same Mendelssohn Wedding March. In the new house, the party scene was illustrated by stupendous decorations on the screen, while the music revealed a gay atmosphere of the Viennese waltzes in the background. It faded a little to indicate the strain as it developed. The musical climax and the climax of the sub-plot came simultaneously in this scene; Chellini sang a recitative and aria that contrasted with the babble at the table where the cooks, waiters, and unappreciative members of a popular dance band sat. The music was dull and expressionless and added to the sense of the failure of the party.

Like love scenes, scenes portraying death and sadness are usually done with strings. In "Mrs. Parkington," as the child was lost, the background was in a minor key and was played with muted strings and woodwinds. As the rest of the family refused to give the embezzler the money, a similar melancholy effect was produced in the strings that made the audience emphatically understand how the man must have felt in his disappointment.

When a scene changes from one country to another, the music almost invariably changes with it. Typically, as the scene in this movie moved to England, the music did likewise; there was a decidedly different background from that in the American scenes.

As Mrs. Parkington changed her decision in favor of paying the money to the embezzler, the music changed tone and built this last scene to a climactic and triumphant conclusion, with three chords

in the major key.

Now, for comparison, let us analyze the music used in the radio dramas of one evening's listening. [10.]

For the production, "Mommy and the Men," (a light and humorous daily serial) the theme was light and frivolous, and lightly orchestrated; it set the humorous mood for the whole show. The middle musical transition came in a humorous mood immediately after an unexpected turn of events. The music was predominately flute with three carefree chords on the end. The closing theme was the same as the opening.

The next production was "Mr. Keen, Tracer of Lost Persons," (a mystery story) in which the music was again orchestrated with original scores to fit the show. The announcer opened the program with the words, "It's time now for 'Mr. Keen, Tracer of Lost Persons!'" The full orchestra followed with a rather discordant fanfare, a set opening that is used each week for this program. After the opening commercial, the theme was melodic and romantic, the type of theme which changed with its own melody to become sinister with three minor chords pitched low in the bass instruments and in the drums. As the scene showed a girl killed by a hit-and-run driver, the orchestra entered sharply with an excited passage, to keep the audience in an excited mood. When the note from her purse was read, "You will die tonight," six mordant chords in a morbid

---

10. December 27, 1945, from 7:00 P.M. until 9:00 P.M. and including the following dramatic shows:
    7:00 to 7:15, CBS, "Mommy and the Men"
    7:30 to 8:00, CBS, "Mr. Keen, Tracer of Lost Persons"
    8:00 to 8:30, CBS, "Suspense"
    8:30 to 9:00, CBS, the F.B.I. show.

rhythm were heard. The rest of the musical bridges were similar. There was no melody, just chords in a sinister mood, sometimes low in pitch, sometimes high in pitch, but always discordant. The concluding chords were likewise in the minor key with a slight discord, which worked up to a slightly happier ending.

For "Suspense," the mystery thriller show, discordant chords were used throughout. An opening chord was followed and taken out by chimes, then by drums. The effect of narration as contrasted with dialogue was used in this production. Under all the narration was background music, and this was effectively used to tie the narration together. It was consistently used but under the narration only. This background music had no melody, just slow chords in the full orchestra in high and in low pitches. Every important sentence in the closing narration was punctuated with a sharp chord. The rest of the music followed the same pattern in this production.

The music for the Federal Bureau of Investigation show was similar except for a few scenes. The first of these was the talk about a hero coming home. It was introduced by a straight orchestral version of "My Country 'Tis of Thee." The montage effect was used in the latter part of the play, when a kidnapped boy was being delivered to his parents. All the time the parents were running through the subway station, from one point to another, the fast orchestral music came in. When they were talking, the same music faded to the background. This montage effect added to the sound effects of the running feet, although several montage passages do not. During a prison break, the same montage effect was used showing the prisoner and the policeman going from one means of conveyance to

another and finally to the hide-out in the mountains. The play ended with the same established theme which is used to end each week's production.

So, through one evening's radio listening, and one movie, the writer discovered many effects that are used: differences in orchestration, background music under either narration or dialogue, montage effects, and theme choice.

The choice of all mood music, bridges, and themes rests with the taste of the director and the sound-music man, but on the whole, a careful study of what is being done by those already established in the field will aid the average student to train himself in this line. When recorded music is used, hours of patient listening are required for many dramatic shows in order to find exactly the right passages. They must be timed to the second, the recordings must be correctly spotted for speed-cueing, and all the techniques of elementary engineering must be mastered.

The novachord and organ are sources of weird and sinister effects. Strings and woodwinds in minor keys are used for sadness, disappointment, and for some types of love scenes. Romantic love scenes are often done with strings and woodwinds in major keys. Storm scenes usually require drums, war scenes require brass, and ethereal scenes are portrayed with chimes and high range sweet instruments. Gay, cheerful scenes use moderately fast tempos with harmonic chords; in contrast, a confused life is portrayed with discordant music, fast or slow in tempo. Every piece of music has a mood, and every scene is in a mood. The problem is to match the two so that every scene is backed by the correct mood in the music.

It does not necessarily follow that every scene must have music in the background, even though the movies most generally use a musical background. However, radio drama requires close listening to the words, as the aural sense is all that is available at the present time to the average listener, and therefore music might detract from the words. If the music, in radio drama, is carefully chosen or composed, and orchestrated, then background music is very effectively used. In this sense, music for the visual dramatics (movies and television) may be more dynamic and forceful whereas the music for aural dramatics (radio) must be more subdued and more perfectly in accord with the mood of the scene. Where the audience can see the characters and scenery, the whole idea of the play is more clearly conveyed. But where the aural sense is the only means of conveyance, any sound out of keeping with the general mood and idea is necessarily eliminated from the production.

The question of realism as opposed to imagination has been presented to the writer in choosing music and sound effects for radio dramatic productions. Should the operator in charge choose the actual sound of horses running on pavement, or should he choose music in the spirit of a run? Perhaps he should use both, one fading into the other. The point to remember is that the sound man, who usually handles the recorded music, must be subjective about his choice and use of music and sound. He must be the actor's shadow instead of being a different personality. The sound man must have the artistic conception and imagination of the actor so that they become as one when all parts of the final production are

coordinated. The sound man watches for the rhythm and pace; he must see the motivation for any change of pace in the actor individually or in the show as a whole. He must feel the music inside him so that he knows the music is in the exact mood of the show and of each scene within it.

The decision to use the actual sound effect or the musical counterpart of it is sometimes decided by the producer-director of the show, and sometimes left to the discretion of the sound-music man. The writer has inquired of several program directors of large stations concerning their policy. The replies were varied:

> We have no station policy concerning professional use of music or sound effects for transition or effect. This is left completely to the discretion of the individual producer and is worked out according to the mood, tempo and type of production. [11].

> Realism is radio's prime object in presenting programs of dramatic material. Only in those productions where actual effects are not needed does the music simulate the dramatic transitions of sound. It is not unusual for the music to "set the stage" for the coming effect with appropriate composition and then dissolve into the actual sound. But not often does the imaginative music take the place of the realistic effect. [12].

> Combination of music and sound effects are usually used. The only time we depend a great deal on music is for a dramatic fairy tale broadcast on station WSAI Saturday afternoons ... [13].

---

11. Don McNamara, Program Manager, Station KFI, Los Angeles, California, in a letter to the writer (May 23, 1945).

12. Anonymous, a member of the sound department of the Columbia Broadcasting System, Pacific Network, Los Angeles, California, in a letter to the writer, (May 8, 1945).

13. Elsa G. Waterman, Director of Guest Relations, Station WLW, Cincinnati, Ohio, in a letter to the writer, (May 4, 1945).

As a rule, we never use music to replace sound effects. Often times, however, music will be so arranged so that we can blend from music to sound effects or visa-versa. By this I mean that in a transition from dialogue to horses' hoofs the music will set the tone and mood of horses' hoofs before we actually go into the sound effects itself. [14].

Whenever it is possible to use actual sound we do so and music in our dramatic shows is pretty much restricted to scene-setting or bridges. We never use music during dramatic action unless it logically would be included. In other words, I am a stickler for realism. [15].

We do not have any policy concerning the use of music instead of actual sound effects. We would rather leave it up to the producer's discretion if he wants to use either or both. [16].

There is no policy concerning the use of music instead of the actual sound effect. This would be entirely up to the director. [17].

There is no policy concerning the use of music as a sound effect. That is left to the intelligence and initiative of the director. [18].

NBC has no set policy for the use of music rather than sound effects in creating a desired dramatic effect. We trust the taste and imagination of the Director assigned to the production, and rely on him for the proper selection of appropriate details. [19].

---

14. Buckingham W. Gunn, Program Director, Station WGN, Chicago, Illinois, in a letter to the writer, (April 25, 1945).

15. R. E. White, Program Director, Station KDKA, Pittsburgh, Pennsylvania, in a letter to the writer, (April 25, 1945).

16. Howard L. Bailey, Manager, Station KWG, Stockton, California, in a letter to the writer, (April 23, 1945).

17. John Hade, Program Director, Station WJZ, New York, New York, in a letter to the writer, (April 20, 1945).

18. Fred Kilian, Production Manager, Columbia Broadcasting System, Chicago, Illinois, in a letter to the writer, (April 20, 1945).

