A SURVEY OF THE SPEECH
TRAINING PROGRAMS IN SELECTED
MIDWESTERN AND EASTERN
INDUSTRIES

Thesis for the Degree of M. A.
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Donald Deloss Brink
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This is to certify that the

thesis entitled

A Survey of the Speech Training Programs in Selected Midwestern and Eastern Industries presented by

Donald Deloss Brink

has been accepted towards fulfillment of the requirements for

M.A. degree in Speech

Major professor

Date August 23, 1951

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A SURVEY OF THE SPEECH TRAINING PROGRAMS IN SELECTED MIDWESTERN AND EASTERN INDUSTRIES

Ву

Donald Deloss Brink

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

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BIOGRAPHY

Donald D. Brink was born in Penton Harbor, Michigan on the first day of January in the year nineteen hundred and twenty-six. He started school in Benton Harbor, later moving to Battle Creek to begin the eighth grade. He moved to Galesburg, Michigan in 1939 and attended Galesburg High School. After graduation, he immediately entered service in the Marine Corps, and did a two-year tour of duty in the Facific, making the landing on Iwo Jima. He returned to the United States on June 4, 1946 and received his discharge ten days later at Great Lakes, Illinois. He entered Kalamazoo College, a small liberal arts college, in the fall of 1946 and remained for four years. He became interested in speech when he noticed that so many people had a great deal of difficulty expressing themselves, and majored in this subject while acquiring a minor in psychology. As he went through Kalamazoo College, he was a member of the debate squad for four years, won special distinction in Pi Kappa Delta, was manager of Forensics, President of his society, Sigma Rho Sigma, was a member of the student senate and an officer in his class. After graduation from Kalamazoo College in June 1950, he entered Michigan State College in the fall of 1950. He began work on a Master's Degree in speech and psychology with the intent of going into industrial work. He completed his work on the degree on August 23, 1951.

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CHAPTER I

INTRODUCTION

Before the advent of the machine, the compact industrial units were composed of as few as two or three members. These units were the family, in which each member completed some part of the total product, and the guild, in which several members of the same trade were banded together, i.e. iron mongers, leather workers, et cetera. As an aftermath of the industrial revolution, the guild and family organizations disappeared and large factories made of concrete and steel began turning out the products which could meet the needs of a progressing world. But even as the large factories solved, to a marked degree, the technological needs of society, they created new and larger problems-human problems. To solve these problems, authority which offered the workers a choice of do-as-I-tellyou-or-get-out, and paternalism, which gave the worker health benefits, recreation, and Vacations, were utilized. Still there was unrest. What was needed, and is still needed today, as evidenced by continued strikes, walk-outs and general unrest, was, according to many students of industrial problems, what Mary Parker Follett calls "dynamic integration". democratic technique necessitates a feeling of participation between worker and manager, and a feeling that the communication line is open, both up and down the ladder. That this element of communication and participation is important was emphasized by the Hawthorne study. In seeking to dis-

¹ H. C. Metcalf and L. Urwick, Dynamic Administration, The Collected Papers of Mary Parker Follett, (New York: Harper and Brothers, 1940). 320 pp.

² George C. Homans, "The Western Electric Researches," in Human Factors In Management, by Schuyler Dean Hoslett, (New York: Harper and Brothers, 1946). 322 pp.

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cover the causes of worker unrest and slowdown, this study found that those workers who were informed of decisions involving them, and, even more, those who participated in making decisions involving their personal welfare, were the higher producers. Changes in physical conditions of work had little, if any, effect.

In order to institute the practice of mutual participation in the operation of a company, both labor and management need adequate communicative techniques. But in spite of their easy accessibility, many industries have not yet seen the need for improving communications facilities and procedures. Bellows emphasizes this point when he states:

It is surprising to note that managements, personnel directors, and industrial editors have not made use of the valuable techniques for making written and spoken materials understandable to the employee. This is surprising because such techniques have been available and because there is extreme need in the industrial communications field for simplification.

The problem becomes an individual one, individual to each industry and to each person. Industry must have people in administrative positions who can do a job efficiently and effectively with the least amount of friction. The supervisory personnel in any company must grow and develop. This must be a continuing process towards more efficiency, towards becoming more effective and capable. Industrial training programs which teach process skills are efficient. Programs are now being sought, however, which will give supervision more self-confidence, and a little more capacity for expressing itself. R. Fred Canaday of General Motors states:

These programs should not only help these individuals do their jobs better, but also help them in their related activities in the

³ Roger M. Bellows, Psychology of Personnel In Business and Industry, (New York: Prentice-Hall, Incorporated, 1949). p. 361.

community, the church, and in their homes. Something seems to be needed in the line of developing personalities, something which will bring out latent talents and capacities and make these individuals more effective as such. A self-improvement program of this type would seem to include such things as overcoming fear and nervousness in speaking before people; strengthening the ability to get along with people; and most of all, the ability to express oneself concisely.

In the last decade industry, realizing this need, has begun to include speech as a definite program in industrial training. Foremen, supervisors and managers are being taught how to communicate, how to explain to the worker why a thing is being done, how it is to be done, and what the effect will be on him. Industry is being "humanized" on the communications level as it has been on the technological level. Several studies have attempted to indicate the needs for speech in specific industries, but no comprehensive studies have been made of the speech or communications programs which are now being fostered in the industrial training field. As Professor Zelko says:

In the area of graduate study and research a great deal should be done. We need to know more about the needs for adult speech training and education, in every segment of American life; we need to know the relation of effective speech to human and industrial relations; we need to know what methods and materials are most effective.

The purpose of this study is to sample industry to find out what is being done in speech training.

⁴ R. Fred Canaday, Employee Relations Staff, General Motors Corporation, Detroit, Michigan. From a report of the Convention of Dale Carnegie Club International, Chicago. June 24, 1950.

⁵ Harold P. Zelko, "Adult Speech Training: Challenge To The Speech Profession," Quarterly Journal of Speech, February 1951, Vol. XXVII, No. 1, p. 55.

The Problem and Definitions of Terms

Problem. A survey of the speech training programs in selected midwestern and eastern industries.

<u>Definitions of terms used</u>. Speech training programs were interpreted to mean programs in effective speech, conference leadership and the like, fostered by industry for executives and supervisors.

Industry. Industry was interpreted to mean those plants producing non-agricultural goods.

Organization of the Study

This study was divided into two main phases, (1) a survey of the industries in the midwest and east to find out which industries had speech programs, and (2) a summary of each program received. Chapter II presents (1) treatment of data, and (2) data, the programs of the responding industries in the following categories: metal industries, metal fabricating industries, non-metallic mineral industries, chemical process industries, the textile and allied products industries, apparel industries, food, liquor, and tobacco industries, and electrical industries. Chapter III presents (1) implications and conclusions of the study, and (2) recommendations for further study.

Review of the Literature

The literature on speech training in industry might be compared or likened to Gestalt psychology in that it is the sum of the parts that is

greater than the whole. Taken a piece at a time, the research already done in the field seems to lead nowhere in particular, but taken as a whole, one can see definite trends towards more emphasis on certain aspects. The literature seems to divide itself quite naturally into three types of investigation or sources of information. These types are: (1) those showing that a need exists for speech training in industry, (2) those giving advice as to how to satisfy this need in the best way, and (3) those showing how specific industries are satisfying their need for speech training. The greatest emphasis has been on the first type of research, that of showing a need. Raines' research on speech training for adults in business and industry in Kansas City, Missouri showed (1) the need for greater emphasis on adult speech classes and (2) that these adult classes were fitted to the needs of the participants. Dean conducted a significant study in the need area showing the qualifications of industrial conference leaders. It was found that these people must be alert, dynamic, well rounded, able to get along with people, and be able to keep the Hanifan, in 1949, conducted a study of speech training thing going. in retail department stores which pointed out that the organizations need more work in this area although some are fostering programs now.

⁶ San Raines, An Analysis of Speech Training for Adults in Business And Industry in Kansas City, Missouri, M.A. Thesis, University of Kansas, 1949.

⁷ Margaret Z. Dean, Qualifications of Industrial Conference Leaders, N.A. Thesis, Wayne University, 1948.

⁸ Harold P. Zelko, op. cit., p. 61, Catherine E. Hanifan, Speech Training in Retail Department Stores, A Study, Northwestern University, Evanston, Illinois, 1949.

Purcell, in a survey of business speech needs, found that industry

needs more emphasis on conference methods. Mollander conducted a survey

of business in Denver in 1944 to determine their needs and found that 80

percent of the businesses contacted felt that speech should be stressed

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more and that needs lay in the conference or discussion method.

Some materials have been published in magazines, periodicals, and books which attempt to point out the deficiencies in present communications and show what can be done for effective communications on the oral and written levels. Charles T. Estes of the Federal Mediation and Conciliation Service has emphasized the importance of co-decisions of labor and management in articles such as "Speech and Human Relations In Industry".

Fortune has, in recent months, been running a series of articles on communications and speech in industry showing the way to better communications.

James F. Bender has written a book showing the qualities of successful labers and stressing the ability to express oneself concisely. Around the country, toastmasters' clubs have been formed to foster better speaking habits.

⁹ Dale Furcell, A Survey of Business Speech Needs, M. A. Thesis, The University of Redlands, Redlands, California, 1949.

¹⁰ A. E. Mollander, A Survey of Speaking Situations in Business Enterprises of Denver, M. A. Thesis, University of Denver, 1944.

¹¹ Charles T. Estes, "Speech and Human Relations in Industry," The Quarterly Journal of Speech, Vol. XXXII, No. 2, April, 1946. p 160.

^{12 &}quot;Is Anybody Listening?", Fortune Magazine, September, 1950. p 77...
"Language of Business," Fortune Magazine, November, 1950. p 113.

¹³ James F. Bender, The Technique of Executive Leadership, (New York: McGraw-Hill Book Company, Incorporated, 1950). 291 pp.

^{14 &}quot;Life Goes to a Toastmaster's Club," Life, January 6, 1947. p 86.

The area which has had the least attention, at present, is the study of the actual industrial programs which are now being conducted or have been conducted for some time. This area of research, as Frofessor Zelko emphasized, needs a great deal more attention. Two studies conducted along this line comprise the material on speech training in industry.

Wattles conducted a study of four Detroit companies and found that the discussion method was most important in supervisory training. Jacobs conducted a study of the Baur's Confectionery Company in Denver, Colorado, and traced the history of communications and its increasing complexities 16 as the organization grew.

Procedure

Those industries producing non-agricultural goods, having 2,000 employees or more, and positioned in the midwest or east were included. This put the industries in one strata as to size. A total of 516 corporations was obtained by the use of Poors Index of Directors and Executives, which lists the 20,000 major corporations in the United States. A clear picture was obtained by dividing the industries even further into eight categories according to the type of product produced. The population was 17 stratified into eight categories, as used by Alderfer and Michl: metal industries, metal fabrication industries, nonmetallic mineral industries,

¹⁵ Jervis J. Wattles, The Use of Oral Techniques in Industrial Supervisory Training and Communications Frograms of Four Detroit Companies, M.A. Thesis, wayne University, Detroit, Michigan, 1948.

^{16.} J. H. Jacobs, A Study in Communications in the Baur's Stores in Denver, Colorado, M.A. Thesis, University of Denver, 1944-45.

¹⁷ E. B. Alderfer and H. E. Michl, Economics of American Industry, (New York: McGraw-Hill Book Company, Incorporated, 1942). 566 pp.

electrical industries, chemical process industries, textile and allied products industries, apparel industries, and the food, liquor, and tobacco industries.

A preliminary survey was conducted to determine the feasibility of the study. Fifteen corporations were sampled and out of the fifteen. thirteen had speech programs. A sample of 100 was taken from the total 516 corporations in the population, based on these figures. This constituted a 20 percent sample before the corporations in the preliminary study were added. Five of these were selected in the major study sampling. total sample was 110 or 21 percent of the 516. The 13 programs constituted 85 percent of the preliminary sample and when applied to a 95 percent level of confidence table showed that 95 percent of the time between 22 and 0 percent of the corporations should have programs of speech training if chosen at random. The 95 percent level of confidence table is constructed so that any given attribute in a population can be predicted. One takes the number having the given attribute, finds this on the table, then looks across under the sample size to find out what constant percentage of the population would have the given attribute with a chance of 5 percent error, if chosen at random. Twenty to 0 percent does not justify a study of this kind. If the sample is expanded to 100, however, between 91 and 76 percent of the industries should have programs 95 percent of the time if chosen at random. The conclusions are valid according to Snedecor.

The next problem was the selection of the 100 corporation sample from the total 516. The industries were in alphabetical order. A random sample

¹⁸ George W. Snedecor, Statistical Methods Applied to Experiments in Agriculture and Biology, (Ames, Iowa: Collegiate Press, Inc., 1937). 465 pp.

could not be taken by use of a table of random numbers, because each industry would not have equal possibility of being selected. The technique used was to number the industries from one to the final tabulation in each strata and put the numbers on slips of paper. The slips were then mixed in a hopper and withdrawn at random, the industries being checked as chosen. The number of industries selected in each strata was determined by converting the totals to percentages of the 516, i.e. if a strata had 36 corporations within its scope, the sample from this strata would be 7 percent or seven since 36 is 7 percent of 516 and 7 percent of 100 is seven.

Another problem was the adequate way of handling correspondence so as to insure a maximum response. A personal letter was typewritten and sent to the training director of each corporation. This letter was not a questionnaire and the terms survey or questionnaire were not used in any instance. The letter, a copy of which is included on the next page, was a clear statement of the objectives of the study, leaving the ideas expressed entirely up to the training director. Two weeks was the period within which the greatest response was realized. At the end of this time, post cards were sent to the industries which had not yet responded. This increased the total response from 75 percent to 89 percent.

April 24, 1951

The Director of Training Congoleum-Nairn, Incorporated 195 Belgrove Drive Kearny, New Jersey

Dear sir:

I am writing you in hopes that you may be able to give me some information. Speech training, as you know, is becoming an important factor in many industries. I am working on my Master's Degree at Michigan State College, and my field of study lies in the communication or speech programs being fostered by these corporations, either within the corporate structure or through cooperation with outside agencies. I will appreciate any information you can give me concerning speech training at Congoleum-Nairn, Incorporated, especially any printed material. It is hoped that this study will provide valuable material as to what industry is actually doing in the field of speech. I will be very happy to send you a copy of the results when completed, if you wish.

I thank you for your kind attention to my letter.

Sincerely yours,

Donald D. Brink 120 Abbot Hall Michigan State College East Lansing, Michigan

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CHAPTER II

DATA AND TREATMENT OF DATA

The purpose of this chapter is to consider (1) how the data was treated, and (2) presentation of the data.

Treatment of Data

In the following enumeration and summary of data received, no attempt was made to evaluate the programs. The object was to present the programs per se, emphasizing the material taught in each case. Evaluations were not attempted since any evaluation would presuppose a complete study of the situation and atmosphere in which each program was given. The total statistical tabulation is presented under data, and the statistical summary pertinent to each strata is presented at the beginning of each summary. The shorter programs are presented in complete form. The longer ones are presented in condensed form. In some cases, the information regarding speech training is meager. The inadequacy of information may be due to one of two factors: (1) the actual incompleteness of the program or (2) reluctance on the part of a corporation to give complete information on programs which were organized at great expense.

Data

One hundred and ten personal letters were sent out to corporations in the midwest and east. Of the 110, 98 responded. The 98 constituted 89 percent of the 110. Thirty and nine-tenths percent had speech programs to a greater or lesser degree. When the number having programs was applied

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to a 95 percent confidence interval table, it was found that 22 percent—41 percent of the population of industries would have speech programs if sampled at random. Inversely, the number of corporations not having programs lay between 24-43 percent.

Summary of the stratified industries was in the following order: metal industries, chemical process industries, textile and allied products industries, apparel industries, food, liquor and tobacco industries, and electrical industries.

Programs Presented

Metal Industries

The metal industries totaled 43 in all and the sample selected from this 43 was eight or 8 percent of 100. Eighty-eight percent was the total response. Five had speech programs.

Campbell, Wyant and Cannon Foundry Company. The Campbell, Wyant and Cannon Foundry Company program of speech training consists of coaching supervisors to act as discussion leaders in conferences. These conferences are held several times a week. At one meeting, subjects are assigned to a group of the leaders, who are given practice in presentation of those subjects. These leaders, in turn, each conduct a conference made up of about 12 or 15 members of supervision. J. M. Schappert, of the corporation, says, "This is a beginning of what we hope will be a better and more effective speech training program later."

The Allegheny Ludlam Steel Corporation. E. H. Forsstrom of the Allegheny Ludlam Steel Corporation explains:

Thus far speech training in our company has been included only for our technical college trainees. These trainees are members of our sixmonth training courses which we have twice a year. This speech training, I have taught myself from personal experience and notes from different courses in public speaking and expressive presentation which I have taken in the past. In the future, as our training of foremen and supervisors expands, we will branch out much further in this field.

The Great Lakes Steel Corporation. The Great Lakes Steel Corporation speech program consists of a fourteen weeks program given within the structure of the Great Lakes Steel Management Club. The instructor is

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Harold Dressel, head of the speech department of the River Rouge Public School System. "We feel this course is one of the most valuable services offered our membership," says Charles F. Olmsted, Director of Education of The Great Lakes Steel Corporation. An outline of material taught was not available.

The Jones and Laughlin Steel Corporation. Among the metal industries, the most extensive program is conducted by The Jones and Laughlin Steel Corporation for selected personnel of the organization. Those enrolled in the course, "Effective Speaking", are taught the fundamentals of organization, analysis, and exposition of a speech. They are required to introduce a member of the class. Their voices are recorded on a tape which is played back so that other members of the class, as well as the speaker, can give constructive criticism. Various vocal exercises are prescribed and practiced to help enunciation, pronunciation, and to relieve nervous tension. Each member of the class is given a textbook, together with supplementary training material developed by the speech instructor. The textbook, information on the background of the instructor, and the supplementary material were not available.

To complete this program satisfactorily, each member of the class is required to prepare and deliver a speech. Each member of the class, using a standard rating chart for effective speaking, rates each speech. At the conclusion of the program, a copy of the speeches and a list of the trained speakers is forwarded to the public relations department. "This provides a selected speakers list, as well as material, to meet requests from other organizations to provide them with a qualified speaker who is able to present his subject authoritatively," says W. R. Elliot, Vice President, Employee and Public Relations.

