

LIKE TOPY, G.E. GROWS AND GROWS

In the face of decreasing enrollments in the various engineering schools and colleges our Department of General Engineering is enjoying an increasing enrollment, with a continued upward trend predicted. Also of interest is the fact that substantially more students transfer into our curriculum than transfer out. The idea that we can offer a thorough technical background to the student and yet let him take a significant number of hours in some other area of specialty is finding an ever increasing number of takers.

BOND ISSUE VITAL

A matter of vital importance comes before the voters of the State of Illinois on November 8, 1960. They must decide upon a proposed \$195,000,000 bond issue, proceeds of which would finance new buildings and other improvements at the six state universities. Facilities in the universities are now strained to capacity and the wave of post-war babies will hit the campuses in three or four years bringing about an impossible situation unless immediate steps are taken. Every citizen has a direct interest in having an adequate supply of college trained personnel for our expanding state economy. Those with children in grade school or high school will be especially concerned with having a place for them in college. The cost of the bond issue will be spread over a 25-year period and the per capita cost per citizen will be only slightly over \$1.00 per year. If you are now living in Illinois, vote for the bond issue and encourage your fellow voters to do the same. If you no longer live in Illinois, encourage your friends and relatives who live here to vote for the issue.

OPEN HOUSE

The weather man conspired against us for the 1960 Engineering Open House, held March 11 and 12, but despite snow drifts and cold, attendance by the public was almost on a par with previous years. Each year this occasion draws from 18,000 to 20,000 visitors. The I.S.G.E. and the Department of General Engineering dispensed free coffee, together with information for prospective students and all other interested persons. Members of the staff were on hand all during the Open House. We feel the G.E. enrollment will go up in proportion to the number of prospective students who become aware of the G.E. curriculum.

QUESTIONNAIRES STILL OUT?

We hope those of you who have not as yet found time to fill out the questionnaire and return it to us will be able to in the near future. In case you've mislaid it, let us know, and we'll send you another.

I.S.G.E. PROSPERS

The Illinois Society of General Engineers has continued to thrive during the past year. The students were finally able to cop the bowling trophy this year leading the faculty to believe that the students resorted to such deplorable tactics as pre-match practice. Other meetings during the year featured speakers from Procter and Gamble, Caterpillar, Trane, Ceco Steel, and Western Electric. Our annual student-faculty banquet was held May 11 at the Champaign Elks Club.

The president of the Society for the forthcoming year is Randal Smith, a junior from Robinson, Illinois. Randy was recently honored by being chosen a Knight of St. Patrick at the annual St. Pat's Ball.

G.E. SURVEY RESULTS!!

SEE NEXT PAGE

SURVEY RESULTS COMPILED

Our thanks for your good response to the questionnaire sent out in last years' News Letter. Herewith are some results of that survey tabulated in the graphs on the next two pages.

The opposite page shows clearly the prevailing opinion of G.E. graduates of all ages that more courses in commerce and social sciences should be added to the present curriculum. It may also be noted that the percentage of graduates favoring more mathematics and engineering science increases as one looks from the older to the younger grads. This, we presume, acknowledges the requirements of an industry growing in both depth and breadth for engineers with more mathematics and fundamental engineering sciences. We are trying to make all these areas as strong as is possible.

The next page shows very clearly that the G.E.'s of all ages working for manufacturing concerns far outnumber those in other types of companies. We must, therefore, maintain sufficient courses in the "art of engineering", oriented toward design and production, in the face of a trend in some areas toward a strictly scientific or research approach to engineering. The third page presents no great surprises. Over the years the bulk of G.E.'s have chosen management (administration) and sales as secondary fields of study, and have put their training to good practice. It may be seen management duties are the most common, with duties in sales and service running second.