19. A. L. Barnard, National Broadcasting Company, New York, New York, in a letter to the writer, (May 4, 1945).

From the above quotations, it can be seen that, although each writer agreed to leave the decision to the director, opinions regarding realism as opposed to imagination vary with individuals. Sound effects and music suggestive of the actual sound can be mixed, depending on the mood of the show, on the taste of the director (and his assistant, the sound-music man), and on the dramatic effect desired.

There are four classifications of radio dramatic productions:

1. The large-account evening network dramas. These would include "Lux Radio Theater," "Screen Guild," and others in a similar category. Their music is, for the most part, originally composed and performed by an orchestra.
2. The "soap-operas." These would include "Widder Brown," "Just Plain Bill," and others. Music for these is usually originally composed, but requires only one man, the organist or pianist.
3. Small-station sustaining or locally-sponsored shows. Music on these is usually dubbed from recordings, chosen by the sound-music man and played by him on the actual broadcast.
4. Sustaining amateur shows. These are usually produced by an educational group, either in high school or college, and performed over an educational station, or on time donated by a local commercial station. Music on these shows is about the same as that on the small-station sustaining or locally-sponsored shows.

Because this manual is aimed to help the beginning dramatic group, we are primarily interested in the music as dubbed from records.

In order to qualify ourselves to choose music from recordings, it is first necessary to acquaint ourselves with the music as used by those who hold the positions of sound men and who have had experience in setting radio dramatics to music. An analysis of movies, such as "Mrs. Parkington," is a very good practice for the beginner. It gives him a better idea of the type of music needed when he can visualize the scene. However, he must remember that the movies are able to use spectacular music whereas radio dramatic productions must be more subtle in the musical settings. After analyzing several movies, the student should then do the same with several radio dramas. He should listen with a pencil and paper handy to record in writing the main effects. This is helpful in making the student put into words what he has heard so that he can still hear the music in his mind when the actual strains of music are no longer being played.

CHAPTER IV

DESCRIPTION AND INSTRUCTIONS FOR USE OF SOUND TRUCK

Before attempting to understand the different methods of choosing incidental music for a radio dramatic show, one must be able to visualize the equipment used.

Some stations use the turntables they normally use for all recorded or transcribed musical programs. However, more prevalent is the use of a sound truck. This consists of a large box with three turntables arranged along the top. Although three is the most common number of turntables on a sound truck, some stations build trucks with fewer or with more. Each turntable has adjustable speeds so that a record may be played at 78 revolutions per minute or a transcription may be played at 33 1/3 revolutions per minute. Some turntables are equipped with a slide adjustment on the speed control so that recorded effects may be played at any speed desired; these controls may be varied while in operation.

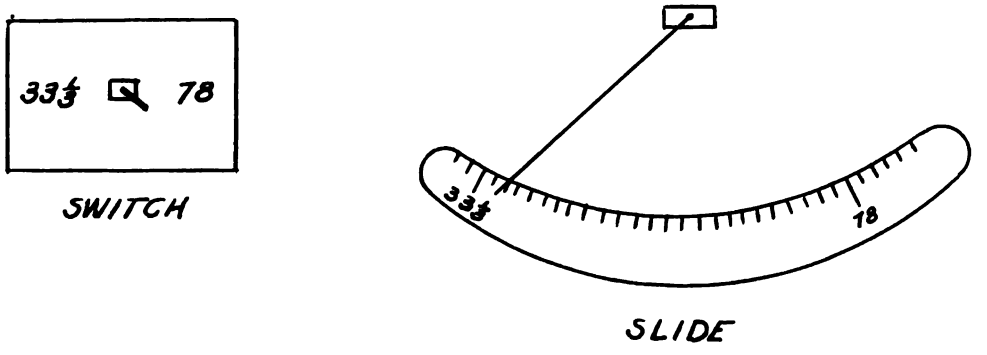


Illustration of Speed Controls

For each turntable there is at least one playback arm and sometimes two. If there are two arms useable on each table, a sound effects record (for example, a wind storm) may be played for more time than the duration of the record, by alternating the two playback arms.

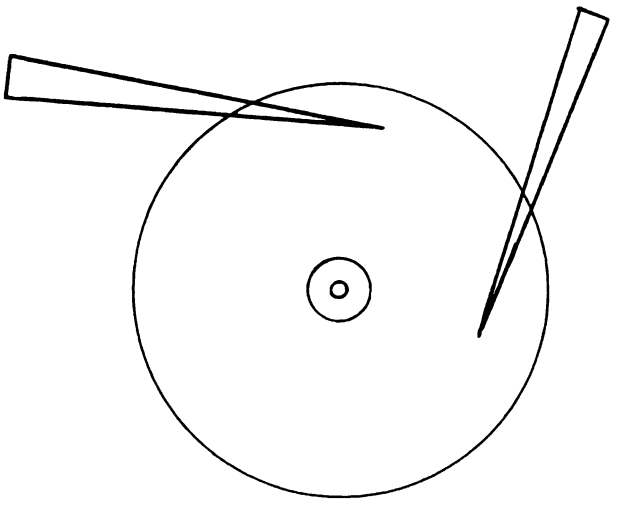


Illustration of a Turntable
With Two Playback Arms in Operation

Every playback arm has a volume control. The volume control is usually a round knob with a pointer on one side. This knob revolves on a fixed plate numbered from one to twenty; "one" indicates the lowest volume and "twenty" the highest. The pointer set at zero cuts off the volume completely. Although each playback arm has a separate volume control, the sound truck as a whole usually has one master volume control, used mainly to cut all the turntables at once for special effects.

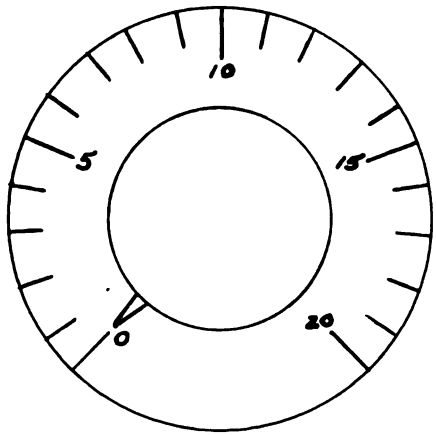


Illustration of a Volume Control

A tone control for each playback arm will serve to emphasize the low frequencies, by cutting out the high frequencies (scratches that accumulate on records or transcriptions). In this tone control, the "out" position indicates normal reproduction, while the further the needle points toward the "in" position, the more high frequencies are being eliminated.

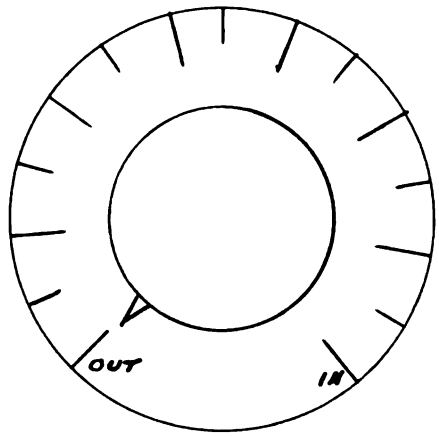


Illustration of a Tone Control

Stationary sound trucks, and many portable sound trucks, have loud speakers. These speakers have a volume control which may cut off the sound entirely if necessary. Usually an outlet is arranged so the operator may use earphones to hear how he is mixing the effects on the three turntables. Operators quite often "feed" enough of the incidental music and sound effects into the studio to enable the actors to react with it. For example, if the actor is to react to a gun shot as it comes from the record, then his reaction is spontaneous. Another trick of the operator is to attach his earphones to the total output of the show, as it is being heard in the control room. This way, he is able to adjust his volume on the sound truck to suit the total volume and balance of the show.

A stroboscope, which is used to accurately set the speed of the turntables, should always be conveniently within reach of the operator. This is a round piece of cardboard on which are arranged several series of dots or lines so that, at certain speeds of the turntable, the dots give the illusion of standing still instead of revolving with the turntable. A stroboscope has been placed in the pocket at the end of this paper for the reader's examination.

At WJR and WWJ, two Detroit, Michigan, radio stations, the following additions to the normal sound trucks have been made:

A pressure weight control was installed on the playback arms in order to enable the operator to change the pressure of the needle on the record or transcription. This is often necessary when a record is warped, or when the groove is too shallow and extra weight on the needle helps to keep it in the groove.

A filter switch was installed to filter out the high or low frequencies in a record. Such a control can make low-pitched wind sound like a high-pitched hurricane, and aid in creating many other effects. When in the "out" position, reproduction is normal; when in "1" position, reproduction has very low frequencies eliminated; position "2" eliminates the next range of low frequencies; position "3" eliminates high frequencies.