Metal Fabricating Industries

The metal fabricating industries covered the largest number of corporations. The range of employees was from 2,000 in Weather Seal, Incorporated to 400,002 in General Motors. The total number of corporations was 195. Thirty-eight industries were selected at random. Eighty-two percent of the corporations replied. The number having programs was 11 or 36 percent of those replying.

Allis Chalmers. Allis Chalmers has no formal program of speech training, and no printed material has been developed. However, in the sales training course in which engineers are trained for the sales force, informal training in speech is given. The engineers are trained in sales work with special emphasis on the oral presentation of the material. Individuals interested in speech improvement are given an opportunity to develop better speech habits in weekly meetings of a toastmaster's club. This club, organized of company personnel, is a member of Toastmaster's International and the procedure followed at these meetings is that developed by this organization for speech improvement. Formal training in speech is available in the speech classes conducted by the Extension Division, University of Wisconsin, and Marquette University, both located in Milwaukee.

Bendix Aviation Corporation. The following statement by H. W. Peterson of Bendix Aviation summarizes the Bendix attitude toward speech:

Here at the various plants of the Bendix Aviation Corporation we recognize very definitely the need for effective communications

not only between individuals but also in group relationships. In several of the Bendix Aviation Corporations public speaking classes are now being held for supervisory groups. Conference members are also given frequent opportunity to lead conferences and discussions. A great deal is done in personal consultation practices such as explanations, discussion, et cetera, between worker and supervisor, between supervisor and his superior.

None of the material relevant to these programs was available.

Caterpillar Tractor Company. In the supervisory training program at Caterpillar Tractor, a conference is conducted called "Effective Speaking". There are five different meetings in this conference. The first meeting is devoted to a discussion of the fundamentals of preparation and delivery, A small card listing these fundamentals is given to each participant. A copy of each side of the card is given below.

PREPARATION

Preliminaries
Consider the audience
Decide on purpose
Adapt subject

Development
Outline major points
Secure material
Design a thread of unity
Choose aids and illustrations

Organization
Select introduction
Outline body and key points
Arrange a conclusion
Budget your time

Polish the rough spots

Daily conversations are often "speeches"

DELIVERY

Poise
Like the audience
Concentrate on subject
Use notes if necessary
Change position

Expression
Speak naturally but be
heard
Use your eyes
Vary tone and pace
Be deliberate and optimistic
Use simple words and
sentences

Presentation
Give overview
Illustrate key points
Summarize and conclude

Be prepared for questions

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In each of the subsequent meetings, the supervisors in the group are given an opportunity to make a four or five minute talk on a subject of their own choosing. K. G. Slutz, the director, says, "These men are encouraged to keep in mind those fundamentals that were discussed during the first meeting." At the conclusion of each talk the members of the group are given the opportunity to comment on how well the speaker followed and applied the fundamentals. They point out the good and bad points.

At some time during the five meetings, the conference leader assigns topics of common interest on which each member of the class is given an opportunity to make an impromptu talk. In many of these conferences, a recording machine is used. The talks are played back to the members of the group so that each person can realize how he sounded before the group and discover some of the places where his talk might be improved.

Included in the related classroom schedule for apprentices and trainees in craft training programs is "Effective Reporting". A large part of the time spent on this subject is devoted to effective speaking. The method used in this program is much the same as that used in the Supervisory Training Program. Each apprentice and trainee attending this class is given an opportunity to make several short prepared talks as well as one longer talk.

As K. G. Slutz says further:

The purpose of these conferences on "Effective Speaking" and the classes in "Effective Reporting" is not to make public speakers, but to help those supervisors, as well as apprentices and trainees, develop their ability to express themselves effectively.

The White Motor Company. The White Motor Company makes available, through the facilities of the Cleveland Board of Education, classes in

public speaking whenever a sufficient number of employees evidence an interest. These classes meet after working hours and the employees attending them do so on their own time. The company reimburses the Cleveland Board of Education for its payments to the instructors. Several hundred employees have taken these courses over the past few years. C. L. Bryan, Director of Industrial Relations says, "I believe that the participants think that they have been well worthwhile."

Willys-Overland Motors, Incorporated. Training in the presentation of materials at monthly meetings is given for employees of Willys-Overland Motors, Incorporated. These meetings are conducted by the wholesale managers or distributors for the benefit of dealers. Materials for these meetings are prepared by Wilding Fictures, Incorporated, with the assistance and approval of the Sales Training Department, and distributed monthly to the wholesale managers. The programs make wide use of visual aids and handouts. The success of the training is determined by the effectiveness of the meetings conducted.

International Harvester Company. Mr. P. A. Carlstone, a staff assistant, explains the program of the International Harvester Company:

At our central school each group of works Foremen is given basic principles in preparing and delivering a talk. They have opportunity to speak before the group several times. Usually the class of 50 is divided into smaller groups. They have an opportunity to have their talks recorded on a tape recorder. The talk is then played back and the instructor makes comments and suggestions regarding each talk. A strong motivating factor is the selection of a class speaker for each class. At the very end of each effective speaking course, the six best speakers are chosen by the group for a final talk and selection of the class speaker.

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The course itself is put in booklet form. The introduction deals with some of the things one may often forget, such as making an impression by personal appearance, enthusiasm, and eye contact. The importance of courtesy and approach to outside contacts for the International Harvester Company are stressed. The introductory material also covers the techniques of introducing a speaker.

The basic requirements of the program are: be yourself, be enthusiastic, be prepared, speak clearly, and know when to stop. Emphasis is placed on accepting speaking assignments as the best way to overcome "that self-conscious feeling". Speech is described as an effective tool—instead of trying to "saw wood with a harmer", one must become familiar with the proper tool. Speech, it is explained, is actually an extension of conversation to the larger situation. The five familiar types of speeches are enumerated: to inform, to persuade, to impress, to activate, and to entertain.

"Never apologize" is the motto. The methods given are five in number: succinct statement of the truth, question method, shock method, story telling method, and quotation method. Each is described in a brief paragraph. Emphasis is placed on: (1) not covering too much material, (2) personal appearance, (3) preparation, (4) practice, (5) poise, (6) power (voice), and (7) speech structure.

Speech structure is taken up further by outlining and discussing the four parts of a speech: opening statement, introducing the main theme, body or main theme, and conclusion. Sticking to three main points, and repetition are suggested as effective ways to make the speech easy to follow and remember.

Techniques of public address and radio systems are taken up in the last section of the program. The differences between these and the ordinary speaking situations are explained.

A short paragraph is given to discussion of conducting formal meetings. A final word is, stand up, say what you have to say, and stop.

Interesting cartoons, which illustrate the speech technique being emphasized, are dispersed throughout the booklet. The program is designed to take up eight sessions of one hour each, but it usually runs to ten because of introductory remarks and the process of getting acquainted. So that a clear picture of what the course entails may be gotten, the complete instructor's manual is presented here.

EFFECTIVE SPEAKING

LESSON PLAN

No. of Sessions δ

Time Required 8 hours

OBJECTIVES:

- 1. To develop in the student the ability to express his ideas clearly and concisely through the spoken word.
- 2. To instruct the student in the theory and practice of effective public speaking.

INSTRUCTIONAL AIDS:

Blackboard

Effective Speaking, International Harvester Company (A-98-II)

INTRODUCTION: (Suggestions to the instructor)

It must first of all be impressed upon the students that ideas can be all but worthless unless they are communicated to others. Inability to express ideas convincingly removes much of the effect of what one has to say. Supervisors are constantly in contact with

people; they must transmit orders or instructions to their subordinates and consult with their superiors. Although they may possess the inherent qualities of leadership, they must know how to sell themselves and their ideas before they can be recognized as leaders. Effective speaking is one of the tools for the job.

This section of the course should be held in an easy, informal atmosphere with considerable emphasis upon active trainee participation. Practice in effective speaking will help the potential leader develop poise, courage and resourcefulness. Later on it will be a valuable aid in the student's contacts with individuals and groups both inside and outside the plant.

If the director of training has access to a wire recorder or other recording machine, it would be advantageous to make recordings of students' voices at least twice during the course. This is a most effective means of allowing students to study their speaking techniques objectively.

PRESENTATION OF SUBJECT MATTER:

- I. Fundamentals of Effective Speech
 - A. Purpose of Speech
 - 1. Communication of ideas
 - 2. Getting response from others
 - B. The leader's need for speech
 - 1. Not often required to make formal speech or lecture
 - 2. Must talk to people on the job day in and day out
 - 3. Opportunity to create favorable impression for self and Company
 - 4. Leadership implies ability to meet any speaking occasion
 - a. Leader should have self-assurance
 - b. Learning fundamentals of speech one way of developing it
 - C. Leader seeks response in three distinct ways
 - 1. Liental response
 - a. Interest in what he has to say
 - b. Liust hold and keep attention
 - 2. Emotional response
 - a. Agreement with ideas
 - b. Disarming listeners of suspicion

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3. Physical response

- a. Translating ideas into action
- b. Must make himself understood

D. Ideas-not technique-important

- 1. Speech not opportunity to show off
- 2. Technique merely to bring out ideas

E. Three tools at speaker's command

l. Voice

- a. Should be friendly and natural
- b. Can convey variety of feelings
- c. Reflects enthusiasm of speaker
- d. Eliminate harshness, grating and nasal effect
- e. Fleasant voice leads to conviction
- f. Words must be clear and distinct

2. Bodily action

- a. Must be motivated
- b. Can often convey more than the spoken word
- c. Gestures should be natural
- d. Looking listeners directly in eye

3. Language

- a. Should suit the occasion
- b. At its best when simple and exact
- c. Do not oversimplify
- d. Avoid use of profanity or slang

F. Value of response depends upon reputation of speaker

- 1. Must be familiar with subject matter
- 2. Must be respected to be believed
- 3. Improvement in personality reflected in improvement in speech

II. Voice Exercises

Here the instructor should arrange voice exercises, assigning each student a word, such as "yes", "hello" or "oh", and asking him to give it as many different shades of meaning as possible through the use of voice and bodily action. For example, a student may select the word "oh" and repeat it so that it expresses surprise, anger, indifference, sorrow, disappointment and pleasure.

III. Conversational Speech

- A. Conversation usual means of expressing ideas
 - 1. Individual pays little attention to technique
 - 2. Leader must strengthen conversational ability
 - a. Study fundamentals of effective speaking
 - b. Learn to talk with assurance and enthusiasm
- B. Conversational speech informal
 - 1. Uses same tools as all speech
 - 2. Organization and preparation not important
 - 3. Direct, sincere and natural manner
- C. Directness in conversational speech
 - 1. Establish eye contact
 - 2. Give impression of conviction
- D. Introductory remarks
 - 1. Should not be lengthy or involved
 - 2. Should establish contact with listener
- E. Casualness in conversation
 - 1. Avoid formality
 - 2. Show enthusiasm in subject
- F. Language in conversation
 - 1. Avoid high-blown language
 - 2. Avoid use of slang or profanity
 - 3. Use simple, concrete statements
 - 4. Bring in specific illustrations
- G. Leader should be a good listener
 - 1. Show interest by asking questions
 - 2. Show respect for opinions of others
- H. Leader seeks response through conversation
 - 1. Efficiency of department hinges on that response
 - 2. Weigh words carefully without sacrificing informality
- IV. Developing Self-confidence
 - A. Leader expected to be able to express ideas before groups of any size

- B. Public speaking differs from ordinary conversation only in degree
 - 1. Voice must be raised
 - 2. Gestures must be broader
 - 3. Movements must be more dignified and deliberate
 - 4. Remarks must be more precisely qualified
 - 5. Speaker must be himself
- C. Everyone has suffered from stage fright
 - 1. In experienced speaker—a slight tenseness
 - 2. In beginner --- an engulfing emotion
- D. Stage fright a lack of assurance
 - 1. Diverts attention from ideas
 - 2. Can be controlled
- E. Methods of controlling stage fright
 - 1. Preparation
 - a. Be well informed on subject
 - b. Outline subject matter
 - c. Memorize salient points
 - d. Write out opening statements
 - e. Make best possible personal appearance
 - 2. Physical control
 - a. Try to relax
 - b. Breathe properly
 - c. Make small movements
 - 3. Mental attitudes
 - a. Realize audience is sympathetic
 - b. Be eager to share ideas
 - c. Dare self to speak
- F. Constant practice necessary to develop self-confidence
- V. Extemporaneous Talks

At this point, students will be assigned two-minute extemporaneous speeches by the instructor. These talks are for the purpose of developing self-confidence in the student by giving him experience in expressing his ideas before a group. The instructor should assign subjects with which the students are reasonably familiar. Some suggested topics are:

Safety First My Last Job My Vacation
Quality Fays Company Policy Harvester Spirit
Leadership Tardiness My Hobby

VI. The composition of a Speech

- A. Audiences do not want incoherent, disorganized speeches
- B. Speaker decides upon objectives
 - 1. What he will say
 - 2. How he will say it
- C. Every speech has introduction, body and conclusion
 - 1. Introduction
 - a. Establishes contact with audience
 - (1) Reference to personal interests
 - (2) Mention of place, occasion or personalities
 - b. Arouses interest of audience
 - (1) Statement of fact
 - (2) Use of question
 - (3) Telling a story
 - (4) Use of quotation
 - c. Introduces the subject
 - (1) What speaker will talk about
 - (2) Why he considers it important
 - d. Need not be long or cumbersome
 - e. Establishes sympathy between speaker and audience

2. Body

- a. Issues in logical sequence
- b. Use of specific examples
- c. Avoidance of unnecessary detail
- d. Use of an outline
- 3. Conclusion
 - a. Sums up points in body
 - b. Ends with strong statement or appeal

VII. Practice Speaking

Students will give five-minute talks, availing themselves of the instruction given in the previous lessons. They will be required

to submit an outline to the instructor at the end of their talks. Subjects must be chosen which deal with some phase of company policy or procedure, with material previously taught in the course, or with the student's own experience with the company. At the conclusion of each speech, there will be a brief period during which the instructor and students will comment on and criticize the talk from the point of view of organization and technique.

SUMMARY AND TESTING:

- What basic principles must be remembered if one is to speak effectively?
- 2. How can self-confidence be developed?
- 3. What steps should a leader take in preparing a talk?
- 4. Discuss the purposes of an introduction to a talk and the means of accomplishing these purposes.
- 5. What factors are important in composing the body of a talk?
- 6. How should gestures and other bodily movements be used by the leader when speaking?
- 7. Why is the arrangement of material important in speaking?
- 8. What factors are important in conversational speech?
- 9. What should be stressed in public speaking?

Ford Motor Company. In the Ford Motor Company, speech training is utilized in apprenticeship training, in training for supervisors, and as "Effective Speaking for Sales Personnel". The following outline is of the apprenticeship program.

GENERAL COURSE OUTLINE

of

EFFECTIVE SPEECH - 802

FRINCIPLES AND STANDARDS SESSION OF EFFECTIVE SPEECH

FORM OF STUDENT APPLICATION OF PRINCIPLES AND STANDARDS

I Introductory Lecture Discussing Purposes and Aspects of Speech

Self Introduction of Students

:

II	Development of objective atti- tude toward speech: - Play- back of records with criticism	Two-minute recordings: - One- minute reading and one-minute extemporaneous
III	Physical action and voice	Pantomines and voice drills
IA	Organization: - Central idea; Introduction - Discussion - Conclusion	One-minute statement of per- sonal opinion on controver- sial subject
V	Organization: - Factors of Interest, use of illustrations	Two-minute talk on any sub- ject with well-marked intro- duction, discussion and conclusion
VI	Summary of principles as applied to final recordings and final speeches	Two-minute introduction of any subject to arouse audience interest
VII	Further development of objective criticism with evaluation of progress	Final Recordings: - one- minute reading and one- minute extemporaneous
VIII and IX	Final Speeches	Five-minute speech utilizing principles discussed in previous sessions. 1/2 class each session
Х	Final Review, evaluation progress, and recommendations for further development	Short written test

The second course offered by The Ford Motor Company in a Production Management Training Program for supervisors who are being trained for more responsible positions is taught at Wayne University as Effective Speech 101. It is a three-hour course designed to develop poise and confidence in speaking. The speaker's personality, voice, diction and bodily action are considered, as well as the effective preparation and presentation of ideas. Projects include group discussions, individual talks, reading aloud, and parliamentary procedure. Special attention is given to the student's individual problems.

The third program is entitled "Effective Speaking for Sales Personnel".

This special training department program was developed for sales personnel by Professor Paul Bagwell, Department of Written and Spoken English,

Michigan State College. The complete course outline is presented below.

The sessions are more or less informal. The scope seems quite wide,

including purposes of speech, voice recording, the voice, organization of a speech, and final speeches, plus a final examination in written form.

(Special program for Sales Personnel)

COURSE OUTLINE

SESSION	TOPIC	
1.	Explanation of the Terms of the Speech Rating Scale	
2.	Why do we make speeches?	
3•	What should we talk about?	
4.	How do we get next to our audience?	
5•	How do we prepare a speech?	
6.	How to organize a speech	
7.	Presiding and participating in meetings	
8.	Voice and its production	
9•	After dinner speaking	
10.	Critical listening	
11.	Demonstration talks by members of the class	

Chrysler Corporation. The Chrysler Corporation has no special training in the speech area. Chrysler works through established institutions and relies on them to give students the proper techniques of speech. In fact, as John M. Amiss of the Chrysler Corporation says, "Chrysler

Corporation...seeks to avoid duplication of efforts or competition with public educational and training organizations".

General Motors Corporation. The General Motors program is the most intensive found in the Metal Fabrication strata. The "G. M. Dale Carnegie Course" is given to salaried personnel of executive level and they hope to make the course available to all salaried personnel in the near future, and eventually, to anyone who wishes to take it. Vern K. Proctor, Public Relations Staff, General Motors Corporation, explains why the Dale Carnegie Course was chosen.

In determining the type and nature of public speaking which would be most appropriate for our people, we set certain ground rules. In the first place the amount of time which our people could devote after work hours to such training was definitely limited. The fact that the Dale Carnegie Course could be streamlined into lk sessions of approximately $3\frac{1}{5}$ hours each, was definitely in its favor.