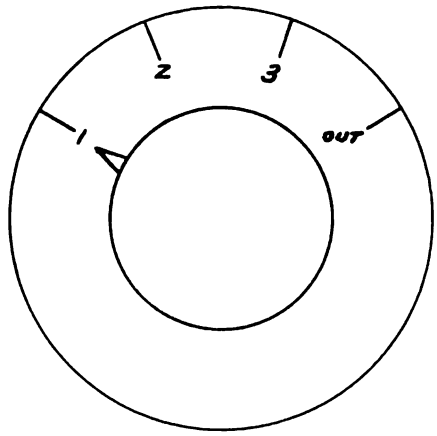
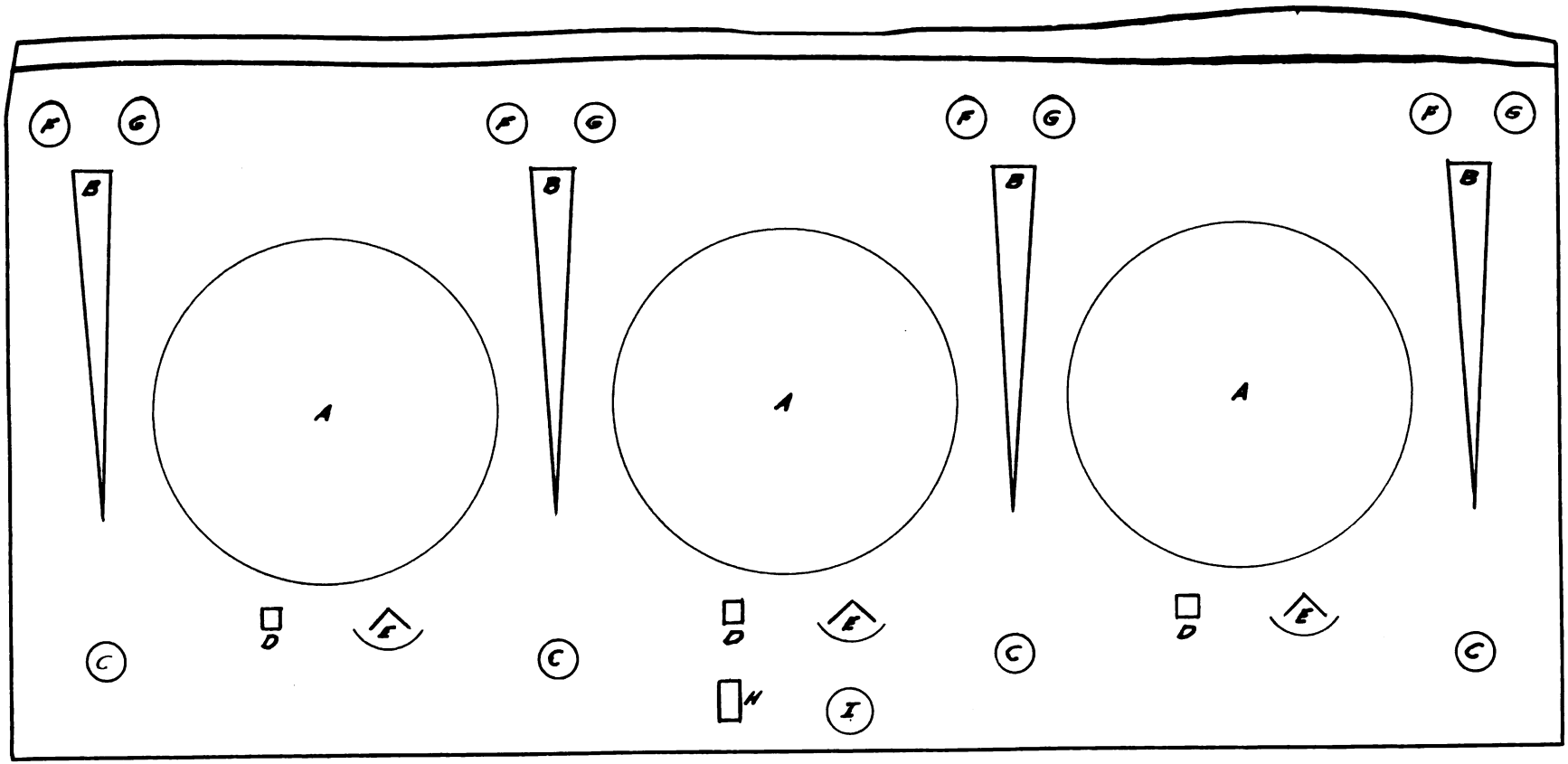


Illustration of a Filter Control

A fluorescent light, or other non-glare light placed a little above the turntables enables the operator to see the lightly marked cues on the records. Behind and above the turntables is a good place to build a script rack; this looks similar to a music stand but runs the full length of the sound truck and will hold recordings as well as papers. A small drawer or shelf will conveniently hold the stroboscope, and folding table leaves give the operator more flat surfact if he requires it.

The sketches on the following pages offer views of the type of sound truck which persons at any average radio station or in the radio division of a school can easily build.



Top View

A - Turntables

B - Playback arms capable of playing on either of adjoining turntables

C - Volume controls for playback arms

D - On-off switches for turntables

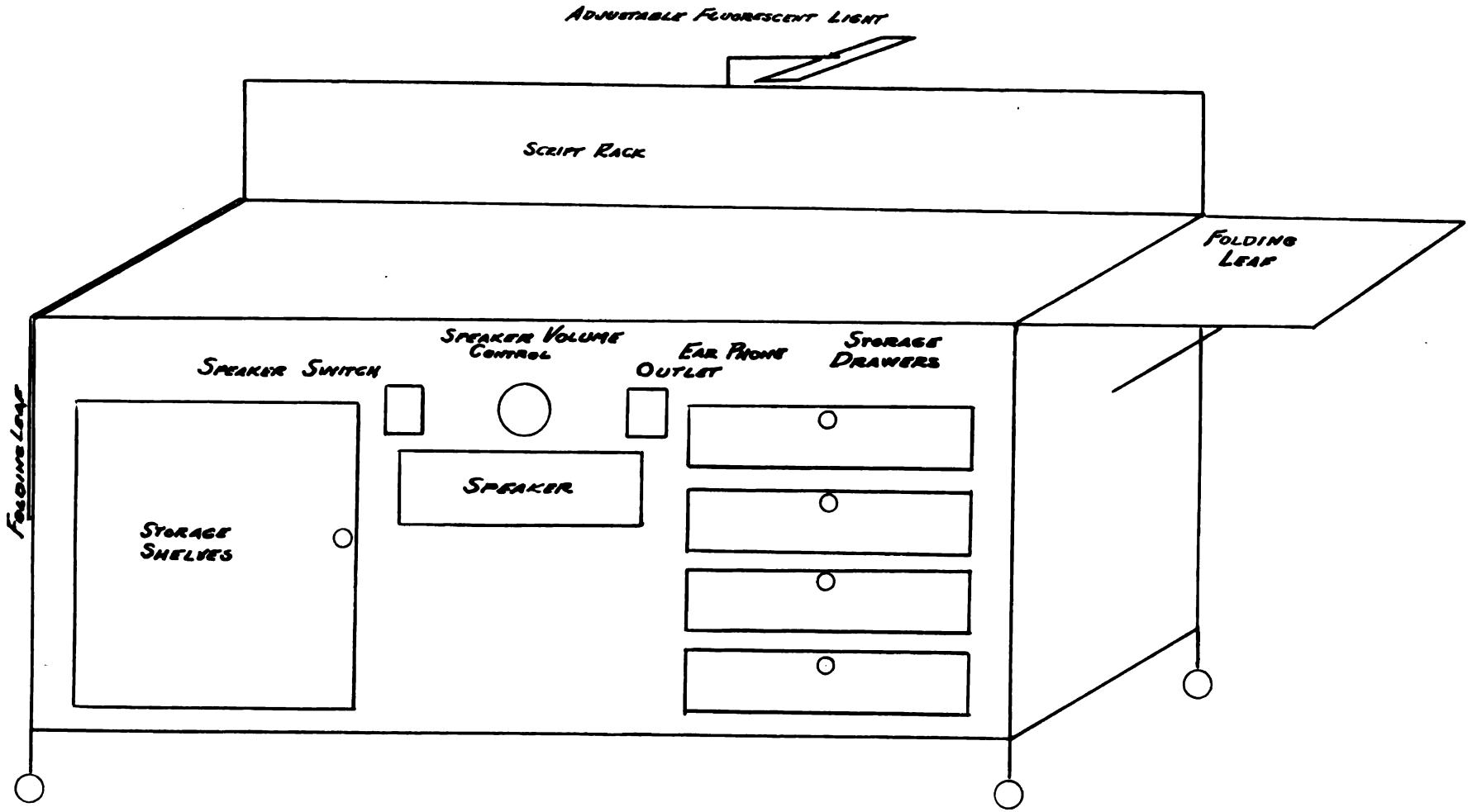
E - Speed controls for turntables

F - Filter switches for playback arms

G - Tone controls for playback arms

H - Master on-off switch for sound truck

I - Master volume control for sound truck


ADJUSTABLE FLUORESCENT LIGHT
SCRIPT RACK
FOLDING LEAF
SPEAKER VOLUME CONTROL
EAR PHONE OUTLET
STORAGE DRAWERS
SPEAKER SWITCH
FOLDING LEAF
SPEAKER
STORAGE SHELVES

FRONT VIEW

For comparison with the equipment just described, here are short descriptions of the equipment as used by several stations in their dramatic productions:

> For our dramatic shows, we use the standard sound effects equipment with three turntables on a portable table, with two arms operating on each turntable. We do not, however, use these for the occasional transcribed musical bridges and transitions used on dramatic programs, as we do not find the quality of reproduction of high enough calibre. All music used on dramatic shows is played from our mixing booth on our standard phonograph and transcription turntables. Operation of these is taken care of by the technician mixing the program. [20]

However, many other stations feel that the quality of the sound trucks is high and therefore use them for all recorded or transcribed effects including music. But the method described by Mr. McNamara above is an excellent way to insure against musical distortion.

> Most essential to a complete sound effect library is a triple turntable unit. A variable speed turntable has been developed with the range of 10 to 120 revolutions per minute which is accurate to within less than 1% of any desired speed. The speed control is similar to an ordinary volume control in appearance. It may be varied while in operation, which makes it possible to change the speed and pace of recorded effects. The unit consists of an amplifier speaker combination. It has units which provide ample gain and output without overload and distortion. The pick-up arms are mounted so that they may be used on adjacent turntables. This makes possible the cross fading from one pick-up to another so that short cuts on a record may be utilized for longer sequences. Included is a tone control highly essential for a high and low frequency by-pass system. The speaker is

---

20. Don McNamara, Program Manager, Station KFI, Los Angeles, California, in a letter to the writer, (May 23, 1945).

> installed in a separate cabinet on rubber wheel castors. This gives it a flexibility which is essential for various perspectives in the studios for different types of effects ... The Sound Department of KNX-CBS, Hollywood, has at its disposal the use of eight triple turntables, with two playback arms for each table. The portable speaker ... completes the turntable unit. [21].

The sound truck and speaker described in the preceding paragraph is a very complete and adaptable sound truck for use with radio dramatics as it enables the operator to wheel the speaker into a completely different room if desired.

> Most of our sound effects chores can be adequately handled on a machine which has three turntables all equipped with two pick-up arms. This is used in conjunction with "live" sound handled by a second man, if needed. [22].

> Our recorded sound equipment is ... built in cabinets of three tables each with a total of four pick-up arms, so that two arms may be used on any one table. We do, at times, use as many as six turntables in a dramatic production. [23].

Some sound effects patterns require four or five records in either simultaneous reproduction or quickly-repeated reproduction; this requires at least that number of turntables set with these records ready to be played.

---

21. Anonymous, a member of the Sound Department of the Columbia Broadcasting System, Los Angeles, California, in a letter to the writer, (May 8, 1945).

22. Buckingham W. Gunn, Program Director, Station WGN, Chicago, Illinois, in a letter to the writer, (April 25, 1945).

23. Fred Kilian, Production Manager, Columbia Broadcasting System, Chicago, Illinois, in a letter to the writer, (April 20, 1945).

CHAPTER V

CHOOSING THE MUSIC FOR A RADIO PLAY

Before auditioning records in search of incidental music for a radio dramatic production, it is wise for one to familiarize himself with the contents of the records available. The music director should know the type of music each of the works in his library contains.

Once he has done this, he should read the complete script two or three times, watching for all the subtle meanings that often are not revealed in a first reading. Then he should go over his copy of the script and mark in easily-seen pencil (perhaps red or blue) all the notations which the sound-music man will need. These are: every occurance of music or recorded sound effect, its duration, and all cross-fades. Every person will work out different notations for himself; the code is unimportant if they are clearly legible to and understood by the person who must read them. One system is to underline every music or sound direction with a single straight line; if the music is to be continued under any talking, use a wavy line vertically on the page from its beginning to its end, with a sharp horizontal line at the termination; and use an X to indicate a cross-fade.

With the script thus clearly marked, the remaining task is to locate the records or parts of records that fit the script. The music director must audition the records he believes might be useful to him. To save time he can gently raise and lower the needle at approximately one-half inch intervals from the outside of the record

to the inside, listening carefully each time the needle is playing. Practice will soon enable the music man to catch the mood of the record at each point in just a few seconds of playing. He should bear in mind all the time exactly what it is for which he is looking. If he hears something close to it, chances are he may find it in that same selection; if he is auditioning a symphony, he should try another part of that same movement, or perhaps another movement. If possible, he should use only one work for all the music in one show. If it is not possible to do that, he should at least stick to one composer or one type of orchestration and harmony. A completely disharmonic work, such as some of the more modern works, will not mix with the type of music composed by men of an earlier period such as Bach, Mozart, and Beethoven, unless, of course, the drama is an unusual one calling specifically for the various periods in music.

Sometimes it will be necessary to climax a scene with one mood, and then lead into the next scene with an entirely different mood. This will require either a very careful choice of music that changes exactly the way the mood of the script changes, or a cross-fade. In the latter case, the record containing the music to climax the first scene will be placed on one turntable, and the record containing the music to lead into the second scene will be on an adjacent turntable. At the cue from the director (or on the script if he is taking his own cues from the show instead of from the director), he will bring up or increase the volume of the first record. Then, when the time comes, fade that volume just a few points and bring up the volume of the second record until it completely drowns the first. Cut the

first record and let the second record lead into the next scene.

When he finds the music that fits the scene on which he is working, he should time it to be sure the director will have enough to let it run a few seconds longer to lengthen the show. Or, if the script is long, there should be short bridges between scenes or music that can be cut in the middle at a convenient point to make a shorter bridge.

Then, when he is absolutely sure that he has the piece of music he wants, or when he has chosen more than one that fits and wants the director to make the final choice between them, it is time to "cue" each one. This is done in one of two different ways.

For a spot cue, that is, when he wants to reproduce sharply or suddenly a particular chord or note, he should use a soft lead yellow pencil made especially to mark records. He plays the record up to the point where this chord is played, then he stops the record quickly, lightly, but firmly with one hand in such a manner that he is holding the record stationary but not interrupting the movement of the turntable. With this yellow pencil, he lightly marks the record from one or two grooves inside the placement of the needle, and out past the needle for three or four grooves. Being careful not to allow the needle to press and cut into the record, he turns the record carefully backwards until the needle wipes out the yellow mark in the groove in which it is placed. He now has the record spotted at the entrance of the chord. But it always takes part of a turn for the record to attain the speed of the turntable when he releases the record, so he very carefully lifts the needle and places it one more groove toward the outside of the record.

Once again the needle wipes out the yellow line on this groove and the record is spotted one complete revolution before the chord. When he uses this spot, he must remember that when the record is being played at 78 revolutions per minute, the length of time required for one revolution is a little less than a second, but that it will be a little longer for the record to pick up the speed of the turntable and therefore he must allow about one second from the time he releases the record until the time he turns up the volume on the play-back arm and thereby reproduces the chord on the record. This synchronization will require practice - first, to become used to the method of releasing the record and then turning up the volume, and, second, to check the spot on the record and become accustomed to bringing in the chord at a particular time.

The other method of spotting a record is used when a bridge or background music comes in under the speeches and no split timing is required. He uses a soft (but harder than the yellow) white pencil lead which has been sharpened to a fine point. If he cannot keep a point on it conveniently, a sharp break in the lead will leave a sharp edge. He plays the record several times just preceding the passage he is spotting, in order to acquaint himself with the few seconds of music immediately preceding this passage. Then he allows the needle to play on the record, poising the white pencil just above the record immediately in front of the needle. As the passage immediately preceding the passage to be spotted is played, he drops the fine edge of the pencil lightly on the record for about one-fourth or one-third revolution. This will leave a fine white line on the space between grooves on the record, and no amount

of playing will erase it. When he plays back the spotted passage, he merely places the needle in the groove preceding the white spot and he is ready to bring in the passage he desires. This white spot will be difficult to see until he is accustomed to looking for it, but can be seen easily if he places the record on the turntable and watches for it while it is revolving.

Mechanical spotters are also in use. These are attached to the turntables in such a manner that an arm projects over and across the record. As the play-back arm plays on the record, it is followed by a tabular stop system similar to that on a typewriter. When a certain passage is heard, and the operator wants to use it, he pushes a button that registers a stop on the carriage on which the tabular stop is located. The stop must be released by hand. The stops on the mechanical spotter are numbered. When he cues up the record for playing it, he merely checks to be sure the mechanical spotter is set at the right number, and then pushes another button that adjusts the play-back arm so the needle will drop on the spot.

As quoted below, opinions about the use of the mechanical spotter vary:

> Our spotting is accomplished by the pre-setting method of cuing immediately before the spot desired for the particular effect. This is done by mechanical means. [24]

---

24. Don McNamara, Program Manager, Station KFI, Los Angeles, California, in a letter to the writer, (May 23, 1945).

It has been found that mechanical spotting devices are not trustworthy for actual production due to their inaccuracy. The manual spotting is used solely by the Sound Department of KNX; and this reliance on the expertness of the sound engineers has given more satisfactory results. [25].

We use no mechanical means for spotting records. This is handled manually by the record turners (operators). [26].

We hand-spot all of our records, and we have no mechanical spotter. Nor do we have material on such mechanisms. [27].

We do not use a mechanical spotter but rely on the sound men to do a good job manually. [28].

We use a mechanical spotter, which was devised by the head of our Sound Department and which is in common use in the radio industry. We have no printed material, as it is an extremely simple device. [29].