In the second place, we were of the opinion that our people need practice quite as much as technical knowledge and training. The Carnegie Course provided opportunity for each student to be on his feet several times each session and allowed for a weekly drill session for students desiring extra practice.

In the third place, we felt that the kind of speech training our people needed consisted not so much in oratorical skill as in getting across ideas in a friendly, clear and convincing way. The Carnegie Course with its emphasis on human relations and on poise, seemed satisfactory on that score. And finally, the program should be of sufficient interest and appeal that a substantial number of our people would be willing to contribute their own time and money to participate. Results to date indicate that this objective has been attained.

The course was adapted to General Motors needs by reducing the number of sessions to 14 and by placing more emphasis on human relations, conference techniques, and impromptu speaking.

The introductory material by Dale Carnegie covers the objectives of the course. He says:

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If this course ran for four years we might try to improve your voice, your breathing, your vocabulary. This course lasts, however, not four years, but less than four months. So we stick to fundamentals.

Following is an enumeration of the important points covered in each of the lh sessions.

Session I. Everyone is put at ease by getting acquainted. It is explained that no one need fear the course since each is in the same boat.

Session II. This session consists of the process of loosening up the vocal mechanism by reading "Mary Had a Little Lamb". Emphasis is placed on talking about something in which you can rank as an authority or something which is of vital interest. The familiar quote of Webster is used, i.e. when asked how long he prepared for a speech he answered, "Ten years".

Session III. Acquiring ease and confidence in speaking are considered. Gestures, one is told, should come naturally. To emphasize this, each student uses gestures in describing a visit to a box factory. Impromptu speeches then are given by each member on subjects selected at random from topics contributed by the members. Awards are given at the end of the session.

Session IV. Gaining and holding attention is the subject here.

The students are told to come out of their shells and speak with complete abandon while giving short speeches.

Session V. Session five is concerned with eliminating "word whiskers", the "ers" and "uhs". To do this, a contest is set up and other members snap their fingers whenever a "word whisker" is evident. The persuasive speech is taken up in the second part of this session and each person is required to persuade the audience on some topic.

Session VI. Careful consideration and preparation of a speech are discussed and two steps of a speech are emphasized: (1) the attention getter and (2) the "so what". These are devices which make it easy for people to remember the steps of a speech. The speaker first gains attention by use of suspense, unified action, fact, or illustration. He then gives some evidence and gets the audience to the place where they say "so what". At this point he must ask them or compel them to action.

Session VII. The importance of good posture is emphasized.

In the second part of the session, enthusiasm is explained as essential to successful speaking.

Session VIII. Gesturing and putting life in one's talk and the human relations angle of "How to Win Friends" are again stressed.

Session IX. The speech of introduction is taken up in the beginning of the session. The points of brevity, specificity and a fast exit (say what you have to say and get out) are stressed. The conference method is explained in the latter part of the session. Four points are emphasized: (1) find the trouble, (2) find the causes, (3) consider the possible solutions, and (4) pick the best solution. Such things as keeping the conference moving, summarizing frequently, keeping the conference on the track and making everyone participate, are given as general rules to follow.

Session X. Impromptu speaking and projection of the voice are the subjects of session ten.

Session XI. The speech to inform is discussed and the conference method is gone over again.

Session XII. Session 12 is mainly an impromptu speaking contest. Making one's audience like him is taken up in the latter part of this session.

Session XIII. This session is concerned with a prepared speech contest and with some further emphasis on influencing people in a positive manner.

Session XIV. This is the wind-up session and an assigned talk on "What I got out of the course" is given by each member.

Nonmetallic Mineral Industries

Seven letters were sent to members of this strata which comprised 7 percent of the sample. Eighty-six percent responded, or six corporations. Of the six respondents, one was fostering a speech program.

Congoleum-Nairn, Incorporated. Public speaking classes are sponsored at Congoleum-Nairn with approximately 40 people of supervisory level participating. These classes are under the guidance of two instructors, employees of the company, who have received specific training through an outside agency (name not given). The group meets once a week for two hours. Each meeting is preceded by a dinner. The training period covers about one year. As a result, this program has provided a nucleus of trained speakers who have presented various papers at supervisory meetings.

Several years ago, Congoleum-Nairn instituted a series of "Informal Meetings". In these meetings speakers visited each plant in the evenings and presented a subject of general interest to the entire supervisory staff of that plant. The presentations were about 45 minutes long. Afterwards the speaker was called upon to answer questions inspired by his remarks. These questions were written on a form provided for that purpose. This question-and-answer session lasted about one hour. The "Informal Meetings" were held three times a year.

Chemical Process Industries

The Chemical Process Industries comprised 19 percent of the study.

Nineteen letters were posted and 17 or 89 percent of those contacted

responded. Eight had speech programs.

The Atlantic Refining Company. The program fostered by the Atlantic Refining Company consists of a pre-foreman training plan of Effective Speaking. The course is divided into four sessions which take up about one and one-half hours each. Following is a summary of the four sessions.

Session I. The purpose of this session is to explain the importance of a foreman being an effective speaker. Practice in speaking is given by assigning a speech on "your last job". The speech is recorded on tape as it is given. The recording, when played back, emphasizes the defects which may arise from lack of preparation.

Session II. The steps to be followed in preparing an effective speech are taken up in the second session. It is emphasized that just as one would plan a trip, one must plan for a speaking engagement. Five steps are given for preparation of an effective speech: (1) select a topic, (2) determine your purpose, (3) collect material, (4) analyze material, and (5) prepare a speaking outline. It is further emphasized that the speech should be kept within the scope of three main points.

Session III. The purpose of session three is to put into practice the principles explained in session two. Stage fright is discussed in the latter part of the session and it is explained that the best ways to keep it under control are four in number: (1) know your subject, (2) have a healthy attitude, (3) relax, and (4) get experience.

Session IV. Practice in the presentation of a talk appealing for action, and discussion of some basic principles concerning voice and posture are considered. The first rule of posture is given as relax and stand erect. Six types of speakers are discussed: (1) "Shy rabbit", (2) "Sonja Henie-the leaner", (3) "debutante slouch"-the lectern leaner, (4) "Barrel—chested bruiser"—he can't relax, (5) "drunken sailor"—is not drunk, just scared, and (6) "the clinging vine"—he hungs the lectern like a long lost friend. Breathing properly and keeping one's tone forward are the other subjects discussed.

The Continental Oil Company. The Continental Oil Company of New York has complete programs in their Oklahoma and Houston, Texas headquarters, but as yet the courses are not company-wide. No outline of the course structure was available.

E. I. du Pont De Nemours, Incorporated. There is some training being done in this corporation, but the courses are not company-wide. No outline of the course structure was available.

The Sutherland Paper Company. The Sutherland Paper Company has fostered a speech training session for executives, but the course was discontinued because of lack of interest and the difficulty of finding a convenient meeting time.

The Goodyear Tire and Fubber Company. At Goodyear some speech training is given to Squadron Production Trainees and Squadron Engineers. The trainees take speech for one quarter (12 weeks) at Goodyear Industrial University. A lecture takes two of the scheduled hours. A flannel board

is used to emphasize the main points of the lecture. For example, if one is talking about the tools of effective speaking, a card "How to Prepare a Speech" appears on the flannel board. These cards, 50 in number for the lecture, were made up by an artist in the training department. The printing is in various colors. The instructor's outline of the complete lecture follows:

OUTLINE OF LECTURE ON EFFECTIVE SPEAKING

I. Introduction

- 1. A few lines from "Break, Break".
- 2. College questionnaires
- 3. Lord Chesterfields advice
- 4. Why effective speaking
- 5. What Chauncey Depew said

II. The Tools of Effective Sreaking

- 1. How to Prepare a Speech
 - a. Prepare a gracious greeting
 - b. Prepare a striking introduction
 - c. Have a plan for the development of your subject
 - d. Develop the plan with variety
 - (1) Use illustrations or examples
 - (2) Use definitions
 - (3) Use comparisons and contrasts
 - (4) Use reasons to develop your ideas
 - (5) Say it over and over again
 - (6) Use conversational style
 - (7) Use vivid words
 - e. Your greatest effort should go into your conclusion.
- 2. How to Improve Your Vocabulary
 - a. Build up knowledge of words.
 - b. Keep vocabulary growing after leaving school.
 - c. Intelligent plan is necessary if progress is to be made.
 - d. Get rid of stale, worn-out expressions.
 - e. Avoid trite figures of speech.
 - f. Learn to use an unabridged dictionary.
 - g. Read widely.

3. How to Keep an Audience Awake

- a. Arouse self-interest
- b. Use humor.
- c. Suspense will keep an audience on the edge of their seats.
- d. Sincerity is very important.
- e. Use human interest story.
- f. The speaker should be animated.

4. How to Conquer Fear

- a. Do not attempt self-analysis.
- b. Prepare thoroughly.
- c. Build up a record of speaking experience.
- d. Resolve that fear is a state of mind.

5. How to Improve Your Voice

- a. Improve your general health.
- b. Be careful in pronouncing words.
- c. Make a conscious effort to increase power of your voice.
- d. Learn to modulate your voice.
- e. Learn to breathe deeply.
- f. Read aloud both prose and poetry.

III. The Four Things a Speaker Should Do

1. Communicate

- a. Look at your audience.
- b. Watch your deportment.
- c. Appear enthusiastic and animated.

2. Illustrate

- a. Illustrate ideas.
- b. Give a picture.
- c. Use striking words.
- d. Compare and contrast.
- e. Cite cases.
- f. Use visual aids.

3. Motivate

- a. Show how your audience can profit.
- b. Show how audience can give unselfish service.
- c. Show how audience can uphold their ideals.
- d. Show how audience can realize self-preservation.
- e. Supply any other wants the audience may need; prosperity, power, importance, self-interest, et cetera.

L. Activate

- a. The speaker should be active.
- b. The speaker should aim at getting action.
- c. Get the audience to respond to your ideas.
- d. Tell your audience what to do.
- e. Finish with a great effort.
- f. To really activate your group, follow up, if possible.

IV. Conclusion

- 1. For Speech Improvement, Read the following:
 - a. Public Speaking for Business Men by William G. Hoffman
 - b. How To Talk Well by James F. Bender.
- 2. Join a toastmaster's group, or if there isn't one, organize one yourself. The address:

Toastmaster's International Santa Arg. Galifornia

- 3. Remember, you are doing more than just making a living.
- 4. The challenge is yours; you can be the kind of man and the kind of speaker you want to be.

After the subject is introduced through the lecture method, ten practice sessions emphasizing the speaking techniques outlined above follow.

Esso Standard Oil Company. At Esso Standard Oil an "Effective Speaking" course is given to executives of all levels, including members of the Board of Directors, and to many levels of sales and technical personnel. Esso has a complete training center where members of the organization's many facets are trained periodically. Here, speech training is frequently offered as a separate course. At other times instruction in effective speech is incorporated within other full-time-off-the-job courses, such as Sales Management, Advanced Industrial Sales, and Petroleum Marketing in the United States. It is expected that the course will be enlarged and

developed so that selected men from affiliated companies can come to the Esso Training Center to be trained. After being trained, they can then return to their own organizations and set up effective speaking programs. It is hoped that in the near future complete session outlines, uses of visual aids, handouts, and other materials will be developed so that the trainees may return to their own organizations with a firm foundation and appropriate materials for organizing effective speaking programs. The course has been in existence for three years and according to Alba K. Alford, Employee Relations Department, it is growing each year.

The objective of the course is to improve individual potentialities of those employees who may at some time have to appear before the public. Philosophically, the course is provided because the company feels that good representatives are an asset. Since the company desires this type of individual, it feels it is obligated to provide the training.

The course includes the basic principles of delivery techniques, audience analysis, and subject preparation. Recordings are used to afford a basis for criticism and comparison. Use of blackboards, slides, charts, et cetera is also explained. The course covers about three weeks, consisting of six three-hour sessions held during regular working hours. The selection of persons to take the course is carried out by the department heads of the plant. The total number of participants is limited to 16. The course is taught by a company representative.

Another course is given in Conference Leadership in which the selection method is the same. Outlines of the two courses showing the objectives, content, et cetera are included here as furnished by Alba K. Alford.

TRAINING PLAN

Name of Course

EFFECTIVE SPEAKING

Objective

To provide training to improve and develop the individual potentialities of those employees whose regular and normal duties include appearance before employee groups, customers, or the public to present or discuss specific subject assignments.

Philosophy

Certain employees are responsible in their regular and normal duties for discussing or speaking on specific subject assignments before groups of fellow employees, customers or the public. It is of direct benefit to the Company for these employees to improve their ability to convey to others a new idea, an improvement in an existing program, belief in a given opinion or Company product or to secure action on a specific proposal. Training to provide the acquisition of speaking skill by these employees should be provided by the Company.

This training is intended to emphasize the development of each participant's individual potentialities, provide him with well-qualified methods of self-development, enable him through practice talks to experiment with these methods and to receive the constructive suggestions of a competent instructor. It is not proposed to present any long set of rules or attempt to mold an individual to some predetermined pattern. Only artificiality and self-consciousness could result from such a program.

Score

The course will include the basic principles of delivery techniques, audience analyses, and subject preparation. Each participant will also have an opportunity to deliver several practice talks followed by the instructor's critique and comments.

Recordings will be made of at least two practice talks for the sake of comparison and will permit self-criticism of subject and delivery. A brief discussion and practice use of a public address system, the blackboard, charts, slides, and movies to insure an understanding of proper transition and handling techniques will be also included.

Location and Schedule

The course will be held in the Esso Building in one of the suitable rooms that may be available. It will cover approximately three weeks, consisting of six three-hour sessions and one two-hour session for a total of 20 hours during regular working hours.

TRAINING PLAN

Name of Course

CONFERENCE LEADERSHIP

Objectives

- 1. Provide information regarding the skills and techniques used in leading conferences.
- 2. Provide opportunity for practice in using these skills and techniques.
- 3. Familiarize the potential conference leader with the planning and organization necessary for effective conference leadership.

Philosophy

The use of conferences to solve operating problems, to train individuals in management, and to discuss policies has had a rapid growth in recent years. The popularity of the conference method has been due to the fact that it enlists the thinking and participation of everyone in the group.

The coordination of management thinking requires conferences. Operating problems, sales planning, and personnel policies call for decisions based upon information and ideas of all concerned. These opinions must be resolved into a plan of action. The conference offers the best medium for permitting and stimulating this interchange of thinking.

Experience has shown that the effectiveness of the conference is dependent, to a great extent, on the ability of the conference leader to guide discussion and provide proper direction and stimulation. This course in conference leadership is intended to provide training and practice which will help the conference leader improve his effectiveness.

Scope

The course is designed to provide information which will be of immediate use to the trainee conference leader. The first part is devoted to an analysis of the proper techniques and required background for conference leadership, namely:

- 1. Background of the conference method
- 2. Conference leadership qualifications and duties
- 3. Conference procedures
- 4. The "FOUR STEP" plan in getting ready to lead a conference

- 5. The "FOUR STEP" plan in conducting the conferences
- 6. Conference leading techniques, case studies, check sheets, films, charts, et cetera
- 7. The use of the blackboard in conference leading and charting techniques.
- 8. Situations encountered in conference leading
- 9. Special devices and techniques used to improve the effectiveness
- 10. The use of questions

The remainder of the course (about 65 percent) is devoted to actual practice in conference leading. Each member of the course is given three opportunities to conduct practice conferences. Each practice session is followed by a short critique in which fellow conferees and the course conductor constructively criticize the conferee's performance.

Johnson and Johnson. The program at Johnson and Johnson has been in effect for seven years. It was inaugurated to help employees become more competent in their jobs, accept added responsibility and provide opportunity for advancement. William V. Machaver, Training Director of Johnson and Johnson, says:

The Conference Leadership Training course helps to develop techniques of conducting successful conferences. Men on all levels of supervision are required to lead conferences with their people. We feel this is an important phase of a supervisor's job and one for which a man should be adequately trained.

The course is divided into nine conferences. All of the material taken up in the entire course is enumerated in Conference I and Conference II.

These conferences are summarized here.

Conference I. Purposes of Conferences. It is explained that conferences in industry have a four-fold purpose: (1) as a communicative device, (2) as an opportunity to exchange ideas, (3) as a training tool, (4) as a technique for getting acceptance of ideas. The three types of conferences, as discussed, are: (1) completely controlled—group says little; (2) leader control plus group participation; and (3) uncontrolled—

more of a social gathering with no special objective in mind. A demonstration conference is conducted on "How Can We Make Better Use of Bulletin Boards". The techniques for controlling and guiding a conference are enumerated as follows: (1) questions - (direct, overhead, reverse, and relay); (2) comments from the group; (3) postural movement, such as eye contact, pauses, gestures, et cetera. The use of teaching aids, such as charts, film strips, slides and blackboards is explained. Conference I is concluded with the introduction and discussion of four phases of discussion; (1) approach, (2) drawing out, (3) acceptance, and (4) summation.

Conference II. Conference two and the remaining conferences enlarge upon the aspects above. Throughout the program, frequent practice sessions are held. A summary of the course is given in conference nine. The three main points emphasized throughout are preparation, proper guidance, and frequent summary.

Owens-Corning Fiberglas Corporation. The Owens-Corning Fiberglas program is comparatively new, having been organized in January 1951. Fred M. Crandall, The Training Director, is enthusiastic about the program and has this to say concerning it.

We've tried it on our college grad trainees and it has proven very effective. We've also tried it with some of our older supervisory people and we find they, too, react quite well. It is our intention to further this program next Winter and from there on.

The course has not been divided into complete session outlines, but a course outline was submitted by Fred N. Crandall and is presented here. No other information concerning the instructor or course content was available.

FIBERGLAS TRAINING PROGRAM IN EFFECTIVE SPEECH

I. PHASE I - INTRODUCTION

- A. Benefits, Objectives, and Mechanics of Program
- B. Get-acquainted Talks
 - 1. Based on personal history
- C. Assignment
 - 1. Tell a short, simple story with significant gesture and facial expressions—no words whatsoever.

II. PHASE II - "TAKING THE BULL BY THE HORNS"

- A. Overcoming Nervous Tension and Building Self-confidence
 - 1. Recite a familiar nursery rhyme in an exaggerated manner, carrying it even to the point of absurdity.
 - a. Projected whisper
 - b. Deadpan monotone
 - c. Laughing
 - d. Crying
 - e. Over-animated
 - f. Melodramatic
- B. Conduct Story-Telling Session Without Words
- C. Obtain a List of Ten Specific Subjects from Each Member of the Group.
 - 1. Subjects to be used later in the program as semi-impromptu 3-minute talks.

D. Assignment

- 1. Prepare a 2-minute talk on some subject that is familiar to the individual.
 - a. Aimed at telling your listeners something that may be helpful to them—how to do something—maybe something very "everyday".

III. PHASE III - "PLANNING A SAFE FOUNDATION"

A. Your Voice

- 1. Range
- 2. Pitch
- Tone

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- 4. Volume
- 5. Inflection
- 6. Pace

Show Film, "Your Voice"

- B. Breathing
 - 1. Benefits
 - 2. Diaphragmatic breathing idea
- C. Enunciation
 - 1. Common Faults and Exercises
- D. Emphasizing the Great Part Which the Lips, Tongue, and Jaws Play in Making Speech more Understandable
 - 1. Recite nursery rhyme, "Humpty Dumpty Sat on a Wall" in three different ways
 - a. Lips and teeth closed
 - b. Teeth closed, lips open
 - c. Making full use of tongue, lips, teeth and jaws
- E. Give 2-minute Prepared Talks
- F. Assignment
 - 1. Practice readings to develop effectiveness
 - a. Emphasizing word endings
 - (1) "The Cateract of Lodore"
 - b. Developing the use of the tongue
 - (1) "The Brook"
 - (a) Trill the r's when reading
 - c. Explain method of reading to emphasize the need for change of pace, pitch, volume, and the need for feeling
 - (1) "Barbara Frietchie"
 - (2) "Charge of the Light Brigade"
 - (3) "The Village Blacksmith"
 - (4) "Casey at the Bat"

IV. PHASE IV - THE POSITIVE EFFECT OF ENTHUSIASM

- A. What It Means
- B. What It will Do
 - 1. For you as the speaker
 - 2. For your audience
- C. Why it Gets Results It does
- D. Where and When To Use It
- E. How to Develop It
- F. Give 3-minute Impromptu Talks
- G. Read Selected Poems
 - 1. Over public address system imitating a radio announcer
 - 2. Record each reading for playback and study
 - 3. Contest by twos-loser repeats at later session

H. Assignment

- 1. Prepare a 4-minute talk on some subject that is familiar to the individual
 - a. Give special attention to the principles of enthusiasm

V. PHASE V - "MAKING YOUR STOCK PAY DIVIDENDS"

- A. Facial Expressions
 - 1. What they are
 - 2. What they will do for the speaker
 - 3. Most valuable THE SMILE
- B. Eye Contact
 - 1. What it will do
 - 2. How to use it
- C. Gestures
 - 1. What they will do
 - 2. What they are
 - 3. How and when to use them
- D. Give 3-minute Impromptu Talks
- E. Give 4-minute Prepared Talks
- F. Assignment
 - 1. Practice applying principles of gestures in selected readings

VI. PHASE VI - "WEIGHT THE DICE FOR YOU"

- A. Posture and Appearance
 - 1. Its effect on the audience
 - 2. Its effect on the speaker
 - 3. Ideas to help the speaker obtain the most pleasing and powerful presentation
- B. Habits and Mannerisms
 - 1. What they are
 - 2. Different types
 - 3. Their detrimental effect upon the audience
 - 4. How to avoid them
- C. Run Team Competition to Correct Common Speaking Faults
- D. Give Selected Readings Emphasizing Gestures
- E. Assignment
 - 1. Prepare a 4-minute talk to get action
- VII. PHASE VII "THE MAP THAT LEADS TO BURIED TREASURE"
 - A. Give 4-minute Talks to Get Action
 - B. Speech Organization
 - 1. Gathering Ideas
 - 2. Selecting the objective and main points
 - a. Outlining and building speech
 - C. The 4-step Formula for Speech Planning
 - 1. Ho-hum!
 - 2. Why bring that up?
 - 3. For instance!
 - 4. So what?

Show Film, "How To Make a Sales Presentation Stay Presented"

- D. Assignment
 - 1. Prepare a second 4-minute talk to get action, based upon 4-step formula

VIII. PHASE VIII - "BUILDING SUPER HIGHWAYS FOR YOUR IDEAS"

- A. Visual Aids
 - 1. What they are
 - 2. Benefits to the audience
 - 3. Benefits to the speaker
 - 4. Different types of and how to use them
- B. Give Second 4-minute Talks to Get Action
- C. Assignment
 - 1. Prepare a final 10-minute talk on any subject that is familiar to the individual
 - a. Apply all principles discussed throughout the program
- IX. PHASE IX PRACTICE FOR PERFECTION
 - A. Each member of group gives two 30-minute talks to inform and 10-minute talks to arouse or inspire.
 - X. PHASE X SUMMARY
 - A. Five the Final 10-minute Talks
 - B. Review All Key Points Covered In The Program

General Training Division January 15, 1951

Textile and Allied Products

The Textile and Allied Products industries constituted 7 percent of the study. Seven letters were sent out and six were answered. Of the six returned, one had a speech program.

The Forstmann Woolen Company. All the apprentices in six apprenticeship programs at Forstmann are required to take a course in "Effective Speaking". This is a 32-hour course conducted at the plant.

In addition to this, courses have been offered in this field to foremen and foreladies in the organization. During the past few years, there have been two or more classes taking this type of instruction annually. The work of these groups has been along the lines of general speech improvement. The improvement of diction, the method of presentation, voice modulation, organization of subject matter and a study of correct forms of speech, et cetera, were given attention.

Joseph H. Constantine, Director of Apprentice Training, says:

"There has been a great deal of interest shown by the people who have taken these courses. In fact, some groups have asked for continuance in the form of advanced work. I...want to assure you that we feel that this is a very important part of the training for people who are in and people who are being trained for supervisory positions".

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Apparel Industries

The Apparel Industries composed 5 percent of the total sample. Five letters were sent out and 100 percent response was received. Of the five answering, one, The A. C. Lawrence Leather Company, has conducted speech training.

A. C. Lawrence Leather Company. A ten-weeks program in public speaking was just completed at the A. C. Lawrence Leather Company in April 1951. Fifteen persons were enrolled in the program which is part of a long-range program for better equipping them to handle their particular responsibilities. H. W. Seinweth, Industrial Relations Manager, in answering the correspondence, stated that he had written and developed the course and that no written material was available.

Food, Liquor and Tobacco Industries

The Food, Liquor and Tobacco industries constituted 9 percent of the total sample. Nine letters were sent out and seven, or 78 percent, were answered. One had a speech program.

Standard Brands, Incorporated. A. C. Noble, Industrial Relations
Division, says:

About a year ago several people in the field sales organization of one of our divisions suggested that speech training would be helpful to many people in the organization. With that as a starter, we set up a three-day program conducted by an outside instructor who conducted two pilot groups of 15 each last winter (1950).

We recognized that in such a short period of time, we could not hope to accomplish much more than to emphasize some of the principles of effective speech and help each individual recognize his own weak points so that he might concentrate his efforts on improving them.

This course was presented as a "How To" program with the following overall objectives: how to use the voice to help you sell; how to improve self-confidence and poise; how to think and speak on your feet; how to speak convincingly and enthusiastically, how to organize thoughts for clear and effective presentation; and how to read a paper to an audience.

The program was very favorably received by those who participated and occasional, informal follow-up meetings are contemplated where members of the group can have an opportunity to put to practice the things they learned in the session.

A card is given to each participant with helpful reminders printed on it, also a complete outline of the "Effective Speech Program", and a speech appraisal sheet which covers the main points of material, organization, presentation, and listener reactions. These materials are presented here.

IMPROVE YOUR MEMORY

IRA Formula

- 1. Impression-Be interested; observe
 alertly; concentrate
- 2. Repetition-Repeat whatever you
 wish to retain
- 3. Association—
 Relate that which you wish to remember with something already in your experience

EFFECTIVE SPEECH PLAN

- 1. Flash!

 Begin with a statement that will catch attention instantly.
- 2. Contact! Adapt your flash to the interest of your listeners.
- 3. Take Aim
 State the main idea or
 thought of your talk clearly
 and concisely.
- 4. Follow Through
 Support your aim with illustrations, authoritative statements, facts, or reasoning.
- 5. Show the Way
 Make clear what you want
 your listeners to do.

EFFECTIVE SPEECH PROGRAM

MAKE THEM WANT TO LISTEN TO YOUR PAPER!

How can you make them want to listen to your paper? When you read a paper, you want others to listen—to understand—to believe—or to act. That's your job—to make your thought stick in the minds of others—to keep it from getting lost—to win attention for your paper. How to do it—

Anybody can make a good talk or read a paper effectively—and we mean anybody. Yet, as listeners, you know there are few who do read or talk well. Why? They think they can't do it. They think that speakers are born, not made—or else they get scared stiff in trying. No less an authority than William Jennings Bryan stated that "The ability to speak is an acquirement rather than a gift". This means you can be a good speaker if you make up your mind to be. Remember, "They can conquer who believe they can".

Let's start by listing a few troubles that people sometimes run into when reading papers. Do any of these apply to you? If so, check them.

- 1. Buck fever
- 2. Want to get through in a hurry
- 3. Lose place while looking up
- 4. Get confused when interrupted

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- 5. Suddenly realize they have hands
- 6. Eyes glued to script
- 7. Don't know what to do with mike
- 8. Become rooted to one spot

If any of these bother you, read on. Can you use any of these suggestions?

Feel nervous? Well, you should. If you don't you'd better see a doctor, for you are practically dead—emotionally. I wouldn't want anyone to speak on my team if he didn't feel nervous when facing a group. Nearly everyone is nervous when he undertakes to do something of importance—whether it's lining up on the gridiron awaiting the whistle, starting a new job, entering the boss' office or beginning a speech. Your buck fever is one of your most important assets. It is proof that you are alert to the importance of the occasion—that you are on edge—ready to meet the challenge. Your problem is not to eliminate nervousness, but to prevent it from showing. These tips may help.

1. Have something to say; don't just have to say something.

Be sure your paper has some meat in it - some facts, observations, questions, suggestions that will mean something to your listeners. You owe this much to them. If it takes you 20 minutes to read your paper and 15 people are present, you consume 5 hours. Be sure you have something to say that warrants that much time. When you know you do have, much of your buck fever will disappear as soon as you start to talk—at least it won't show!

2. Know your paper thoroughly.

Read and reread your paper before you come to the meeting. Read it aloud. Read it to your wife or to anyone who will listen. When you are familiar with your report, you won't get "lost" when looking up from your paper. You will read thoughts rather than words.

3. Take time to get started.

Pause a moment before you speak. You can be sure of holding everyone's attention as long as you don't speak. So take it easy. Take a deep breath before you talk. This gives you control of your breathing—and good breathing is essential to speaking as gasoline is to an engine. Look at your audience straight in the eye. Make contact before you take off!

4. Concentrate on what you're going to say.

Don't be worrying about how you're doing. You are no longer important. That you're going to say is important—and your audience. If you must feel sorry for someone, feel sorry for them—not yourself. Get your mind off yourself. Put it on the audience and on your report. If you've forgotten to straighten your tie, it's too late now—forget it.

5. Speak upl

Open your mouth when you read. There's only one place for words to come out. So open your mouth and let them out.

6. Re enthusiastic!

Your attitude determines the response of your listeners. You lack interest, they'll turn away or sleep. You show enthusiasm, they'll be alert and interested.

7. Be convincing!

Be sure of your facts. Know their importance. The big thing in a talk is the attitude of the speaker. Let people know you believe what you say. Be sincere. If necessary, an audience will forgive you a multitude of sins in presentation—if you are sincere.

8. Iet yourself gol

Forget about hand, feet, gestures. Public speaking texts have ruined many speakers by writing about how to gesture. True, action is important because people who listen also watch. They learn more from observing than from hearing. So your expressions mean a lot. But action should result from feeling—just as it does in conversation. "Feel" what you're talking about—know it's important—believe it and be enthusiastic about it. Action will take care of itself. So don't hold back—as you feel, so act.

9. Make yourself heard.

Do not stare at rostrum or paper. This destroys sense of communication—also sends voice floorward. The voice tends to go where the eyes look—so watch your audience toward the rear of the room. Your voice will automatically get back there.

10. Be conversational.

Take it easy—don't shout! Talk as much like "you" as possible.

Don't imitate others. You have personality that no one else has—

make the most of it. Don't "make a speech"—just talk with enthusiasm and sincerity.

11. Pause.

Take it easy. Don't rush. You don't have to keep on making sounds. Silence at the right intervals is an important part of good speaking and reading. Give emphasis to the really important thoughts in your report by pausing before or after them.

12. Watch your listeners.

Don't bury yourself in your script, looking up furtively as though ready to dodge vegetables. There won't be any. Look at your listeners during your reading—really watch them to see whether they are following you. Remember, you read for others—not for yourself.

13. Look pleasant.

Said good old Confucious, "He who cannot smile ought not to keep a shop". So he who cannot look pleasant should not talk in public. Be sincere about it. Feel pleasant toward people and you'll look that way. Be friendly and you'll appear friendly.

14. When interrupted - Think! - Then speak.

When a question or objection is raised, don't so off half-cocked. No one requires that you answer in the next second. When you do, you often say things that you would never say a bit later. Take time to realize what the question means. Then marshal your facts and answer. If you don't have the facts, say so. Don't bluff!

Making The Mike Help You Talk

The microphone is your friend. Learn how to use it. Here are a few tips.

- 1. Adjust the mike for your comfort. Don't have to stoop to reach a mike. And don't let it hide your face from the audience. Adjust it to your height so you can talk directly into it and still see and be seen easily.
- 2. Stand as close as you need to for best results. Take your cue from preceding speakers. Don't weave back and forth.
- 3. Leave it alone. Once you have adjusted it, leave it alone. Don't handle it; it's sensitive.

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- 4. Talk to your listeners—not to the mike. Once you're correctly set, forget about the microphone and watch your listeners.
- 5. Take your time—especially to start.
- 6. Be conversational in tone. Don't shout.
- 7. Have your papers loose leaf, not stapled. Mike picks up rattling of papers.

Preparation

Margins -

Left - right - top - bottom.

Spacing -

Single or double. Make a trial run to determine which you follow better. People differ in this regard.

Sentences -

Make them short. They are easier for you to follow and much easier for listeners to grasp.

Faragraphs -

Keep them short. Four or five lines to a paragraph. You'll handle them much more effectively.

Length of paper -

Remember, you write for others, not yourself. Try to be both adequate and concise.

SPEECH APPRAISAL - EFFECTIVE SPEECH PROGRAM

Name:		Time:			Date:		
	Factors	YES	2	CONTO PROVE	Helpful	Comments	
I.	MATERIAL AND ORDANIZATION						
	Is material worth the listening	1 1					
	time it consumes? Is it impor-			1 1			
	tant to listeners? Are the			1 1			
	thoughts well supported?						
	Is material interesting to the						
	listeners?			1 1			
	Does speaker relate it to						
	listener?			1			
	Does he include interesting		į				
	illustrations?						
	Is the thought clear to the		l	1 1			
	listeners?		l	1 1			
	Is the main idea clear?	1	1	1 1			
	Do listeners know what	Ì	1	1 1			
-	speaker wants them to do?	↓	<u> </u>	\vdash			
11.	FRESERTATION	1	ŀ	1			
	Does the speaker's voice help	1	İ				
	him sell his material?	Ì	į	1 1			
	Does he emphasize effectively?	1	į	1 1			
	Does he vary his voice in rate,	1	l	1 1			
	pitch, volume?	1	1				
	Is his voice pleasing and con-			1 1			
	vincing?		ı	1 1			
	Is his speech clear?		1	1 1			
	Does he pause effectively?		├	╂┷┵			
	Does speaker's body help him talk?		ł	1 1			
	Does he put his personality into		1	1 1			
	his speaking?	1	}	1 1			
	Does he express interest in his material?	i		1 1			
	Does he watch reactions of his	1	ł	1 [
	listeners? All the time?	1	1				
	Is he self-confident? Composed?	1	1	1 1			
	Does speaker employ language	+	╁┈	 			
	effectively?	1	ı	1 1			
	Is his phraseology clear - easily	1	1	1 1			
	understood by his listeners?		1				
	Are his sentences short?	ı	1	1 1			
	Does he ask questions?		1	1 1			
	Is he generous with "you" and			1 1			
	sparing with "I"?	1	1	1 1			
	Is grammar reasonably correct?	1	1	1 1			

III.	LISTENER HEACTION Did listeners react to the opening remarks? Was listener interest sustained throughout talk? Were listeners keenly interested in closing remarks?			
	in closing remarks?	1	i	

Electrical Industries

The Electrical Industries comprised 7 percent of the total study. Seven letters were sent out and six or 86 percent of the corporations responded. Of the responding six, three or 50 percent had speech programs.

The Sunbeam Corporation. R. Hagmeyer of the Sunbeam Corporation sums up the attitude of the members of this corporation when he says:

We agree with you speech training is of decided value - that is why colleges and industries are encouraging training along that line.

Our company does not have a fixed working plan that promotes speech training. Within the past year or two, however, various senior and junior executives have attended classes in public speaking, sponsored and paid for by the company. These classes were ten sessions of two hours each at weekly intervals. The classes were conducted by Dr. Leighton Borin, Professor at Northwestern University. Approximately 60 men were enrolled. Many of them are now members of a public speaking club organized as a debating group, meeting once each month for a two-hour period. In this manner we hope to maintain the value gained in our class work, also to improve our speech training as we go along.

All of us are convinced that an individual who can think and speak on his feet enjoys a decided advantage over someone who can't. The ability to do so will, without doubt, result in greater progress than otherwise.

Radio Corporation of America. The emphasis on speech training at the Radio Corporation of America will be placed on training the supervisor how to hold small groups meetings and express his ideas more effectively.

Mr. H. Bowie, of the training division, says:

We are just getting into this field although we recognize that it is very important. We are not concerned about making our supervisors public speakers.

In one of our plants some of our people have taken a speech training course patterned after the Dale Carnegie Course. In another of our plants a small group has been conducting a speech class after

hours, following a standard textbook with which you may be familiar. This text is "How to Talk More Effectively" by Jean Bordeaux, and it is published by the American Technical Society, Chicago, Illinois.