---

25. Anonymous, a member of the Sound Department, Columbia Broadcasting System, Los Angeles, California, in a letter to the writer, (May 8, 1945).

26. Buckingham W. Gunn, Program Director, Station WGN, Chicago, Illinois, in a letter to the writer, (April 25, 1945).

27. Elsa G. Waterman, Director Guest Relations, Station WLW, Cincinnati, Ohio, in a letter to the writer, (May 4, 1945).

28. R. E. White, Program Director, Station KDKA, Pittsburgh, Pennsylvania, in a letter to the writer, (April 25, 1945).

29. Fred Kilian, Production Manager, Columbia Broadcasting System, Chicago, Illinois, in a letter to the writer, (April 20, 1945).

According to these quotations from various large stations which produce large-account dramas, most operators prefer to spot the records manually and thus be assured of having it done correctly.

In playing the records for the rehearsals and for the actual production, the operator must, as was mentioned earlier, be the actor's shadow. He must "feel" the whole scene and be aware of its meaning. When an actress is sobbing and the music is to build up and over her sobs, the operator must feel just how much of the sobbing should be left in and when he should bring up his volume and let the music drown out the actress. He takes his directions from the director of the show at all times, but this feeling and sympathy with the actors and actresses must be developed if the operator is to aid in the production.

The mechanics of playing the records after they have been spotted are simple, although they require constant practice to develop the required coordination. The record is placed on the turntable, the needle is carefully placed at the marking of the spot. Then, a few seconds before the time to bring in the music, one hand is lightly placed on the edge of the record to hold it stationary while the other hand turns the switch that starts the turntable into motion. All this time, the volume is cut off completely. The hand that turned the switch is now placed on the volume control. When there is still about a second before the music is to be played, the hand is lifted from the record, allowing it to assume the speed of revolution of the turntable, and then the volume is brought up to the desired point. If the volume is brought up too soon, the music will be distorted as the record is still picking up speed, and also, the

spot will have no effect since the music was brought in before the cue. On the other hand, if the volume is brought up too late, the actual spot will have been passed and the effect of the music lost. The value and requirement of constant practice cannot be over-emphasized.

CHAPTER VI

CATALOGS OF PREPARED MUSIC FOR RADIO DRAMATIC PRODUCTIONS

In this section of the manual, the writer is presenting catalogs of available music prepared especially for radio dramatic productions.

In the larger stations, the problems of using recorded music do not exist. So, for those groups which are able to use "live" music (music actually performed in the studio instead of being recorded) we have endeavored to obtain catalogs of all music especially composed for radio dramatic productions and published for the use of the general public. However, contact with the publishing houses in the United States show that very little music has been published for "live" performance in radio plays. The only material available is a large pamphlet entitled "Bridges, Moods, Interludes" and published by Broadcast Music, Incorporated. It is written for piano or organ, not for orchestra, and contains "original incidental and background music for radio drama and professional or amateur theatrical productions." [30]. Written by Louis Katzman and Milton Rettenberg, there are 110 selections, each timed to within a few seconds of the playing speed at which they have their best effect,

---

30. Louis Katzman and Milton Rettenberg, Bridges, Moods, Interludes, Broadcast Music, Incorporated, New York, New York, 1943, cover.

although "it is obviously not necessary to adhere strictly to the indicated dynamics and tempi, since variations in treatment may add to the value of the music for individual scripts or scenes." 31. Following are the selections as listed in the index:

Agitato
Agony
Animal Scene
Anxiety
Appassionato
Arabic
Bridges (Neutral)
Bridges (Dramatic)
Bugle Calls
Build Up
Chase
Children
Chinese
Closing Scenes
Coquette
Covered Wagon
Crashes
Creepy
Death
Defiance
Despair
Donkey Walk
Dreams
Emphatic
Exaltation
Excitement
Fanfares
Fantastic
Fiesta
Fight
Fire
Flirtation
Flourishes
Fog
Fright
Furioso
Gavotte
Happy Mood
Heroic
Horror
Horse Race
Hunting Scene
Hurry
Indian
Jungle
Latin-American
Laughter
Love
Lullaby
Majestic
Martial
Mechanical
Meditation
Misterioso
Mob Scene
Mockery
Moonlight
Mountain Trail
Nostalgic
Opening Scenes
Oriental
Pastorale
Pensiveness
Playful
Pleading
Pomp
Rain
Reconciliation
Religioso
Riot
Romantic
Russian
Screams
Sea
Sickness
Sleigh Ride
Slumber
Snow Scene
Solemn
Somber Rhythm

---

31. Ibid., forward.

Sorrow
Spanish
Storm
Street Scene
Suspense
Tenderness
Tension
Thirst
Threat
Tragic
Train Effect
Tranquility
Triumph
Troubadour
Turkish
Victory
Water Scene
Western
Wind [32].

Since a compilation of all music recorded especially for use with radio dramatic productions has never been completed in the past, the writer has compiled this list. Here, also, there is not much to offer the beginner.

Among the sound effects recorded by Standard Radio are the following:

Bugle Calls (44 different cuts)
Baseball Themes (2 different cuts)
Fanfares (32 different cuts)
Orchestra Effects (4 different cuts)
Music Box
Drum Rolls and Solos (8 different cuts)
Military Band (4 different cuts)
Calliope Themes (2 different cuts)
Bagpipe Themes (2 different cuts)
Merry-Go-Round (2 different cuts)
Orchestra Themes (3 different cuts)
Reed Organ Themes (4 different cuts)
Pipe Organ Themes (4 different cuts)
Harp Interludes (13 different cuts)
Carillon Chimes (4 different cuts) [33].

The organ themes listed above include wedding themes, funeral themes, and other sometimes hard-to-find selections. The military band cuts include "America," "Dixie," and the "Star Spangled Banner."

---

32. Ibid., index.

33. Super Sound Effects, Standard Radio, 6404 Hollywood Boulevard, Hollywood 28, California, 17-19.

These are included with the regular Standard Sound Effects and may be ordered from Standard Radio at Hollywood, Chicago, or New York.

On its transcriptions, Standard Radio also has two 16-inch discs of themes. These themes are listed below.

Star Spangled Banner - played by Victory Military Band
America - played by the Victory Military Band
'Victory Theme' - played by the Victory Military Band
Hawaiian (open) - played by Dick McIntire and his Hawaiians
Aloha Oe (close) - played by Dick McIntire and his Hawaiians
Religious ("There's a Chapel in the Sky") - sung by Wade Lane, baritone
Western (open, "Let's Have a Musical Roundup") - played and sung by Eddie Dean and His Boys
Western (close, "We've Had a Musical Roundup") - played and sung by Eddie Dean and His Boys
Pop Concert ("Our Love") - played by Dave Rose and his orchestra
Latin-American ("La Cumparsita") - played by Carlos Molina and his orchestra
Early Morning ("Top of the Morning") - sung by Ronnie Kemper, song stylist
Dance ("Relax") - played by Don Allen and his orchestra
String Orchestra - played by Earl Towner and his string orchestra
Vibraphone Interlude (4 different cuts)
"There'll Be A Hot Time in the Old Town ... "
"Wedding March" (Mendelssohn's)
"Auld Lang Syne"
"What's the Matter with Father"
"Take Me Out to the Ball Game"
"I Love You Truly"
"Happy Birthday"
"Hail, Hail the Gang's All Here"
"Asleep in the Deep"
"Good Night Ladies"
"Sidewalks of New York"
"Wearing of the Green"
"Smiles" [34].

---

34. Standard Radio Tailored Transcription Service, Standard Radio, 1 East 54th Street, New York 22, New York, Themes 1 and Themes 2.

Although some of these are vocally performed and cannot be used in most dramatic productions, the others may possibly be exactly what the operator is trying to locate for special effects. These, too, may be ordered from Standard Radio in Hollywood, Chicago, or New York.

The Standard Radio transcription discs are divided by letter; "P" is mostly for popular and vocal selections, "Q" is for novelty numbers and orchestras, "R" is for novelty vocals, and so forth. The "T" section is semi-classical in nature and in this section are several good discs that may be used for bridges, moods, and themes. Light comedy or fantasy selections may be found in the "Q" section, especially selections performed by the George Barnes Octet,

> .... a group using classical reeds and amplified by a rhythmic guitar, bass and drums. Some very unusual results are obtained from this combination.
>
> I call particular attention to such titles as "Man Riding Bicycle Down Street Meets Fair Lady," "Intricacies of a Threashing Machine," "Private Life of a Vulture" and several others which really have to be heard to be appreciated. [35]

In addition to these, Standard Radio is planning to release around 200 numbers of mood or bridge music very shortly.

The World Broadcasting System has transcriptions of bridge and mood music, also. These include:

> Fanfares (9 different cuts)
> Piano Interludes (11 different cuts)
> Harp Interludes (23 different cuts)
> Orchestral Mood Music (many taken from classical works) - Dramatic

---

35. Adeline Hanson, Script Editor, Standard Radio, Hollywood, California, in a letter to the writer, (May 22, 1945).

Agitatos (12 different cuts)
Interludes (2 different cuts)
Pompous
March
Orchestral Mood Music - Neutral
Interludes (2 different cuts)
Agitatos
Orchestral Mood Music - Melancholy
Sad Dramatic
Sad Neutral
Melancholy Interlude
Funereal
Orchestral Mood Music - Unusual
Sinister
Oriental
Portentous
Weird Mysterioso
Storm Music
Orchestral Mood Music - Quiet
Romantic (5 different cuts)
Neutral
Mysterious
Pastoral (3 different cuts)
Special Themes (15 different cuts)
Dance Orchestra Signatures (10 cuts of name bands)
Dramatic Backgrounds and Signatures for Commercial and Sustaining Programs (44 different cuts) [36].