No other information was available concerning the programs enumerated.

The General Electric Corporation. General Electric is fostering the most extensive and highly developed program in the Electrical Industries sampled. "Speech Technique in the General Electric Company is receiving more and more emphasis each year". This statement by J. M. Helmick of General Electric expresses the importance which is placed on speech in this organization.

Several years ago, a program was started at General Electric to train sales engineers in the fundamentals of Effective Presentation. The instructors came from within the company. After the course had been revised and improved several times, it was realized that not only sales engineers could benefit. Today, the course is not only given to manufacturing and engineering personnel but also to people in other phases of the company's operations. This Spring (1951) there were over 50 classes being taught.

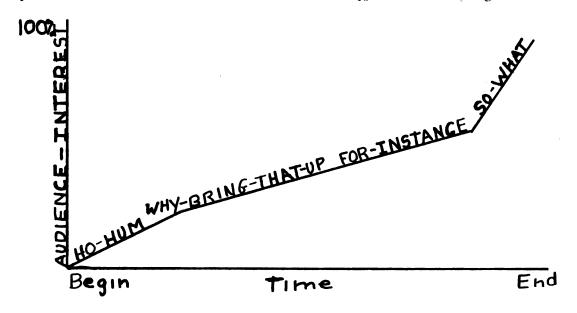
The course itself attempts to teach correct use of all the methods for effectively communicating ideas such as speaking, writing, the use of the telephone, the use of the dictaphone, et cetera. The greatest emphasis is placed on the oral presentation of material. Each student is required to make a speech at each session and his efforts are constructively criticized.

The course structure is explained in an instruction manual for the leader. The instructor introduces himself briefly giving his name, where

he works, his background, and his interests and hobbies. The students then do the same. A summary of the 17 conferences in the program follows.

Conference I. The first conference is mostly an orientation period for getting acquainted and feeling at ease.

Conference II. Attention is stressed. First, it is to be assumed by the speaker that the audience is completely anathetic. Second, after getting attention, by using surprise or curiosity, the topic must be related to the audience. Thirdly, the speaker must convince the audience with evidence that the point being stressed is factual. Finally comes the call to action. The four steps are stated thus: "Ho-Hum", Why Bring That Up", "For Instance", and "So What". The diagram on this page shows the progress of the procedure. In each session, an outline and completely written speech are handed to the instructor. Timing is begun at once with each student being allowed two and one-half to three minutes. A tape recorder is used so that each student may check his progress.



Conference III. The aspects covered in the last conference are reiterated and each student is given a "Letter Writer's Manual". This begins the letter writing given in conjunction with speaking.

Conference IV. Conference IV primarily deals with the audience point of view. The assigned talk is to concern itself with some cutstanding personality one has known. The conference emphasizes the point that one must be a good listener as well as a good speaker. The following points relative to speaking are stressed:

- 1. Learn to be a good listener.
- 2. Whenever you speak, always take into consideration the other person's viewpoint.
- 3. Remember to translate the facts of your "for instances" into terms that will carry personal significance to your listeners, never presenting them arbitrarily. "Creative Listening Makes Effective Speaking".

To be a good listener one is told to keep the following in mind:

- Fay strict attention.
- 2. Remember we all have language deficiencies.
- 3. Don't interrupt.
- 4. Summarize in your own words what has been said.
- 5. Be interested look for new ideas.
- 6. Be unbiased. Try to listen without personal prejudice.

Conference V. A three-minute talk is presented and criticized. The term atmosphere is introduced and defined as "That collective group of qualities which creates receptiveness, relieves tension or hostility, and removes doubt or prejudice in the mind of the listener." It may be broken down into three subdivisions: (a) personality, (b) the human quality, (c) audience contact. Personality is defined as the extent to which the individual has learned to convert his energies into habits or actions which successfully influence other people. Personality is said to convey the ideas of the individual. Audience contact necessitates the use

of audible and visible aspects of speech. Appearance, stance, poise, gestures, and facial expressions are all part of the visible in speech. Audiole aspects include the voice which in turn needs the properties of clear enunciation, tone modulation, change and variance of pitch, and emphasis and inflection. Sweak up is the rule given. Diction should be clear and sharp. Language, which is effective, presupposes the use of "descriptive, colorful words that have life and stamina." Intentional pauses as a factor in voice control can be very effective, but one is warned against using ah's and er's to fill in gaps. Use of these only make the audience feel nervous because the speaker feels uncertain. human quality is explained by emphasizing the importance of common bond. A good motto might be do unto others as you would have them do unto you. One is told that practice in this can remove "doubts, prejudices, nervousness, and disline between himself and his listeners". Friendliness is stressed as an important aspect of the human quality and some suggestions for cultivating friendliness are given: (1) develop a cheerful lilt to your voice, (2) wear a friendly smile, (3) "learn to like people...then let them know you do", (4) be courteous—think of other people in your correspondence whether it be written or oral; use tack. It is emphasized that a friendly attitude alone is not enough, for interest must still be fostered in the audience. Unless one gives the audience what it wants or creates a desire for wanting what is given, the audience may be apathetic. Slides, pictures, displays and other visual stimuli are considered as valuable interest creators. One is told above all to choose a subject on which he knows the most. One's convictions can dispel a great deal of nervousness.

Attention is next considered. One is told "You have all seen a successful speaker rise and in that moment before he begins to talk, collect with his eyes the attention of his audience. Then you talk to your audience look at them, smile with them. No presentation is effective without audience contact". It is explained that gestures which are graceful, slow, large, and clear are very helpful.

Conference VI. Conference VI takes up the voice more thoroughly. Since one's voice describes one, it is important to speak well. Three rules are given: (1) enunciate clearly, (2) speak forcefully, by using volume, emphasis, and intentional pauses, (3) cultivate variety by effective use of timing, emphasis, variation in volume, and variation in pitch and inflection. Development of good voice takes training. One is told to first relax the vocal mechanism so that full utilization can be gotten without strain or tenseness. The rag doll technique is given as a good method of relaxation. The importance of the oral cavity (tongue, teeth, lips, et cetera) are stressed but the technical formation of sounds is not considered. At the end of conference VI exercises are given for breathing and resonance.

A three-minute descriptive or explanatory talk is assigned. It is to be written out and outlined. Emphasis is placed on the idea that "any word that does not help to give the desired impression, hinders". Building a vocabulary is discussed and three rules are given for doing so: (1) be alert for new words, (2) reach for your dictionary often, and (3) discover the origin of the words you use. Words should further be selected according to denotation and connotation. Denotation is described as the idea

directly contained. Four tests for words used denotatively are: (1) is it a correct word, (2) is it correctly used, (3) is it exactly used, and (4) will it be understood. Connotation is described as the idea that is indirectly implied. Three tests for words used connotatively are given: (1) is it euphoneous, (2) has it the appropriate caste—social standing, and (3) does it contribute a suitable atmosphere.

Sentence structure and paragraphing are considered in the latter part of conference VII. Use of short sentences is emphasized and three rules are given in respect to them: (1) the more words in a sentence the harder it is to understand, (2) the more parts to a word the harder it is to understand that word, (3) the more personal references in a paragraph the easier it is to understand. It is recommended that one shorten sentences to 17 words, shorten words to 150 syllables per one hundred words, and use six personal references per one hundred words. Fragmentary sentences are to be avoided. Sentence unity should be evidenced in the fact that each sentence is a step forward in one's thought and the words in these sentences should be put in the order of greatest effect, using all the available connections. The paragraph should develop a complete thought or ideal. Faragraphing is important in both writing and speaking. It is more difficult to convey in the speaking situation, but it must be done by use of pauses, changes in pitch, or changes of volume.

Conference VIII. Conference VIII is entitled "A Straight line".

A three-minute talk demonstrating clarity and forcefulness is to be prepared on the subject of one's choice. Four suggestions are given: (1) speak clearly, (2) develop your ideas in logical sequence, (3) develop strong positive convictions, and (4) express your convictions in a clear concise style.

Conference IX. "The Secret of Interest and An Open Lind". A three-minute talk on a controversial subject is to be prepared. The instructor asks the student to take the side of the question contrary to his beliefs. It is explained that the secret of interest lies in expressing one's ideas in vivid word pictures, in developing one's imagination, and in arousing one's listeners imagination. Emphasis is put on writing and speaking with variety and specificity. One is told that an open mind is hard to maintain because everyone resents condecension. Six rules of an open mind are given: (1) be courteous, (2) suggest, rather than command, (3) request, rather than order, (4) insist, rather than threaten, (5) be sincere, and (6) cultivate the "you attitude (the other persons viewpoint)".

Conference X. "Unaccustomed As I Am". The assignment is an extemporaneous speech. It is explained that prepared talks take a great deal of careful selection of words and frequent revision. Extemporaneous talks require some preparation, but this preparation many times comes from personal experience. A warning is given that the beginner should not resort to extempore speaking unless there is no time to prepare an outline. A few rules are given which aid in presenting an extemporaneous talk:

(1) use short, coherent sentences, (2) be informal and conversational,

(3) be brief and be sure the introduction is strong.

Conference XI. "A Ficture is Worth 10,000 Words". As the title implies, this conference is concerned with charts and other types of visual aids. A ten-minute talk is assigned in which the person is to discuss some semi-technical subject with the use of visual aids. An outline and completely written talk are handed in. The main idea expressed here, other

than technique of use, is that "The visual aid should complement the spoken, not detract from it". Visual aids can be used for greater clarity and increased audience retention, but they should be used smoothly and effectively.

Conference XII. Conference XII deals with written work. Conference XIII. If You Read It", "Reports" and "That Monster, The Microphone". A four-minute (500 word) talk on a subject of one's choice is assigned. It is explained that people usually detest read speeches. They can be made effective, however, if one's eyes are not glued to a page. A well marked manuscript can aid in this by making phrasing and emphasis easier to pick out. One is given ten rules to follow: (1) always double space the manuscript, (2) never fasten it together, (3) be sure the type is dark and clear, (2) underline pauses, (5) mark important words, (6) delete awkward phrases and sentences, (7) write out phonetic pronunciation of difficult words, (8) put in crescendo and dimuendo marks, (9) write ideas for ad-libs on the margin, and (1) practice aloud. The student is told to prepare these reports well through field, work, library research, or interviews. They must be kept concise and to the point, is the final word given. The difficulty of using a microphone is discussed in conference XIII. One is told that your voice is you over a microphone with no audience present. One must remain ap roximately 18 inches from the microphone and speak conversationally, but with more richness and emphasis to the words. Five rules are given in summary: (1) be well prepared, (2) your voice is you, (3) speak into the microphone, (4) be natural and conversational, and (5) if you have an audience, look at them.

Conference XIV. "The Dynamics of Persuasion". A speech is assigned in which one is to persuade someone to do or buy something. Persuasion is defined as "a universal method of transmitting a desire for action from yourself to another person". It is explained that one can persuade a person to take action he wants to take already, or to take action on something when the advantages are made clear. It is further explained that persuasion is then an emotional problem. If one can arouse the proper emotional responses in others, his case is won. It must be remembered, however, that everyone resists persuasion to a degree. A desire stronger than the resistance must be aroused. One is told to select several approaches, balance them against one another, and select the best. What is wanted is voluntary action, not forced action. If a succession of yeses can be obtained gradually building up to the desired response, that response can often be gained.

Conference XV. "Success Guaranteed" and "Mechanized Selling".

A three-minute talk is assigned. This conference covers the uses of persuasion in selling. The emphasis is placed on considering each prospect as an individual, not another mechanical sale. Four steps are emphasized: (1) interest, (2) desire, (3) conviction, (4) action.

Mechanized selling is also used to refer to advertising.

Conference XVI. This is a summary conference.

Conference XVII. This is the graduation conference.

CHAPTER III

DEFLICATIONS, CONCLUSIONS AND FIELDS OF FURTHER STUDY

The purpose of this chapter was to enumerate the conclusions and implications which could be drawn from the material presented in Chapter II, and the fields of study which were evinced.

Implications and Conclusions

Technologically, industry has advanced since the industrial revolution. Large industry has become a fixed stereotyped concept in the American way of life. Large industry, however, brought with it large problems. Human beings were striving to satisfy needs and desires as rapidly as industry was trying to satisfy the need for newer and better machines. Various methods were tried in an attempt to find a solution to these problems. Some were unsuccessful such as the "Yellow Dog Contract", which allowed managers to fire workers who joined unions. Some conferences of workers and management seemed to be equally unsuccessful. failure of these methods and the failure of management and labor to communicate with one another is still evident in the prevalent strikes and walkouts occurring today. The reason for the failure of labor and management to cope with these problems seemed to lie in the realm of communica-They were not experienced in using speech techniques in solving the problems of human relationships. In the last decade the industries sampled in this study have to a great degree, realized this failure and have been seeking a remedy. Industry has found this need to be one

peculiar to each industry and to each individual. Recognition of the importance of speech training is emphasized by S. C. Allyn, Fresident of the National Cash Register Company.

Ability to speak no longer is a professional art to be mastered only by lawyers, preachers, teachers, and entertainers. The man preparing for leadership in business needs the ability, too, because leadership expresses itself primarily through speech.

Research in this area, with the purpose of finding out what is included in the programs fostered by industry, has been incomplete. This study had as its purpose a survey of midwestern and eastern industries to find out which industries had programs and what was taught in these programs.

To determine the feasibility of the study, a preliminary random selection was made and 100 percent response was realized. The major study was based on the response to this preliminary survey. Personal letters were sent to 110 corporations in all and a response of 89 percent was realized. Thirty percent of the responding corporations had speech programs. From this procedure and the results, three valid conclusions could be drawn. First, the 30 percent indicated as having programs was an unbiased estimate of the corporations fostering such programs. Second, when the figures were applied to a 95 percent level of confidence table, it was evident that 22 to 41 percent of the corporations in the population should have speech programs if sampled at random, while 24 to 43 percent would be expected not to have programs. Third, the personal letters sent to the representatives of industry would seem to be an effective means of realizing maximum response in a study of this type, since 98 letters were

¹⁹ S. C. Allyn, "Speech And Leadership In Pusiness," The Quarterly Journal of Speech, 36-40, February, 1948.

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responded to out of a possible 110.

In the following paragraphs, the philosophy, structure, content, instructor, and evaluation of the courses was taken up in an attempt to formulate a picture of exactly what these courses entail.

The industries fostering programs of speech training seemed to have a more or less consistent philosophy in regard to such training. The major emphasis in these courses was put on developing individual capacities for expression through practice in the proper techniques. When industry spends dollars and cents to train people, it expects a dollar and cents return on its investment in the form of more capable and alert individuals. Industry wants people who can explain things to others, people who can discuss intelligently and effectively proposed changes, present problems, or company regulations. Since industry wants this type of individual it feels it is its duty to provide the training. This philosophy extends even further into the realm of developing individuals by creating an atmosphere of informality in which the training takes place.

Structurally, the courses were concentrated. The major courses were divided into sessions with each session being a unit complete in itself. These sessions lasted from one to three hours, depending on the material to be covered. Within the session procedure, careful attention was given to the aspects of practice and criticism. The compact session units were put in one of three forms, (1) mimeographed sheets, (2) printed manuals, or (3) in small booklets. The courses offered were frequently given in connection with a complete training program encompassing other material, such as Esso Standard Oil's program in Sales Management, or as separate courses, such as Standard Brand's course in "Effective Speech". At other

times several courses designed to take care of specific problems were given. Such a plan is the Ford Motor Company's in which one course was given to apprentices, one to supervisors, and one to sales personnel. As structurally designed at the time of this study the majority of the courses were given to make supervisors and salaried executives, with the belief that they would be expanded to include all interested parties in the corporations. Female participation in speech training programs was mentioned only once, in the Forstmann Woolen Company.

The courses, as explained in the last paragraph, were highly concentrated, but yet they attempted to give a well rounded, practical view of the aspects of speaking. The major points emphasized in the programs seemed to be those of preparation, delivery, and subject matter. The texts for the programs presented these factors in simple straightforward language which was interwoven with unique cartoons, in some cases, to emphasize points. These courses have been developed by people working, within the corporate structure, by outside agencies (Dale Carmegie, Inc.), or through utilization of material developed by others such as James F. Bender or Harold P. Zelko. Within the corporate programs, practical aspects of speech were stressed. In seven programs, voice development was stressed; among these were Ford, Owens-Corning Fiberglas, and Goodyear. Seven programs, while not mentioning voice per se, used recordings of the voice extensively; one of the most important was the General Motors Dale Carnegie Course. To nine, the teaching of voice development was incidental to the teaching of straightforward communicating devices. The Atlantic Refining program would fall in this category. Conference methods were taught in many instances along with the major aspects of public speaking.

Johnson and Johnson and Esso Standard Oil placed the major emphasis on this, while others such as the Great Lakes Steel Corporation and Goodyear seemed to give it little attention. The use and value of visual aids as communicating devices was treated in almost all of the major training programs. with the belief that pictures are worth many words. The use of these aids was practiced along with the regular speaking assignments. The types of speaking pertaining to various occasions such as the speech to inform, to entertain, to persuade, to activate, and to impress were discussed in the majority of the programs. Also, in a great majority of the programs, it was stressed that a speech must be concise. The methods for obtaining this conciseness were sticking to a maximum of three main points. and the use of the familiar divisions -- introduction. body and conclusion. It was evident from the material presented that although these courses were concentrated in time, they were extensive in the coverage of material. Moreover, the amount of material covered was not necessarily in relation to the size of the corporation. In general the larger corporations covered approximately the same material as the smaller, but spread it over a longer period.

Not much information about the background of the instructor was available. He seemed to come predominantly from within the corporation, but in some cases, he was drawn from college faculties. However, the content and structure of the courses seemed to indicate that these instructors were steeped in human relations and practical experience. They were dynamic, observant, and patient. In some respects the instructor in these courses had a job which was perhaps somewhat different from that of the college professor. He had to be able to present the concentrated program in an

appealing way.

Concrete evaluation of the programs effectiveness was not explained by the training directors. Some of the comments of these directors seemed to indicate, however, that the courses were evaluated primarily by the success or popularity they enjoyed. Another evaluation could have been the final tests given in some instances, depending on the type of test.

Fields of Further Study

This study was one step in what it is hoped will be a long line of such studies in adult and industrial speech training. As Frofessor Zelko and others have emphasized, there is great need for such investigation. Some of the fields for further investigation became evident as this study progressed. Studies could be made of southern and western industries to determine the extent of speech training in these areas. The corporations with less than 2,000 employees could be sampled. Industries in other categories such as banking, dairying, agriculture and retailing could be studied. A comparison of aspects taught in the industrial situation with those taught in the college or university could provide much information. The history and development of speech training in a selected number of corporations could reveal the circumstances which first brought about the recognition of a need for speech training. The visual aids used in the speech progrems could be an interesting field for someone desiring information on this phase of industrial training.



BIBLIOGRAPHY

A. BOOKS

- Aldelfer, E. B., and Michl, H. E., Economics of American Industry.

 New York: McGraw-Hill Book Company, Inc., 1942. 566 pp.
- Bellows, Roger M., Fsychology of Fersonnel In Business and Industry.

 New York: Frentice-Hall, Inc., 1949. 361 pp.
- Bender, James F., The Technique of Executive Leadership. New York: McGraw-Hill Book Company, Inc., 1950. 291 pp.
- Homans, George C., "The Western Electric Researches," in Human Factors
 In Management, By Schuyler Dean Hoslett, New York: Harper and
 brothers, 1946. 322 pp.
- H. C. Metcalf and L. Urwick, Dynamic Administration, The Collected Fapers of Mary Parker Follett, New York: Harper and Brothers, 1940. 320 pp.
- Snedecor, George W., Statistical Methods Applied to Experiments in Agriculture and Biology. Ames, Iowa: Collegiate Press, Inc., 1946. 485 pp.

B. FERIODICAL ARTICLES

- Allyn, S. C., "Speech and Leadership in Business," The Quarterly Journal of Speech, XXXIV, (February, 1948), 36-40.
- Estes, Charles T., "Speech and Human Relations in Industry," The Quarterly Journal of Speech, XXXII, (April, 1946), 160-169.
- "Is Anybody Listening," Fortune Magazine, XLII, (September, 1950), 77, 78, 79, 81, 82, 83, 167, 168, 170, 172, 174, 176, 178.
- "Language of Business," Fortune Magazine, XLII, (November, 1950), 113, 114, 115, 116, 117, 134, 136, 138, 140.
- "Life Goes to a Toastmaster's Club," Life, XXII, (January 6, 1947), 86-92.
- Zelko, Harold P., "Adult Speech Training: Challenge to The Speech Profession," Quarterly Journal of Speech, XXXVII, (February 1951), 55-62.

C. PAMPHLETS

Report of the Convention of Dale Carnegie Clubs International. June 24, 1950. New York, New York: Institute of Effective Speaking and Human Relations, 1950. 3 pp.

D. UNPUBLISHED MATERIALS

- Dean, Margaret Z., "Qualifications of Industrial Conference Leaders."
 Unpublished Master's dissertation, Wayne University, Detroit, Michigan 1948. 81 pp.
- Hanifan, Catherine E., "Speech Training in Retail Department Stores."
 Unpublished study. Northwestern University, Evanston, Illinois,
 1949. 75 pp.
- Jacobs, J. H., "A Study in Communications in the Baur's Stores in Denver, Colorado." Unpublished Master's dissertation, The University of Denver, 1944-45. 132 pp.
- Mollander, A. E., "A Survey of Speaking Situations in Business Enterprises of Denver." Unpublished Master's dissertation, The University of Denver, Colorado, 1944. 50 pp.
- Furcell, Dale, "A Survey of Business Speech Needs." Unpublished Master's Dissertation, The University of Redlands, California, 1949. 62 pp.
- Raines, Sam, "An Analysis of Speech Training For Adults in Business and Industry in Kansas City, Missouri." Unpublished Master's dissertation, The University of Kansas, Missouri, 1949. 80 pp.
- Wattles, Jervis J., "The Use of Oral Techniques in Industrial Supervisory Training and Communication Programs of Four Detroit Companies."
 Unpublished Master's dissertation, Wayne University, Detroit, Michigan 1948. 71 pp.



APPENDIX

Metal Industries	Number of Employees
Acme Steel Co., 2840 Archer Avenue, Chicago 8, Illinois	4,000
Alan Wood Steel Corporation, Conshohocken, Pennsylvania	3,200
**Allegheny Ludlum Steel Corp., Henry Oliver Bldg., Fittsburgh, Pa.	12,500
Aluminum Co. of America, 801 Gulf Bldg., Fittsburg 19, Fennsylvan	
The American Brass Co., 414 Meadow St., Waterburg, Connecticut	20,000
Smelting and Refining Co., 120 Broadway, New York 32, New York	32,908
**Anaconda Copper Mining Co., 25 Broadway, New York 4, New York	45,079
Andes Copper Mining Co., 25 Broadway, New York, New York	4,000
Bethlehem Steel Corp., 100 W. Tenth St., Wilmington, Delaware	132,000
Bridgeport Brass Co., 30 Grand Street, Bridgeport, Connecticut	5,000
Calumet and Hecla Consolidated Copper Co., Calumet, Michigan	2,500
Calumet and Hecla Consolidated Copper Co., Boston, Massachusetts	2 , 450
**Campbell, Wyant and Cannon Foundry Co., Muskegan, Michigan	3,200
Ceco Steel Products Corp., 5601 26th St., Chicago, Illinois	2 , 400
Cleveland-Cliffs Iron Co., 1460 Union Commerce Bldg. Cleveland	6,000
Cleveland Graphite Bronze Co., 17000 St. Clair Ave., Cleveland	2 , 974
Continental Copper and Steel Industries, Inc., 345 Madison Ave.,	29714
New York, New York	2,000
Continental Steel Corp., 1109 S. Main St., Kokomo, Indiana	2 , 482
Copperweld Steel Co., Glassport, Pennsylvania	3,000
**Crucible Steel Co. of America, 405 Lexington Ave., New York	14,211
Dayton Malleable Iron Co., 1307 W. 3rd St., Dayton, Ohio	3,000
Detroit Steel Corp., 1025 S. Oakwood Avenue, Detroit 9, Nichigan	3, 950
Granite City Steel Co., 20th St. and Madison Ave., Granite City,	J\$ / J =
Illinois	2,900
**Great Lakes Steel Corp., Tecumseh Road, Ecorse, Detroit, Mich.	13,000
Ingersoll Steel Division, Borg-Warner Corp., 319 S. Michigan Ave.	•
Chicago, Illinois	2 ,7 59
Inland Steel Co., 38 S. Dearborn St., Chicago 3, Illinois	17,000
**Interlake Iron Corp., 1900 Union Commerce Bldg., Cleveland, Ohio	2,063
International Silver Co., 48 State St., Meriden, Conn.	6,000
**Jones and Laughlin Steel Corp., 3rd Ave. and Ross St., Pittsburg	41,516
Kennecott Copper Corp., 120 Broadway, New York 5, N. Y.	23,100
Keystone Steel and Wire Co., 7000 St. Adams Street, Peoria, Ill.	2,150
Lukens Steel Co., S. lst Ave., Coatesville, Pennsylvania	4,500
Midland Steel Products Co., Madison Ave., Cleveland, Ohio	5,000
Mueller Brass Co., 1925 Lapeer Ave., Port Huron, Michigan	2,9 80
National Lead Co., 111 Broadway, New York 6, N. Y.	13,000
New Jersey Zinc Co., 160 Front St., New York 7, N. Y.	6,348
Patino Mines & Enterprises, Consolidated, Inc., New York, N. Y.	7,600
Phelps Dodge Corp., 40 Wall St., New York 5, N. Y.	12,080
*Pittsburg Steel Co., 1600 Grant Bldg., Pittsburg 19, Pennsylvania	9,800
Republic Steel Corporation, Republic Bldg., Cleveland, Ohio	65,000
Revere Copper & Brass, Inc., 230 Park Ave., New York 17, N. Y.	8,854
** U. S. Steel Corp., 71 Broadway, New York 6, N. Y.	291,163

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Metal Fabricating Industries

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3,000
  ATF, Inc., 200 Elmora Avenue, Elizabeth 3, New Jersey
  Addressograph-Multigraph Corp., 1200 Babbitt Rd., Cleveland 17, Ohio
                                                                          2,400
**Allis-Chalmers Mfg. Co., 1126 S. 70th St., Milwaukee 1, Wis.
                                                                          32,545
₩Aluminum Goods Mfg. Co., Manitowoc, Wisconsin
                                                                           2,900
  American Blower Corp., Box 58, Roosevelt Park Annex, Detroit, Mich.
                                                                           2,200
**American Brake Shoe Company, 230 Park Avenue, New York 17, N. Y.
                                                                           9,000
  American Can Co., 230 Park Avenue, New York 17, N. Y.
                                                                          31,184
  American Car and Foundry Co., 30 Church St., New York 8, N. Y.
                                                                          10,800
  American Chain & Cable Co., Inc., 929 Connecticut St., Bridgeport,
                                                                           8,000
    Connecticut
  American Hardware Corp., 10 Granklin Square, New Britain, Conn.
                                                                          4,200
  Locomotive Co., 30 Church St., New York 8, N. Y. (American)
                                                                         10,345
  American Machine & Foundry Co., 511 Fifth Ave., New York 17, N. Y.
                                                                           2,030
  American Metal Products Co., L.T.D., 61 Broadway, New York 6, N. Y.
                                                                           3,000
  American Radiator & Standard Sanitary Corp., 40 W. 40th St., N. Y.
                                                                          22,000
  American Sealing Co., 901 Broadway, Grand Rapids, Michigan
                                                                           2,000
  Baldwain Locomotive Works, Paschall, P. O. Philadelphia, Pa.
                                                                         11,765
**Bell Aircraft Corp., P.O. Box 1, Buffalo 5, New York
                                                                           3,064
**Bendix Aviation Corp., 1104 Fisher Bldg., Detroit 2, Michigan
                                                                          21,900
                                                                           2,300
  Black & Decker Mgf. Co., E. Pennsylvania Ave., Towson 4, Maryland
                                                                          6,500
  Blaw-Knox Co., 2028 Farmers Bank Bldg., Pittsburgh 22, Pa.
                                                                         18,և85
  Borg-Warner Corp., 310 S. Michigan Avenue, Chicago 4, Illinois
                                                                           2,672
  Bowser, Inc., 1302 Creighton Ave., Fort Wayne 2, Indiana
  Briggs Mfg. Co., 3675 E. Outer Drive, Detroit 34, Michigan
                                                                         37,000
                                                                           2,450
  Briggs & Stratton Corp., 2711 N. 13th St., Milwaukee 1, Wis.
  Brown & Sharpe Mfg. Co., 236 Promenade St., Providence, R. I.
                                                                           3,500
  Bucyrus Erie Co., South Milwaukee, Wisconsin
                                                                          000 و 5
  Budd Co., 2450 Hunting Park Ave., Philadelphia 32, Pa.
                                                                         20,000
                                                                          2,000
**Bulova Watch Co., Inc., 630 Fifth Avenue, New York 20, N. Y.
                                                                         12,000
  Burroughs Adding Machine Co., 6071 2nd Ave., Detroit 32, Mich.
  A. M. Byers Co., 717 Liberty Avenue, Pittsburgh 30, Pa.
                                                                           2,600
  Carrier Corp., 30 S. Geddes St., Syracuse 1, New York
                                                                          5,000
  J. I. Case Co., 700 State Street, Racine, Wisconsin
                                                                         11,900
                                                                         24,500
**Caterpillar Tractor Co., Feoria 8, Illinois
                                                                          2,250
  Chamberlin Co. of America, 1254 Labrosse St., Detroit 26, Mich.
**Champion Spark Plug Co., 900 Upton Ave., Toledo 1, Chio Chapman Valve Mfg. Co., 203 Hampshire St., Indian Orchard, Mass.
                                                                           3, 294
                                                                          2,500
  Chicago Pneumatic Tool Co., 6 E. Fourth St., Chicago 3, Illinois
                                                                          4,400
                                                                           2,000
  Chicago Screw Co., 2701 Washington Blvd., Bellwood, Ill.
                                                                         90,000
 Chrysler Corporation, Detroit, Michigan.
  Cincinnati Milling Machine Co., 4701 Marburg, Ave., Oakley, Cin-
                                                                           3,400
    cinnati, Chio
                                                                          8,500
  City Products Corp., 33 S. Clark Street, Chicago 3, Illinois
                                                                          4,400
  Clark Equipment Co., Buchanan, Michigan
                                                                           2,000
  Coleman Co., Inc., 250 N. Street, Wichita, Kansas
  Combustion Engineering-Super Heater, Inc., 200 Madison Ave., N. Y.
                                                                          8,000
                                                                         25,000
**Continental Can Co., 100 E. 42nd St., New York 17, N. Y.
  Continental Foundry & Machine Co., 144th St. & R.R. Ave.,
                                                                         22,750
    East Chicago, Illinois
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Continental Motors Corp., 205 Market St., Muskegan, Michigan
                                                                       6,000
  Cooper-Bessemer Corp., N. Sadersky St., Mount Vermon, Ohio
                                                                       3,700
  Crane Company, 836 S. Michigan Avenue, Chicago 5, Illinois
                                                                      19,000
  Crown Cork and Seal Co., Inc., 4425 Eastern Avenue, Baltimore
                                                                       7,850
  Curtiss Wright Corp., 30 Rockefeller Plaza, New York 20, N. Y.
                                                                      12,553
  Deere & Co., 1325 Third Avenue, Moline, Illinois
                                                                      22,358
  DeLeval Separator Co., 165 Broadway, New York 6, New York
                                                                       2,450
  DeLeval Steam Turbine Co., 16 Broadway, New York 6, New York
                                                                       2,000
                                                                       2,700
  Detroit Harvester Co., Guardian Bldg., Detroit 26, Michigan
  Henry Disston & Sons, Inc., Tacony, Philadelphia 35, Pa.
                                                                       3,300
  Doehler-Jarvis Corp., 386 Fourth Ave., New York 16, New York
                                                                       8,202
                                                                       5,234
**Draper Corp., 25 Hopedal St., Hope, Massachusetts
                                                                       4,236
  Dravo Corp., Fifth & Liberty Aves., Pittsburgh 22, Pennsylvania
  Ergle-Picher Co., American Bldg., Cincinnati 1, Ohio
  Easy Washing Machine Corp., Solar and Spencer Sts., Syracuse 1, N.Y.2,000
  Eaton Mfg. Co., 739 E. 140th St., Cleveland 10, Ohio
                                                                       8,059
  Ekco Products Co., 1949 N. Cicero Avenue, Chicago 39, Illinois
                                                                       3,654
  Elgin National Watch Co., 107 National St., Elgin, Illinois
                                                                       3,900
                                                                       3,800
  Ex-Cell-O Corp., 1200 Oakmen Blvd., Detroit 32, Michigen
  Fabria Bearing Co., Booth Street, New Britain, Connecticut
                                                                       3,600
  Fairchild Engine & Airplane Corp., 30 Rockefeller Plaza, N. Y.
                                                                       5,300
  Falk Corp., 3001 W. Canal St., Milwaukee 8, Wisconsin
                                                                       2,052
                                                                       2,250
  Fedders-Quigen Corp., 5801 Grand Ave., Maspeth, L.I. New York 2,
  Federal Mogul Corp., 11031 Shoemaker Ave., Detroit 13, Michigan
                                                                       2,400
 *Ferro Machine & Foundry, Inc., 3155 66th St., Cleveland 27, Ohio
                                                                       2,700
  Florence Stove Co., 205 School St., Gardner, Massachusetts
                                                                       2,600
**Ford Motor Co., 3000 Scheefer Rd., Dearborn, Michigan
                                                                     136,000
  Foster Wheeler Corp., 165 Broadway, New York 6, New York
                                                                       8,700
  Gar Wood Industries, Inc., Main St., Wayne, Michigan
                                                                       2,500
                                                                       2,900
  Gardner-Seenver Co., S. Front St., Quincy, Illinois
  General American Transportation Corp., 135 S. LaSalle, Chicago
                                                                       7,500
  General Cable Corp., 420 Lexington Ave., New York 17, New York
                                                                       4,500
  General Devices & Fittings Mfg. Co., 1450 Buchanan Ave.,
    Grand Rapids, Michigan
                                                                       2,864
  General Instrument Corp., 829 Mewark Ave., Elizabeth 8, New Jersey
                                                                       3,000
**General Motors Corp., General Motors Bldg., Detroit 2, Michigan
                                                                     400,002
  General Precision Equipment Corp., 92 Gold St., New York 7, New Y.
                                                                       2,100
 *General Steel Castings Corporation, 1417 State St., Granite City,
                                                                       3,000
    Illinois
                                                                       5,852
  General Time Corp., 109 Lafayette St., New York 13, New York
  Gibson Refrigerator Co., 515 W. William St., Greenville, Mich.
                                                                       4,000
  Gillete Safety Razor Co., 15 W. 1st St., Boston, Mass.
                                                                       3,019
  Goodyear Aircraft Corp., 1210 Massillon Road, Akron 15, Ohio
                                                                       4,500
  Gruman Aircraft Engineering Corp., Sheridan Ave., Beethpage, N.Y.
                                                                       6,200
  W. F. Hall Printing Co., 4600 Diversey Ave., Chicago 39, Illinois
                                                                       5,500
**Hemilton Standard Division United Aircraft, S. Main St., Hartford,
                                                                       2,000
    Connecticut
  Hamilton Watch Co., Columbia Ave., Lancaster, Pa.
                                                                       2,500
                                                                       7,200
  M. A. Hanna Co., 1300 Leader Bldg., Cleveland 14, Ohio
                                                                       2,800
  Heil Co., 3000 W. Montana St., Milwaukee 1, Wisconsin
**Heintz Mfg. Co., Front St., & Olney Ave., Philadel_hia 12, Pa.
                                                                       2,000
  Hercules Motors Corp., 101 11th St., S.E., Canton, Ohio
                                                                       2,500
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Wheel Mor Co. Demonstranto francis Marco Chic	2 000
Hobert Mfg. Co., Pennsylvania Avenue, Troy, Ohio	2,000
Holland Furnace Co., 491 Columbia Avenue, Holland, Michigan	7,500
**Hoover Co., 101 E. Maple St., North Canton, Ohio	2,530
Houdeille-Hershey Corp., 1500 Fisher Bldg., Detroit, Michigan	6,000
Hudson Motor Car Co., 12601 E. Jefferson Ave., Detroit 14, Mich.	23,200
**Ingersoll Rand Co., 11 Broadway, New York 4, New York	9,000
E. Ingreham Co., 392 N. Main St., Bristol, Mass.	2,400
International Business Machines Corp., 590 Madison Ave., N.Y.	28,604
**International Harvester Co., 18 N. Michigan Avenue, Chicago	95,000
**F. L. Jacobs Co., 1043 Spruce St., Detroit 1, Michigan	3,500
Jeffrey Mfg. Co., First Ave. & Fourth St., Columbus 16, Ohio	3,000
Joy Mfg. Co., 333 Oliver Bldg., Pittsburgh 22, Pa.	4,500
	13,490
Kaiser, Frazer Corp., Willow Run, Michigan	
Kelsey-Heyes Wheel Co., 3600 Military Ave., Detroit 32, Mich.	5,500
King-Seeley Corp., 315 S. First St., Ann Arbor, Michigan	2,700
Kroehler Mfg. Co., 222 Fifth Ave., Naperville, Illinois	4,700
Lamson & Sessions Co., 1971 W. 85th St., Cleveland 2, Ohio	2,207
**The Lennox Furnace Co., 200 S. 12th Ave., Marshalltown, Iowa	2,225
R. G. LeTourneau, Inc., 2301 N. Adams St., Peoria, Illinois	2,200
Link Belt Co., 307 N. Michigan Ave., Chicago 1, Illinois	9,000
Lionel Corp., 15 E. 25th St., New York 10, New York	2,000
Mack Trucks, Inc., Empire State Bldg., New York 1, N. Y.	8,597
Manning, Marwell & Moore, Inc., 405 Lexington Ave., New York 17,	2,528
Marine Midland Corp., 15 Exchange Pl., Jersey City 2, New Jersey	2,750
Glenn L. Martin Co., Baltimore 3, Maryland	8,500
Maytag Co., 512 N. Fourth Ave., W. Newton, Iowa	2,750
McCord Corporation, 2537 E. Grand Blvd. Detroit 11, Michigan	2,400
McInerney Spring & Wire Co., 655 Godfrey Ave., S.W. Grand Rapids	2,500
**Mergentheler Linotype Co., 29 Ryerson St., Brooklyn, New York	2,489
Midwest Piping & Supply Co., Inc., 1450 S. Second St., St. Louis	2,120
*Mills Industries, Inc., 4100 Fullerton Ive., Chicago 39, Illinois	2,750
Minneapolis-Honewell Regulator Co., 2745 Fourth Live., Minneapolis	14,000
Monroe Calculating Machine Co., 555 Mitchell St., Orange, N. J.	3,580
	5,200
Motor Products Corp., 11801 Mack Avenue, Detroit 14, Michigan	
Motor Wheel Corp., 735 E. Sasinaw St., Lansing 3, Michigan	4,290
Mullins Mfg. Corp., S. Ellsworth Ave., Salem, Ohio	3,900
Nash Kelvinstor Corp., 14250 Plymouth Rd., Detroit 32, Mich.	26,733
National Can Corp., 100 E. 42nd St., New York 17, N. Y.	2,000
The National Cash Register Co., Main & K. Streets, Dayton, Ohio	30,000
*National Container Corp., 3001 Review Ave., L. I. City, 1, N. Y.	3,000
National Lock Co., 1902 7th St., Rockford, Illinois	4,000
National Malleable & Steel Castings Co., 10600 Quincy Ave.,	
Cleveland 6, Ohio	5,100
*National Radiator Co., 221 Central Ave., Johnstown, Pa.	2,131
**Mational Screw & Mfg. Co., 2440 E. 75th St., Cleveland 4, Chio	2,339
Notional Supply Co., Grant Bldg., Pittsburgh 30, Pa.	7,600
New Britsin Machine Co., South St., New Britsin, Conn.	2,400
**New York Shipbuilding Corp., Camden, New Jersey	4,000
**Nicholson File Co., 23 Acorn St., Providence, Rhode Island	2,000
Nile-Bement-Pont Co., Charter Oak Elvd., West Hartford, Conn.	3,000
NITE-Dement-ront co., oner ber oak bivd., west in thord, com.	J,000