The last group of cuts are designated for commercial and sustaining programs, but many of them will be just what the operator needs for special effects. A few of the titles are "Alice Blue Gown," "For He's A Jolly Good Fellow," "Happy Birthday," "Little Brown Jug," "Old MacDonald Had a Farm," and "School Days."

Gennett Records of Richmond, Indiana, is another organization offering records of mood music and special effects that may be helpful to the operator. Their catalog lists the following:

---

36. "World Program Service Bulletin," World Library Service, World Broadcasting System, 711 Fifth Avenue, New York 22, New York, (February 1, 1945), 1-6.

Historical Recordings (speeches of historical value, 13 different cuts)
Songs of the Hopi Indians (11 different cuts)
Calliope (7 different cuts)
Fanfares (33 different cuts)
Fife and Drum Corps (6 different cuts)
Hurdy Gurdy (3 different cuts)
Orchestral Background Transcriptions (22 different cuts)
Skating Rink Service (36 different cuts)
Bell Records (Carillon, 18 different cuts)
Chapel Transcriptions
Pipe Organ (18 different cuts)
Vocal (20 different cuts)
Symphony Orchestra (2 different cuts) 37.

The Skating Rink Service consists of recordings especially made for use in Skating Rinks, with special tempo, instrumentation, and volume. By using a very low volume on these records, the operator may be able to achieve some very unusual effects in various rhythms for bridges and interludes.

There are two other concerns who have recorded music especially to be used as mood music. The first is the Thomas J. Valentino, Incorporated, company, distributors of General Records. All of their 150 selections are classified as to mood; and the list follows:

Dainty graceful dance
Light novelette
Heavy sinister dramatic
Comedy eccentric burlesque
Gavotte intermezzo
Rhythmic novelette
Spanish dance
Light overture, various movements
Comedy patrol
Viennese valse
Valse intermezzo
Selection of various classical movements
Flowing pastoral melody

---

37. Gennett Records, Gennett Records, Richmond, Indiana, 1944, 1-32.

Continental overture; various movements
Valse triste
Light Italian serenade
Brilliant valse intermezzo
Valse
Characteristic Scottish or Hebridean
Lilting novelty intermezzo
Bright intermezzo
For ocean and rugged scenes
Arabian festive dance
Gay Viennese waltz
Standard
Medium tempo
Good end title
Standard
Gay gypsy air
Syncopated piano novelty
Ballroom waltz
March
Quick march
Allegro Giocoso
Melody
Processional march
Intermezzo
Descriptive intermezzo
Minuet
Gavotte
Entr'acte
Intermezzo
Nautical
Light overture
Characteristic (storm)
Misterioso
Light oriental
Misterioso oriental
Galop
Screen preludes
End titles
Dramatic
Machinery motion
Rhythmic intermezzo
Dance
Serenade
Spanish dance
Dance parade
Galopade
Valse caprice
March medley
Grand march
Religious
Galops
Dramatique
Oriental
Characteristic and grotesque
Spanish Paso Doble
Gypsy
Full marches
Military march
Nautical march
Lively fast nautical
Sturdy 3/4
Jiffy
Native primitive
Vigorous
Native full (Irish)
Tension
Heavy
Agitato
Heavier
Big minor
Full processional
Harvest dance
Softer interlude
Active
March medley
Galops
Busy
Melodic-waltz
Full [38].

This brings us to the last of the prepared mood and background music professionally recorded or transcribed. The Charles Michelson Radio Transcriptions company in New York has released eleven records, the contents of which are listed below:

---

38. Mood and Background Music, Thomas J. Valentino, Incorporated, 1600 Broadway, New York 19, New York, (January, 1945), 1-7.

Scenes of sorrow
Sad situations, funeral music
Approaching danger, suspense
Dramatic turmoil, Agitato grandiose
County fair, race track scenes
Joyous scenes, racing, carnivals
Criminal scenes, burglaries, under-hand procedure
Scenes of mystery (hiding from pursuers)
Conversation, chatter scenes
Babble, gossip scenes
Scenes of merrymakers - joyful gathering
Light or playful love scenes
Serenade, love scenes
Rollicking Knave (grotesque, playful, rustic scenes)
Dramatic Lamento (deep emotions or sorrow)
The Martyr (scenes of great sorrow, deaths, funerals)
Gigue (lively dance scenes)
Defy the Clouds (flying hurry)
Aggression (restless action)
The Ride of the Klan (Allegro to the rescue scenes)
Dramatic Agitato (quarrels, ominous situations)
Destruction (war scenes, riots, disasters) [39].

That completes the lists of recorded music prepared especially for use in radio dramatics.

---

39. Recorded Theme and Background Music, Charles Michelson Radio Transcriptions, 67 West 44th Street, New York, New York, (1 page release notice).

CHAPTER VII

SUGGESTED WORKS AND SELECTIONS FOR RADIO DRAMATICS

(INCLUDING BRIDGES, THEMES, AND MOOD MUSIC)

For the school group, or other beginning group, the writer has collected a list of records that will make a beginning for a musical library. They were chosen for their variety. For example, the Berlioz "Symphony Fantastique" has several distinctly different moods while, at the same time, it offers this variety with one orchestration, and one harmonic style.

The list is arranged in the order the writer has found most useful; the first works on the list are most versatile while the last are more for special effects.

Kern - Mark Twain
Berlioz - Symphony Fantastique
Holst - The Planets (seven tone poems)
Liszt - Les Preludes
Strauss - Ein Heldenleben
Franck - Symphony in D Minor
Rimsky-Korsakoff - Scheherazade
Respighi - Fountains of Rome
Respighi - Pines of Rome
Strauss - Death and Transfiguration
Prokofiev - Classical Symphony in D Major
Strauss - Don Juan
Taylor - Through the Looking Glass
Coates - London Again
Animal Pictures in Music
Insect Pictures in Music
Strauss - Till Eulenspeigels
Moussorsky - Pictures at an Exhibition
Debussy - Afternoon of a Faun, Clouds, Festivals
Wagner - Selections from Lohengrin, Gotterdamerung, Siegfried Idyll
Tschaikowsky - Manfred
Brahms - Tragic Overture
Mendelssohn - Midsummer Night's Dream
Moussorsky - Night on Bald Mountain
Rimsky-Korsakoff - Russian Easter Overture

Strawinsky - Fire Bird Suite
Shostakovitch - Symphony #5
McBride - Mexican Rhapsody
Offenbach - Gaite Parisienne
Schubert - Rosamunde Ballet Music
Liszt - Orpheus
Smetana - Moldau, Bohemia's Meadows and Forests
Wagner - Flying Dutchman Overture
Tschaikowsky - Symphony #2 in C Minor
Stravinsky - Le Sacre Du Printemps
MacDowell - Suite #2, Indian
Tschaikowsky - Swan Lake Ballet Selections
Kipling's Jungle Book
Brahms - Academic Festival Overture
Mozart - Magic Flute Overture
Kodaly - Hary Janos Suite
Rimsky-Korsakoff - Ivan the Terrible
Grofe - Grand Canyon Suite
Scriabim - Two Etudes
Franck - Piece Heroique
Cesama - Negro Heaven
Skilton - Suite Primival
Chausson - Poeme

Also for the convenience of the beginner, the author has compiled a list of the various moods, themes, and bridges that occur in three recorded works. They are timed from the beginning of the record to the spot where the selection begins. For this purpose, a scale was prepared showing every five seconds of playing time, up to five minutes.

The Scale For Timing Spots On Records

One may copy this scale on the edge of a stiff paper and hold it to the record so that the zero is on the record where the grooves begin. Then he may place the needle at the desired point along the paper on the record. This will be the spot at which the selection occurs.

The first of the three works cataloged as to mood, bridge, and theme, is Richard Strauss' "Death and Transfiguration" as played by the Philadelphia Symphony Orchestra under the direction of Leopold Stokowski, on Victor records. The album number is DM-217 and the individual record numbers are 16614, 16615, and 16616.

THEMES

Side number of album	Time selection begins	Time selection ends	Total time of selection	Description of selection
6	beginning	ending		Builds smoothly and drops for closing announcement. Good for simple story or for triumph.
6	beginning	2:00	2:00	As above; this is another good ending spot.
6	beginning	2:13	2:13	As above; this is another good ending spot.
6	beginning	2:40	2:40	As above, this is another good ending spot.
2	3:50	ending		Leads to climax for play ending. Dramatic but fast-moving and fades for closing announcement.

BRIDGES

3	:35	1:00	:25	Poignant
1	:35	indeterminate		Soft, sweet, and sad
2	1:48	indeterminate		Straight, strong
6	1:13	indeterminate		Straight, smooth and full
4	1:36	1:54	:18	Very full, smooth and commanding
2	1:05	1:30	:25	Strong and punctuated, but not wild
4	:55	1:22	:27	Smooth and commanding, ends on a sad note
4	1:36	1:58	:22	Very full, smooth and commanding, ends on sinister deep tones
3	3:15	3:50	:35	Smooth, full and resonant, fast, ends tragically
2	2:05	indeterminate		High note prolonged, and into sharp bridge
2	3:15	indeterminate		Fast galloping, reminiscent of old witch riding
2	2:50	indeterminate		Fast galloping
2	2:30	indeterminate		Militaristic and rhythmic
3	2:25	2:35	:10	Fast and slightly wild
5	beginning	:25	:25	Turbulant, ends on rhythmic punctuations
2	1:05	indeterminate		Sharp punctuation into strong anti-climax
2	2:07	indeterminate		Sharply punctuated into softer melodic strains with some punctuation
4	beginning	:15	:15	Climactic with fanfare attention-calling to following scene
3	beginning	:33	:33	Soft, three-chord final, into sweet strings

MOODS FOR BACKGROUNDS

2	2:20	3:50	1:30	Leads to climax for play end, dramatic, fast-moving
5	:25	end		Sad melodic, good for funeral scenes or funeral marches
5	:25	3:10	2:45	Deep, low, and sad, cymbol faintly heard, good for funeral scenes
1	beginning	:35	:35	Leads to soft sweet and sad bridge
1	beginning	2:35	2:35	Soft, sweet, sad, not tense nor melodic
1	2:35	end		Soft, sweet, sad, not tense, partially melodic
1	beginning	end		Soft, sweet, sad, not tense, partially melodic
3	:35	1:30	:55	Poignant strings
3	1:30	2:25	:55	Pizzicato but poignant strings into smooth melodic strings
3	:35	2:25	1:50	Smooth poignant strings, short pizzicato passage, smooth and melodic
6	beginning	end		Beautiful melodic and slightly triumphant without malice, a little sad, can be brought up in any spot for closing theme.

The second album the writer has cataloged as to mood, bridge, and theme music, is Cesar Franck's "Symphony in D Minor," also performed by the Philadelphia Symphony Orchestra under the direction of Leopold Stokowski. The Victor album number is DM-300, and the individual record numbers are 16706, 16707, 16708, 16709, 16710, and 16711.

THEMES

9	beginning	indeterminate		Chordal fanfare into soft melodic opening
11	3:16	end		Suitable closing for above
11	3:35	end		Shorter closing for above
11	3:40	end		Shorter closing for above
11	3:50	end		Shorter closing for above
11	4:10	end		Shorter closing for above
11	beginning	end		Closing, rather triumphant or straight depending on the script
5	1:50	end		Closing after emotional scene

BRIDGES

9	1:30	indeterminate		Quiet, religious feeling
9	3:45	indeterminate		Melodic, straight, can go into the background for about five seconds
8	2:10	2:32	:22	Sweet and loving
10	beginning	indeterminate		Soft melodic
8	beginning	indeterminate		Undecided love, perhaps a closing for scene of unhappiness or of finality
6	beginning	indeterminate		Sad and mocking, pizzicato chords, can go into background
4	2:40	2:46 or 2:50	:06 or :10	Smooth, a bit triumphant, goes into a sad undercurrent in the strings (can be background)
3	beginning	indeterminate		Plaintive, heart-rending, woodwind solo

2	1:42 or 1:35	1:50	:08 or :15	Poignant, troubled mood with faint suggestion of change, ends on sad note
3	1:11	indeterminate		Sharp punctuation, preceded by a slight build and quick short flute run to the punctuation
1	2:30	indeterminate		Sharp punctuation, almost militaristic
1	2:48	2:58	:10	Sharp punctuation into sad and melancholy mood for background
2	beginning	:15	:15	Good to build the last line of a rather patriotic and moving speech into a climactic bridge, the following music is rather semi-climactic and can be used for background
3	1:13	1:46	:45	Sharp punctuation, high run down to poignant mood. The following music is poignant and can be used for background.
10	2:42	3:45	1:03	Thoughtful and undecided into emotional turmoil
3	2:40	3:10	:30	Takes away a highly emotional scene and sets a sad scene, can carry into background
10	3:45	4:08	:23	Climactic, straight, sudden drop into quiet mood.
5	1:50	2:50	1:00	Building under emotional scene to climax, can carry to end of record for closing theme
10	:38	indeterminate		Climactic and strong, winning triumph
10	beginning	1:05	1:05	Triumphant build, can be used for closing climax

MOODS FOR BACKGROUNDS

1	:32	end		Good record for building climaxes
1	:32	1:10	:38	Semi-climax
1	:32	1:30	:58	Semi-climax
1	:32	1:50	1:18	Semi-climax
1	:32	2:10	1:38	Semi-climax
1	:32	2:30	1:58	Semi-climax, more positive, into strong bridge
9	1:30	2:50 or 3:50 or 4:15	1:20 or 2:20 or 2:45	Religious theme, quiet and deep
10	1:40	2:42	1:02	Thoughtful and tender, strings and woodwinds in antiphony
6	:45	2:20	1:35	Sad and almost mocking, smooth woodwind against string pizzicato
3	beginning	1:00	1:00	Unhappy and heart-rending, strings and woodwinds, goes into happier gay mood
1	3:10	4:05	:55	Sad background, low and mournful, no climax until the one chord at 4:05
10	2:42	3:45	1:03	Thoughtful and undecided into emotional turmoil
7	beginning	end		Mocking, pizzicato, suggests disaster pending, build near the end
7	1:43	2:45	1:02	Almost mocking, half-sinister mood - pizzicato
5	1:50	2:50	1:00	Building under emotional scene to climax, can carry to end of record for closing theme
7	:45	1:43	:58	Straight mood, deep strings to woodwind chords

7	beginning	:45	:45	Woodwinds, sweet, sad, and sympathetic
6	2:20	indeterminate		Smooth, almost happy build, fade, and build to end of record
5	:50	2:50	2:00	Starts expressionless, slightly melodic, for straight or tender scenes, builds to climax at 2:50
8	beginning	end		Slightly sad and loving, builds to conclusion
4	2:50	3:30	:40	Sad and sweet strings
4	3:30	end		Slight build without a definite climax
10	beginning	1:05	1:05	Triumphant build, can be used for closing climax

The final album of records chosen for cataloging was Jerome Kern's "Mark Twain" as played by Andre Kostelanetz and his orchestra. The music was pressed on Columbia records with the album number of X-227 and individual record numbers of SCO-32898, 32899, 32900, and 32901.

THEMES

1	beginning	:31	:31	Opens, sad, low, and slow-goes into good background of sad mood to 1:05
1	2:15	2:25 or 2:46	:10 or :36	Opening, good for school programs
4	beginning	end	3:25	Many different moods all building to a triumphant conclusion

BRIDGES

1	2:15	2:25 or 2:37 or 2:46	:10 or :22 or :31	Familiar, schoolish
1	3:14	3:35	:21	Same as above at about half the tempo
1	1:50	1:55	:05	Dynamic climax, fades into a peaceful bridge
1	1:55	2:00	:05	Fades from a dynamic climax to a peaceful pastorale bridge and into background material
1	1:30	1:40	:10	Fairy-like and fantastic
1	1:05	1:20	:15	Youthful, gay, almost like a circus
2	beginning	1:41	1:41	Familiar, sweet, and melodic, for bridge or background, builds in volume, and repeats
2	1:41	2:03	:22	Quick and jumpy, pizzicato
2	2:03	2:15	:12	Forceful dynamic passage
2	2:15	2:31	:16	Running music (slow run)
2	2:31	2:44	:13	March music
2	2:44	3:10	:26	Running bridge, louder and fuller orchestra
2	3:10	3:16	:06	Sad
2	3:16	3:28	:14	Running repeated with full orchestra
2	3:28	3:40	:12	March repeated with full orchestra
2	3:40	end		Sad ending with mockery, or can be used entirely as mocking or satirical
3	beginning	:40	:40	Almost childlike

3	:40	1:35	:55	Muted trumpet, sad, sweet, melodic and dreamy
4	:30	:45	:15	Dynamic and war-like
4	1:05	1:49	:44	Melodic and sweet
4	1:49	2:05	:16	Light and fantastic
4	2:05	2:32	:27	Begins confusion, indecision

MOODS FOR BACKGROUNDS

1	3:14 or 3:35	4:35	1:21 or 1:00	Sad, melancholy, melodic, soft, slight build at 4:25
2	beginning	1:41	1:41	Familiar, sweet, melodic, can be used also as bridge, builds in volume in repeat
3	beginning	end	3:15	Good for straight scenes or touch of sadness
3	beginning	:40	:40	Almost child-like
3	:40	1:35	:55	Trumpet solo (muted), sweet, melodic, dreamy
3	1:35	2:10	:35	Strings with bolero rhythm in the background, melodic
3	2:10	2:47	:37	Orchestral for straight scene
3	2:47	3:15	:28	Trumpet solo (muted), sweet, ends without a cadence

Before choosing any music for a dramatic production, it is important that the operator understand the rules and regulations of the American Society of Composers, Authors and Publishers and of Broadcast Music, Incorporated. These organizations consist of publishers, composers, performers, and some operators. For reasons concerning the benefit of their members, the organizations have restricted certain works from performance over the air. Every week

or month lists are sent to radio stations informing the program directors and musical directors of the latest restrictions and releases. Any station not adhering to these rules in their schedule of music is liable to be fined or perhaps to have its contract revoked. These two organizations have individual contracts with every radio station that is permitted to use the music these organizations publish. The exception to this may be the non-commercial or educational stations. The operator should consult the program director of the station over which the dramatic program will be transmitted, and obtain a complete list of restricted works; he should then be absolutely sure that he is not using any of these works in this program. The contracts with the stations are individual ones and therefore the restricted works will vary from station to station.