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2,500
  Niles Tool Vorks, 545 N. Third St., Hamilton, Ohio
**Nordberg Mfg. Co., 3073 S. Chase Ave., Milwakee 7, Wisconsin
                                                                       2,500
**Norge Division, Borg-Warner Corp., Merchandize Mart Place, Chicago
                                                                       4,536
  Northwestern Steel & Wire Co., 1012 Nat'l Bldg., E. 6th St.,
                                                                       2,000
    Cleveland, Ohio
                                                                       8,500
  Cliver Corporation, 400 W. Madison St., Chicago, Illinois
  O'Neida L.T.D., Kenwood Station, Oneida, New York
                                                                       4,450
  Ctis Elevator Co., 260 4th Ave., New York 1, N. Y.
                                                                       8,704
  Outboard, Marine & Mig. Co., 200 Pershing Road, Waukegan, Ill.
                                                                       3,000
  Parker Pen Co., Court & Division Sts., Janesville, Visconsin
                                                                       2,390
  Perfection Stove Co., 7609 Platt Ave., Cleveland 4, Chio
                                                                       2,150
  Pitney-Bowes, Inc., Walnut & Pacific Sts., Stanford, Conn.
                                                                       2,309
  Pittsburgh Screw & Bolt Corp., 2719 Preble Ave., Pittsburgh, Pa.
                                                                       2,308
  Remington Arms Co., Inc., 939 Barnum Ave., Bridgeport, Conn.
                                                                       4,000
  Remmington Rand, Inc., 315 4th Ave., New York 10, New York
                                                                      29,909
                                                                       2,700
  Reo Motors, Inc., 1331 Washington Ave., Lancing 20, Michigan
                                                                       3,000
  Rheem Mig. Co., 570 Lemington / ve., New York 22, New York
  Riley Stoker Corp., 9 Naponaet St., Wardester 8, Mass.
                                                                       2,000
  Robertshaw-Fulton Controls Co., 110 E. Otterman St., Greenburg, Pa. 4,127
                                                                       4,600
  Rockwell Mfg. Co., 400 N. Lexington Ave., Pittsburg, Pa.,
  Ronson Art Metal Works, Inc., Arongon Squire, Newark 2, New Jersey
                                                                       2,500
                                                                      10,000
  Royal Typewriter Co., Inc., 2 Part Ave., New York 16, N. Y.
                                                                       4,200
  Saco-Lowell Shops, 60 Batterymarch St., Boston 10, Mass.
  Sagamo Electric Co., 11th & Converse, Springfield, Ill.
                                                                       2,700
  Savage Arms Corp., 60 E. 42nd St., New York 17, N. Y.
                                                                       2,100
  Seeger Refrigerator Co., 850 Arcade St., St. Paul 6, l'immesota
                                                                       5,500
                                                                       5,300
  Servel, Inc., 119 N. Morton Ave., Evanaville 20, Indiana
  Shellmer Products Corp., Mt. Vernon, Chio
                                                                       2,000
  L. C. Smith & Corona Typewriters, 701 Washington St., Syracuse, N.Y. 5,080
                                                                      15,930
  Sperry Corp., 30 Rockefeller Plaza, New York 20, New York
                                                                       2,000
  Standard Products Co., 2130 W. 110 St., Cleveland 2, Chio
  Standard Screw Co., 3701 Washington Blvd., Bellwood, Illinois
                                                                       4,000
                                                                       3,500
  Standard Steel Spring Co., 843 4th Ave., Coropolis, Pa.
                                                                       6,500
  The Stanley Works, 195 Lake St., New Britain, Connecticut
                                                                       7,500
  Stewart-Warner Corp., 1826 Diversey Pkwy. Chicago 14, Illinois
                                                                       4,000
  Talon, Inc., 626 Arch St., Meadville, Pennsylvania
  Taylor Instrument Co., 95 Ames St., Rochester, N. Y.
                                                                       2,291
                                                                      16,450
  Timken Roller Bearing Co., 1835 Dueber Ave., S. W. Canton, Ohio
  Trailmobile Co., 31st & Robertson Ave., Cincinnati &, Ohio
                                                                       3,000
                                                                       2,696
**True Temper Corp., 1623 Euclid Ave., Cleveland 15, Ohio
  Underwood Corp., 1 Park Ave., New York 16, New York
                                                                      12,000
                                                                      24,700
**United Aircraft Corp., 400 Main St., East Hartford, Conn.
  United Shoe Machinery Corp., 140 Federal St., Boston 7, Mass.
                                                                       9,360
                                                                       2,366
**Woltham Votch Co., 221 Crescent St., Wolthom, Maps.
**Westher Seal, Inc., Barberton, Chio
                                                                       2,000
                                                                       9,135
  Westinghouse Air Brake Co., Wilmerding, Ps.
                                                                       3,000
  Whirpool Corp., St. Joseph, Michigan
                                                                       Ã,000
**Mhite Motor Co., 842 E. 79th St., Cleveland 1, Obio
                                                                       2,000
 White Sowing Malhine Corp., 1231 Main St., Cleveland 1, Ohio
**Willys-Overland Motors, Inc., Welott Plvd., Tolude 1, Chic
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Wilson Foundry & Machine Co., Wilson Ave., Pontice, Michigan	2,500
**Worthington Pump & Machinery Corp., 401 Vorthington Ave.,	7,794
Yale & Towne Mfg. Co., 405 Lexington Ave., New York 17, N. Y.	8,501
L. A. Young Spring & Wire Corp., 9200 Russell St., Detroit 11, Mid	h 7,500
The Youngstown Sheet & Tube Co., 44 Central Equare, Youngstown,	
Ohio	27,500
** The Studebaker Corp., South Bend, Indiana	19,765

Nonnetallic Mineral Industrics

Amoniach Window Class Co. Francus Plin Dittahund D.	0 500
American Window Class Co., Farmers Blag., Pittsburgh, Pa.	2,589
**Anchor Hocking Glass Corp., 109 N. Proud St., Lancaster, Ohio	10,250
Itles Plywood Corp., 1432 Statler Eldg., Foston 16, Mass.	5,000
Bakelite Corp., 30 E. 42nd St., New York 17, New York	2,000
Pehr-Mennign Corp., Troy, New York	2,100
Berwind White Coel Mining Co., Proedway, New York 4, N. Y.	3,000
Brunswick-Balke-Collender Co., 623 S. Wabash Ave., Chicago 5, Ill.	2,986
Carborundum Co., P. O. Box 337, Niagara Falls, New York	4,771
Philip Carey Mfg. Co., Lockland, Cincinnati 15, Ohio	3,300
**Certsin-teed Products Corp., 120 E. Lencaster, Ave., Ardmore, Pa.	2,678
Columbian Carbon Co., 41 E. 42nd St., New York 17, New York	2,500
**Congoleum-Nairn, Inc., 195 Belgrove Drive, Kearny, New Jersey	3,500
Corning Glass Works, Corning, New York	9,818
**Devoe & Reynolds W. Inc., 737 1st Ave., New York 17, New York	2,850
Diamond Match Co., 122 E. 42nd St., New York 17, New York	8,577
Flintkote Co., 30 Rockefeller Plaza, New York 20, New York	5,500
General Fireproofing Co., E. Dennick Ave., Youngstown, Ohio	3,600
Glen Alden Coal Co., 310 Jefferson Ave., Scranton 1, Pa.	14,000
Harbison-Walker Refractories Co., Farmers Bank Bldg. Pittsburg	5,900
**A. Hollander & Son, Inc., 143 E. Kinney St., Newark, New Jersey	2,000
Island Creek Coal Co., 75 Federal St., Boston 10, Moss.	4,700
**Johns Menville Corp., 22 E. 40th St., New York 16, N. Y.	16,000
Lehigh Portland Cement Co., Young Elag., Allentown, Pa.	3,700
**Lone Star Cement Corp., 100 Park Ave., New York 17, New York	3,1.00
Masonite Corp., 111 W. Washington St., Chicago 2, Illinois	2,900
National Gypsum Co., 325 Delaware Ave., Buffelo 2, New York	4,050
North American Refractories Co., 1012 Not'l Bldg. E. 6th St.,	
Cleveland, Ohio	2,000
Norton Co., 1 New Bond Street, Worcester, Mass.	4,325
Ohio Match Co., 254 Main St., Wadsworth, Ohio	2,100
Old Ben Coal Corp., 230 Clark St., Chicago 4, Illinois	2,224
Rayman Concrete Pile Co., 140 Cedar St., New York 6, N. Y.	7,000
Thermoid Co., Whitehead Road, Trenton 6, New Jersey	2,500
U. S. Plywood Corp., 55 W. 44th St., New York 18, New York	4,300
Vanadium Corp. of America, 420 Lexington Ave., New York 17, N. Y.	7,560
S. S. White Dental Mfg. Co., 211 S. 12th St., Philadelphis, Pa.	2,100
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The Chemical Process Industries

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Abbott Laboratories, 14th St., Sheridan Rd., North Chicago
                                                                       4,203
  Air Reduction Co., Inc., 60 E. 42nd St., New York 17, New York
                                                                       7.675
  American Agricultural Chemical Co., 50 Church St., New York 7
                                                                       3,300
  American Colortype Co., 9 Brighton Pd., Clifton, New Jorsey.
                                                                       2,100
**Hard Rubber Co., Marcer St., New York 15, New York
                                                                       2,100
  Archer-Daniels-Midland Co., 600 Rosnoke Bldg., Minnespolis, Minn.
                                                                       5,000
**Atlantic Refining Co., 260 S. Broad St., Philadelphia 1, Pa.
                                                                      19,653
  Avon Allied Products, Inc., 30 Rockefeller Plaza, New York 20,
                                                                       2,000
  Bristol Myers Co., 630 Fifth Ive., New York 20, N. Y.
                                                                       3,100
  Brown & Bigelov, 1200 University Avenue, St. Paul 4, Minnesota
                                                                       4,801
                                                                       4,236
  C. Provin Co., Berlin, New Hamp, hire
                                                                      17,690
  Celanese Corp. of America, 180 Madison Ave., New York 16, N. Y.
                                                                       5,000
  Celotex Corp., 120 S. La Salle St., Chicago, Illinois
  Champion Paper & Fibre Co., 601 N. "B" St., Hamilton, Ohio
                                                                       7,685
  Cities Service Co., 60 Well St., New York, New York
                                                                      20,000
                                                                       2,250
  Commercial Solvents Corp., 17 E. 42nd St., New York 17, New York
                                                                       6,728
**Consolidated Natural Gas Co., Pockefeller Plaza, New York 20,
  Consolidated Water Power & Paper Co., Wisconsin Rapids, Wis.
                                                                       3,708
 *Continental Diamond Fibre Co., 70 S. Chapel St., Newark, Delaware
                                                                       2,000
                                                                       7,353
**Continental Oil Co., 10 Rockefeller Plaza, New York 20, N. Y.
**The Dayton Rubber Co., 2352 Riverview Ave., Dayton 7, Ohio
                                                                       3,000
  Dennison Mfg. Co., 300 Howard St., Tramingham, Mass.
                                                                       3,485
                                                                       8,577
  Diamond Match Co., 122 E. 42nd St., New York 17, New York
                                                                       2,700
  Dixie Cup Co., 24th St., & Dixie Ave., Easton, Pa.
                                                                      14,619
  Dow Chemical Co., Midland, Michigan
  Dunlop Tire & Rubber Corp., River Pd. & Sheridan Drive, Buffalo,
                                                                      33,100
                                                                      73,515
**E. I. du Pont De Nemours & Co., Wilmington, Delaware
                                                                       2,511
  Rest Ohio Gas Co., 14C5 E. 6th St., Cleveland 14, Ohio
                                                                      26,500
**Esso Standard Oil Co., New Jersey
                                                                       3,667
  Firestone Industrial Products Co., 1200 Firestone Pkway, Akron
                                                                      71,245
  Firestone Tire & Rubber Co., Altron 17, Chio
                                                                       4,000
  Robert Cair Co., Inc., 155 E. 4/th St., New York 17, New York
                                                                       9,500
  General Aniline & Film Corp., 230 Park Ave., New York 17, N. Y.
                                                                       2,500
  General Box Co., 500 N. Dearborn St., Chicago 10, Ill.
                                                                      38,178
  The B. F. Goodrich Co., 500 S. Main St., Akron, Ohio
                                                                      73,000
**Goodyear Tire & Rubber Co., 1144 E. Market St., Akron 16, Ohio
                                                                       2,209
  Great Northern Paper Co., Millenocket, Maine
                                                                      47,323
**Culf Oil Corp., Gulf Bldg., Pittsburgh, 30, Pa.
                                                                       9,300
  Hercules Powder Co., 900 Market St., Wilmington, Delavare
                                                                       2,000
  Hevitt-Robins, Inc., 370 Lexington Ave., New York 17, New York
                                                                       3,076
  Hollingworth & Whitney Co., 60 Betterymerch St., Boston 2, Mcsa.
                                                                       4,900
  Interchemical Corp., 61 W. 44th St., New York 18, New York
  International Minerals & Chemical Corp., 20 N. Wacker Drive,
                                                                       3,865
    Chicego 6, Illinois
  International Paper Co., 220 E. 42nd St., New York 17, New York
                                                                      30,278
                                                                      15,000
**Johnson and Johnson, 501 George St., New Prunswick, New Jersey
                                                                       3,547
  Kalamazoo Vegetable Parchment Co., Parcement, Kalamazoo, Mich.
                                                                       2,700
  Kelly-Springfield Tire Co., Kelly Blvd., Cumberland,
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Kimberly-Clark Corp., 128 N. Commercial St., Necomb, Wis.,
                                                                       8,600
  Lee Rubber & Tire Corp., Conshohocken, Pa.
                                                                       3,000
  Lever Bros. Co., 505 Park Ave., New York 22, New York
                                                                       7,000
  Liquid Carbonic Corp., 3100 S. Kedzie Ave., Chicago 23, Ill.
                                                                       4,015
 *Mansfield Tire & Pubber Co., 515 Newman St., Mansfield, Chio
                                                                       2,026
                                                                       4,168
  Marathon Corp., Rothschild, Wis.,
  Mathieson Chemical Corp., 10 Light St., Baltimore, Maryland
                                                                       5,000
  McKesson & Robins, Inc., 155 E. 44th St., New York 17, New York
                                                                       8,700
  Merd Corp., 118 W. 1st St., Dayton 2, Ohio
                                                                       7,000
  Merck & Co., Inc., 126 E. Lincoln Ave., Rahway, New Jersey
                                                                       5,800
                                                                       3,318
  Mid-Continent Petroleum Corp., 328 Equitable Bldg., Baltimore
                                                                       2,500
**Milprint, Inc., 431 W. Florida St., Milwaukee, Wisconsin
                                                                       8,000
  Minnesota Mining & Mfg. Co., 900 Fanquier Ave., St. Paul 6, Minn.
  Minnesota & Ontario Paper Co., 500 Baker Arcade Bldg., Minneapolis
                                                                       3,800
  Ohio Boxtoard Co., Pittman, Chio
                                                                       2,000
  Ohio Rubber Co., Willoughby, Ohio
                                                                       2,100
                                                                       2,025
  Okonite Co., 220 Passala St., Passaic, New Jersey
**Owens-Corning Fiberglas Corp., Box 901, Toledo, Ohio
                                                                      24,983
                                                                       3,857
  Oxford Paper Co., 230 Park Ave., New York 17, N. Y.
                                                                       7,650
  Pan American Petroleum Transport Co., 122 E. 42nd St., New York
                                                                       8,385
  Parke Davis & Co., Jos. Campau Ave., at The River, Detroit 32,
                                                                       2,200
  Pennsylvania Rubber Co., Chambers Ave., Jeannette, Pa.,
**Pennsylvania Salt Mfg. Co., 1000 Widener Bldg. Philadelphia, Pa.
                                                                       2,500
**Chas. Pfizer & Co., Inc., 11 Bartlett St., Erooklyn 6, New York
                                                                       2,400
                                                                      26,257
**Pittsburgh Plate Glass Co., Grant Bldg., Pittsburgh 19, Pa.
                                                                      10,060
  Pure Oil Co., 35 E. Wacker Drive., Chicago, Ill.
**Rayonier, Inc., 122 E. 42nd St., New York 17, New York
                                                                       4,C13
                                                                       3,000
  Richardson Co., Wyoming & Cooper Aves., Cincinnati 15, Ohio
                                                                       4,600
  Rohm & Hans Co., 222 W. Washington Square, Philadelphia, Pa.
 *St. Regis Paper Co., 230 Park Ave., New York 17, New York
                                                                       3,000
                                                                       4,161
  Scott Paper Co., Front & Market Sts. Chester, Pa.
  See Fright Co., Inc., 313 S. First St., Fulton, New York
                                                                       2,150
                                                                       2,500
  Seiberling Rubber Co., Central Tower Eldg., Akron 9, Ohio
**Sharp & Dohme, Inc., 640 N. Broad St., Philadelphia, Pa.
                                                                       2,850
                                                                      30,332
  Shell OilCo., 50 W. 50th St., New York 20, New York
  Sherwin-Williams Co., 101 Prospect Ave., N. W., Cleveland, Ohio
                                                                      12,000
                                                                      19,500
**Sinclair Oil Corp., 630 Fifth Ave., New York 20, New York
                                                                       6,318
  E. R. Squibb & Sons, 745 Fifth Ave., New York 22, New York
                                                                      46,736
  Standard Oil Co. of Indiana, 910 S. Mich. Ave., Chicago 80, Ill.
  Sun Chemical Corp., 10th St. & 44th Ave., L. I. City, New York
                                                                       2,650
  Sun Oil Co., 1608 Walnut St., Philadelphia 3, Pa.
                                                                      20,530
                                                                       3,100
**Sutherland Paper Co., 243 E. Paterson St., Kalamazoo, Mich.
  Thompson Products, Inc., 23555 Euclid Ave., Cleveland, Ohio
                                                                      16,450
  Union Bag & Paper Corp., 233 Broadway, New York 7, N. Y.
                                                                       5,722
  U. S. Gypsum Co., 300 W. Adams St., Chicago E, Illinois
                                                                      10,000
  U. S. Rubber Co., 1230 Avenue of Americas, New York 20, New York
                                                                       4,300
                                                                       3,700
  Upjohn Co., 301 Henrietta St., Kalamazoo, Michigan
                                                                       3,000
  Vick Chemical Co., 122 E. 42nd St., New York 17, New York
                                                                       2,500
  Warner-Hudnut, Inc., 113 W. 18th St., New York 11, New York
**Wyandotte Chemicals Corp., 1609 Biddle Ave., Wyandotte, Mich.
                                                                       5,200
                                                                      45,700
**Esstman Kodak Co.
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Textile and Allied Industries