CHAPTER VIII

CONCLUSION

In preparing this manual on the use of music in radio drama, the writer has traced the history of music used for background material to build in dramatic effect.

A motion picture was analyzed for its musical content and the results of the analysis compared with the results of an analysis of the music in one evening's radio dramas.

The next step was that of describing a sound truck and describing its use in detail.

Catalogs of music prepared especially for use in radio dramatic productions were gathered and listed. The author also listed sources of music recorded especially for this purpose. Included in this manual is a list of records suggested for use in radio dramatic productions with a detailed catalog of the various bridges, moods, and themes in three of the albums.

The trend in music for radio dramatic productions is toward extensive use of "live" music in the large stations and in the networks. However, with more records of music now being pressed commercially to offer greater variety in choice of incidental music, and with the continuation of dramatics in the small stations and in educational groups, this manual should be useful to the beginner.

BIBLIOGRAPHY

BOOKS

Broadcasting in the United States. Washington: National Association of Broadcasters, 1933. Pp. 190.

Chase, Francis, Jr. Sound and Fury. New York: Harper and Brothers Publishers, 1942. Pp. 303.

Codel, Martin. Radio and Its Future. New York: Harper and Brothers Publishers, 1930. Pp. xiii + 349.

Connah, Douglas Duff. How To Build The Radio Audience. New York: Harper and Brothers Publishers, 1938. Pp. xiii + 271.

Harris, Credo Fitch. Microphone Memoirs. Indianapolis: Bobs-Merrill Company, 1937. Pp. 281.

NBC and You. New York: National Broadcasting Company, 1944. Pp. 124.

Sarnoff, David. The Radio Industry, The Story of Its Development. Chicago: A. W. Shaw Company, 1928. Pp. vii + 330.

MAGAZINE ARTICLES

Broadcasting Yearbook. Washington: Broadcasting Publications, Incorporated, 1945. Pp. 73-176, 314-332.

"Dramatic Celebrities," Radio Broadcast, (June, 1924), 126.

"New Fashions in Radio Programs," Radio Broadcast, (May, 1925), 83-88.

"One Act Play Broadcast for First Time," Radio Broadcast, (February 24, 1923).

Radio Broadcast. Garden City, New York: Doubleday, Page and Company, 1924, 1925, 1926.

"The Radio Drama Needs a New Technique," Radio Broadcast, (August, 1924), 302.

Tune In. New York: D. S. Publishing Company, Incorporated, (November, 1945).

"Wanted: A Radio Shakespeare," Radio Broadcast, (March, 1926), 577-78.

"WGY Finishes Its Dramatic Season," Radio Broadcast, (September, 1924), 405-6.

PAMPHLETS AND CATALOGS

Gennett Records. Richmond: Gennett Records, 1944. Pp. 32.

Katzman, Louis and Milton Rettenburg. Bridges, Moods, Interludes. New York: Broadcast Music, Incorporated, 1943. (Pages not numbered, 110 selections).

Mood and Background Music. New York: Thomas J. Valentino, Incorporated, (January, 1945). Pp. 7.

Recorded Theme and Background Music. New York: Charles Michelson Radio Transcriptions. Pp. 1.

Standard Radio Tailored Transcription Service. New York: Standard Radio. Pp. Themes 1, Themes 2.

Super Sound Effects. Hollywood: Standard Radio. Pp. 32.

"World Program Service Bulletin," World Library Service. New York: World Broadcasting System, 1945. Pp. 6.

LETTERS TO THE WRITER

Anonymous, a member of the Sound Department, Columbia Broadcasting System, Los Angeles, California, (May 8, 1945).

Bailey, Howard L., Manager, Station KWG, Stockton, California, (April 23, 1945).

Barnard, A. L., National Broadcasting Company, New York, New York, (May 4, 1945).

Gunn, Buckingham W., Program Director, Station WGN, Chicago, Illinois, (April 25, 1945).

Hade, John, Program Director, Station WJZ, New York, New York, (April 20, 1945).

Hanson, Adeline, Script Editor, Standard Radio, Hollywood, California, (May 22, 1945).

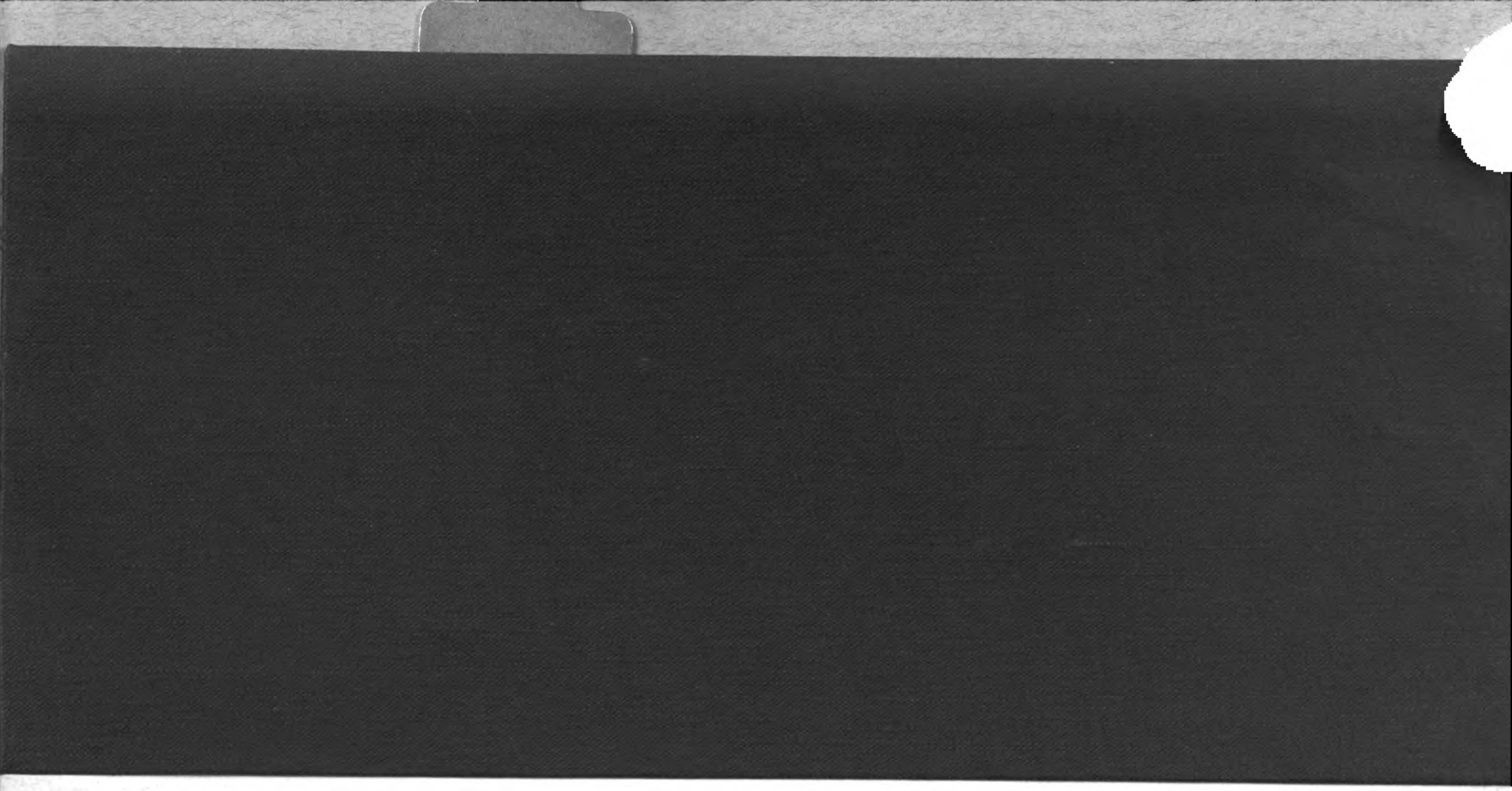
Kilian, Fred, Production Manager, Columbia Broadcasting System, Chicago, Illinois, (April 20, 1945).

McNamara, Don, Program Manager, Station KFI, Los Angeles, California, (May 23, 1945).

Tooke, Franklin, A., Program Manager, Station KDKA, Pittsburgh, Pennsylvania, (November 1, 1945).

Waterman, Elsa G., Director Guest Relations, Station WLW, Cincinnati, Ohio, (May 4, 1945).

White, R. E., Program Director, Station KDKA, Pittsburgh, Pennsylvania, (April 25, 1945).



A Manual on the Use of Music in Radio Drama