American Thread Co., 260 W. Broadway, New York 13, New York	
	20,500
· · · · · · · · · · · · · · · · · · ·	13,544
Brtes Mfg. Co., Box 591, Lewiston, Maine	7,300
Berkshire Fine Spinning Association, Inc., 1100 Burks Head Bldg.	1,500
Providence, Rhode Island	8,463
Bigelow Sanford Carpet Co., Inc., 140 Maison Ave., New York	7,500
Sidney Blunenthal & Co., Inc., 1 Park Ave., New York, New York	3,000
Poteny Mills, Inc., 84 Dayton Ave., Passaic, New Jersey	5,290
Cheney Brost, 146 Hartford Rd., Manchester, Conn.	2,100
Chicopee Mfg. Corp., 501 Ceorge St., New Brunswick, New Jersey	3,500
Crompton & Knowles Loom Wks. 93 Grand St., Worcester, Mass.	2,866
Dwight Mfg. Co., 89 Franklin St., Boston 10, Mass.	2,459
**Forstmann Woolen Co., 2 Barbour Ave., Passaic, New Jersey	4,630
**Goodell-Senford, Inc., 2 Hight St., Senford, Maine	5,000
	2,300
The Hathaway Mfg. Co., 97 Cove St., New Bedford, Mass. Industrial Rayon Corp., 660 Union Commerce Bldg., Cleveland, Chio	4,900
A. D. Juilliard & Co., Inc., 40 W. 40th St., New York 18, New York	2,536
min Francis I on 1/0 Endowed St. Poston 10 Moss	7,500
The Kendall Co., 140 Federal St., Boston 10, Mass.	
James Lee & Sons Co., E. 4th St., Bridgeport, Pa.	4,700
**Linen Thread Co., 418 Grant St., Patterson, New Jersey	3,000
M. Lowenstein & Sons, Inc., 37 Leonard St., New York 13, New York	8,500
Ludlow Mfg. & Sales Co., 211 Congress St., Boston 5, Mass.	2,000
Mishawaka Rubber & Woolen Mfg. Co., 312 N. Hill St., Mishawaka, Ind.	5,000
**Mohawk Carpet Mills, Inc., 57 Lyon St., Amsterdam, New York	6,200
*Vernon Woodberry Mills, Inc., 201 E. Baltimore St., Paltimore 2,	4,250
National Automotive Fibres, Inc., 19925 Hoover Ave., Detroit 5	2,500
Naumkeag Steam Cotton Co., 47 Congress St., Salem, Mass.	2,000
**New Jersey Worsted Mills, 174 Passaic St., Garfield, New Jersey	2,300
North American Rayon Corp., 26 Fifth Ave., New York 16, New York	3,500
Reeves Bros., Inc., 54 Worth St., New York 13, New York	7,000
**Riegel Textile Corp., 342 Madison Ave., New York 17, New York	8,005
Simmons Co., 230 Park Ave., New York 17, New York	14,000
Alexander Smith & Sons Carpet Co., 255 Lake Ave., Yonkers, New York	6,000
J. P. Stevens Co., Inc., 350 Fifth Ave., New York 10, New York	24,190
Textron, Inc., 20 Market Square, Providence, Rhode Island	4,480
Utica Knitting Co., 101 Mathews Ave., Utica, New York	2,300
Utica & Mohawk Cotton Mills., 801 State St., Utica, New York	2,000
Verney Corp., Vernet St., Manchester, New Hampshire	2,000

The Apperel Industries

Aldens, Inc., 511 S. Paulina St., Chicago 7, Illinois	2 500
	3,500
Brown Shoe Co., Inc., 1600 Washington Ave., St. Louis, Mo.	13,500
Cluett, Peabody & Co., Inc., 433 Fiver St., Troy, New York	10,000
J. & P. Coats, Inc., 366 Pine St., Pautaucket, Rhode Island	2,200
Endicott Johnson Corp., Page Ave., Endicott, New York	18,000
**Florsheim Shoe Co., 130 S. Canal St., Chicago 6, Illinois	3,174
**Hart Shaffner & Marx, 36 S. Franklin St., Chicago 6, Illinois	5,000
Hat Corp. of America, 417 Fifth Ave., New York 16, New York	2,100
Hicky-Freeman Co., 1155 Clinton Ave., N. Rochester, New York	2,025
F. Jacobson & Sons, Inc., 1115 Broadway, New York 10, New York	2,000
Joseph & Feiss Co., 2149 W. 53rd St., Cleveland, Ohio	2,50 5
**A. C. Lawrence Leather Co., 10 Sawyer St., Peabody, Mass.	2,900
**Manhattan Shirt Co., 444 Madison Ave., New York 22, New York	4,000
J. F. McElwin Co., 103 Temple St., Nashua, New Hampshire	4,500
Melville Shoe Corp., 25 W. 43rd St., New York 18, New York	6,687
**I. Miller & Sons, Inc., 43-10 23 St., Long Island City, New York	4,000
Mojud Hosiery Co., Inc., 385 Fifth Ave., New York 16, New York	2,400
Munsingwear, Inc., 718 Glenwood Ave., Minneapolis 5, Minn.	2,581
Phillips-Jones Corp., 1225 Broadway, New York 1, New York	3,500
Phoenix Hosiery Co., 320 E. Buffalo St., Milwaukee, Wisconsin	2,300
Public Shirt Corp., 15 Leonard St., New York 13, New York	4,073
Real-Silk Hosiery Mills, Inc., 611 N. Park Ave., Indianapolis	2,470
Reliance Mfg. Co., 212 W. Monroe St., Chicago 6, Illinois	6,000
Shoe Corp. of America, 35 N. 4th St., Columbus 5, Ohio	3,500
John B. Stetson Co., 5th St. & Montgomery Ave., Philadelphia	2,550
U.S. Shoe Corp., 1658 Hereld Ave., Cincinnati 7, Ohio	3,000
Weyenberg Shoe Mfg. Co., 234 E. Reservoir Ave., Milwaukee, Wis.	2,300
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The Food, Liquor, and Tobacco Industries

Abbotts Dairies, Inc., 3043 Chestnut St., Philadelphia, Pa. American Tobacco Co., 111 Fifth Ave., New York 3, New York Armour & Company, Chicago, Illinois	2,200
Bestrice Foods Co., 120 S. LaSalle St., Chicago 3, Illinois	8,525
Beechnut Packing Co., Canajohoree, New York	4,103
The Best Foods, Inc., 1 E. 43rd St., New York 17, New York	2,500
Borden Co., 350 Madison Ave., New York 17, New York	28,000
Campbell Soup Co., 100 Market St., Camden 1, New Jersey	4,355
**Clinton Foods, Inc., 445 Park Ave., New York 2, New York	3,000
The Coca Cola Co., 515 Madison Ave., New York 22, New York	2,000
Consolidated Grocers Corp., 135 S. LaSalle St., Chicago 3, Ill.	5,500
*Consolidated Cigar Corp., 444 Madison Ave., New York 22, New York	5,000
Continental Baking Co., 630 Fifth Ave., New York 20, New York	12,443
Corn Products Refining Co., 17 Batter Pl., New York 4, New York	6,000
Curtiss Candy Co., 1101 Belmont Ave., Chicago 13, Illinois	4,400
**Fanny Farmer Candy Shops, Inc., 7 Griffith St., Rochester, N. Y.	2,446
**General Baking Co., 420 Lexington Ave., New York 17, New York	11,170
General Cigar Co., Inc., 119 W. 40th St., New York 18, New York	6,279
General Goods Corp., 250 Park Ave., New York 17, New York	16,662
General Ice Cream Corp., 101 Nat'l Terrace, Schenectady, N. Y.	3,000
Gerber Products Co., State St., Fremont, Michigan	2,300
**Hathaway Bakeries, Inc., 44 Life St.	2,800
H. J. Heinz Co., 1062 Progress St., Pittsburgh 12, Pa.	10,000
Hershey Chocolate Corp., 19 E. Chocolate Ave., Hershey, Pa.	3,500
George A. Hormel Co., Austin, Minnesota	6,970
*Hygrade Food Products Corp., 2811 Michigan Ave., Detroit 16	6,800
Jewel Tea Co., Inc., Jewel Park, Barrington, Ill.	6,225
Kellogg Co., 235 Porter St., Battle Creek, Michigan	5,000
Liebmann Breweries, Inc., 36 Forest St., Brooklyn 6, New York	2,000
Liggett & Myers Tobacco Co., 630 Fifth Ave., New York 20, N. Y.	10,000
Eli Lilly & Co., 740 S. Alabama St., Indianapolis, Indiana	5,964
Loft Candy Corp., 251 W. 42nd St., New York 13, New York	2,000
P. Lorillard Co., 119 W. 40th St., New York 18, New York	8,500
Oscar Mayer & Co., 1241 Sedgwick St., Chicago 10, Illinois	6,000
Nash-Finch Co., 1750 Hennepin Ave., Minneapolis 3, Minn.	2,200
National Biscuit Co., 449 W. 14th St., New York 14, New York	28,000
**National Dairy Products Corp., 230 Park Ave., New York 17, N. Y.	43,615
**National Distillers Products Corp., 120 Broadway, New York 5	7,500
Philip Morris & Co., LTD., Inc., 100 Park Ave., New York 21	2,500
Pillsbury Mills, Inc., 600 Pillsbury Bldg., Minneapolis 14, Minn.	5,400
Qualter Oats Co., Merchandise Mart Plaza, Chicago 54, Ill.	6,000
Schenley Industries, Inc., 350 Fifth Ave., New York 1, New York	12,570
**Standard Brands, Inc., 595 Madison Ive., New York 22, New York	8,400
Stokely-Van Cemp, Inc., 941 N. Meridian St., Indianatolia, Indiana	5,000
Sunshine Biscuits, Inc., 29-10 Thomson Ave., Long Island City, N.Y.	9,600
Swift & Co., Union Stock Yards, Chicago, Illinois	73,000
Wilson & Co., Inc., 4100 S. Ashland Ave., Chicago 9, Ill.	30,000
**General Mills Co.	12,000

Electrical Industries

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Admiral Corporation, 3800 Cortland St., Chicago 47, Illinois
                                                                       3,000
  Aerovox Corp., 740 Belleville Ave., New Bedford, Mass.
                                                                       2,500
  Apex Electrical Mfg. Co., 1070 E. 152nd St., Cleveland 10, Ohio
                                                                       3,000
  Arrow-Hart & Hegman Electric Co., 103 Hawthorne St., Hartford, Conn 2,200
  Allan B. Dumont Labs., Inc., 750 Bloomfield Ave., Clifton, N. J.
                                                                       4,000
  Thomas A. Edison, Inc., 51 Lakeside Ave., West Orange, New Jersey
                                                                       3,500
  Electric Auto-Lite Co., Champlain & Chestnut Sts., Toledo, Ohio
                                                                      20,200
  Electric Boat Co., 445 Park Ave., New York 22, New York
                                                                       6,000
  Electric Storage Battery Co., Allegheny Ave., & 19th St.
    Philadelphia, Pa.
                                                                       6,950
  Electro Motive Mfg. Co., Inc., S. Park St., Willimantic, Conn.
                                                                       2,100
                                                                       3,600
  Electrolux Corp., 500 Fifth Ave., New York 18, New York
                                                                       2,900
**Elliot Co., N. 4th St., Jeannette, Pa.
  Emerson Radio & Phonograph Corp., 111 8th Ave., New York 11, N. Y.
                                                                       2,500
  Federal Telophone & Radio Corp., 100 Kingsland Rd., Clifton, N. J.
                                                                       3,476
**General Electric, Schenectady, New York
                                                                     196,800
  Clobe-Union Inc., 900 E. Keefe Ave., Milwaukee 1, Wisconsin
                                                                       3,500
  Graybar Electric Co., Inc., 420 Lexington Ave., New York 17
                                                                       4,100
  Harnischfeger Corp., 440 W. Nat'l Ave., Milwaukee 14, Wisconsin
                                                                       3,000
  Hoover Co., 101 E. Maple St., North Canton, Ohio
                                                                       2,530
                                                                       3,000
**Hytron Radio & Electronics Corp., 76 Lafayette St., Salem, Mass.
  I. T. E. Circuit Bresker Co., 445 N. 19th St., Philadelphia, Pa.
                                                                       2,400
  Landers, Frary & Clark, 47 Center St., New Britain, Conn.
                                                                       3,700
                                                                       2,225
  Magnovox Co., 2131 Bueter Rd., Fort Wayne 4, Indiana
  Motorola, Inc., 4545 Augusta Elvd., Chicago 51, Illinois
                                                                       4,500
                                                                       3,000
  Noma Electric Corp., 55 W. 13th St., New York 11, New York
**Philco Corp., Tioga & C. Sts., Philadelphia, Pa.
                                                                      17,000
                                                                      27,731
**Radio Corp. of America, 30 Rockefeller Plazs, New York 20, N. Y.
                                                                      10,300
  Raytheon Mfg. Co., 55 Chapel St., Newton 53, Mass.
  Sprague Electric Co., 189 Beaver St., North Adams, Mass.
                                                                       4,000
                                                                       2,500
  Stromberg-Carlson Co., 100 Carlson Rd., Rochester 3, New York
                                                                       4,000
**Sunbeam Corp., 5600 W. Roosevelt Rd., Chicago 50, Ill.
  Sylvania Electric Products, Inc., 1740 Broadway, New York 19
                                                                      14,000
  Western Electric Co., Inc., Brosdway, New York 7, New York
                                                                      67,500
                                                                      88,354
  Westinghouse Electric Corp., 306 4th Ave., Pittsburgh, Pa.
  Zenith Radio Corp., 6001 Dickens Ave., Chicago 39, Illinois
                                                                       6,500
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^{**}Responding Corporations

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