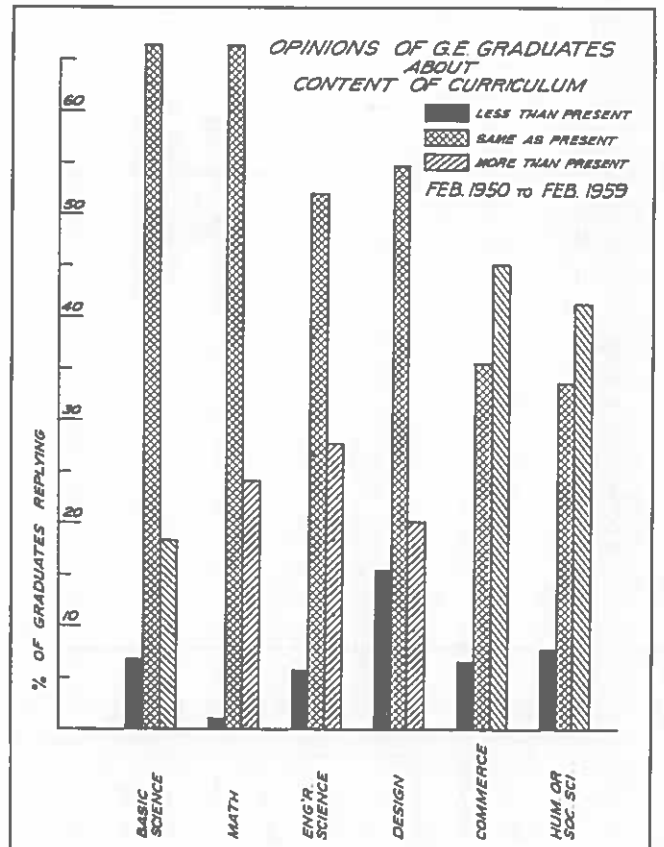
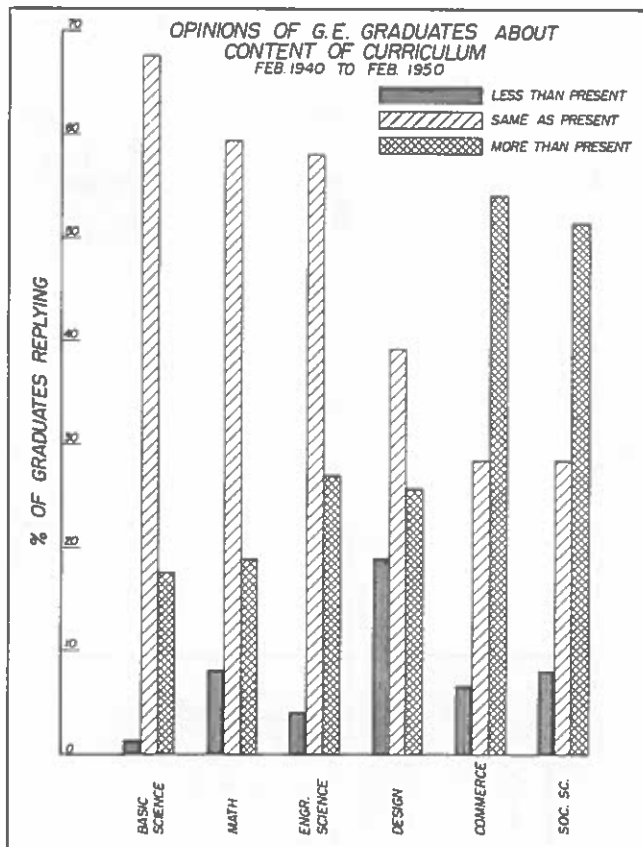
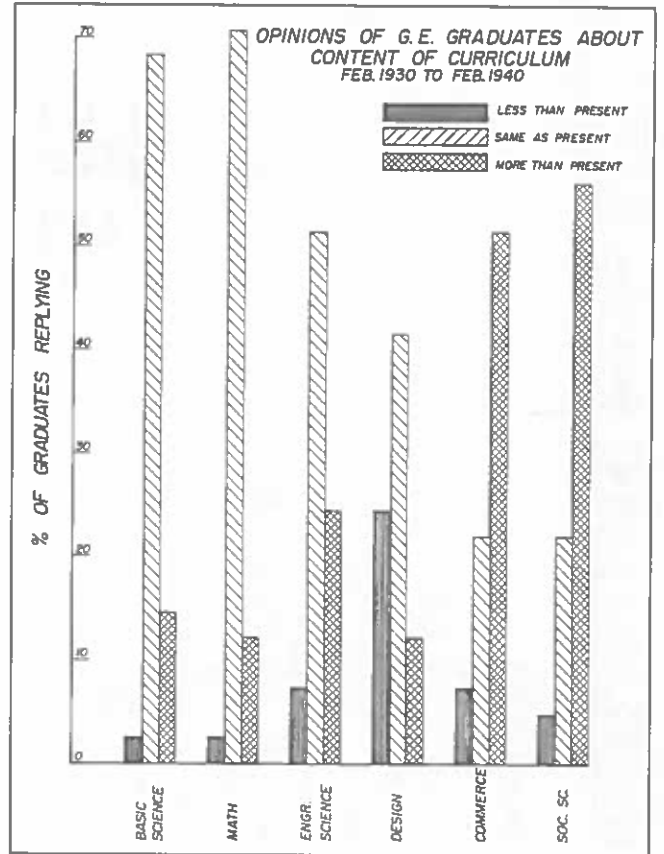
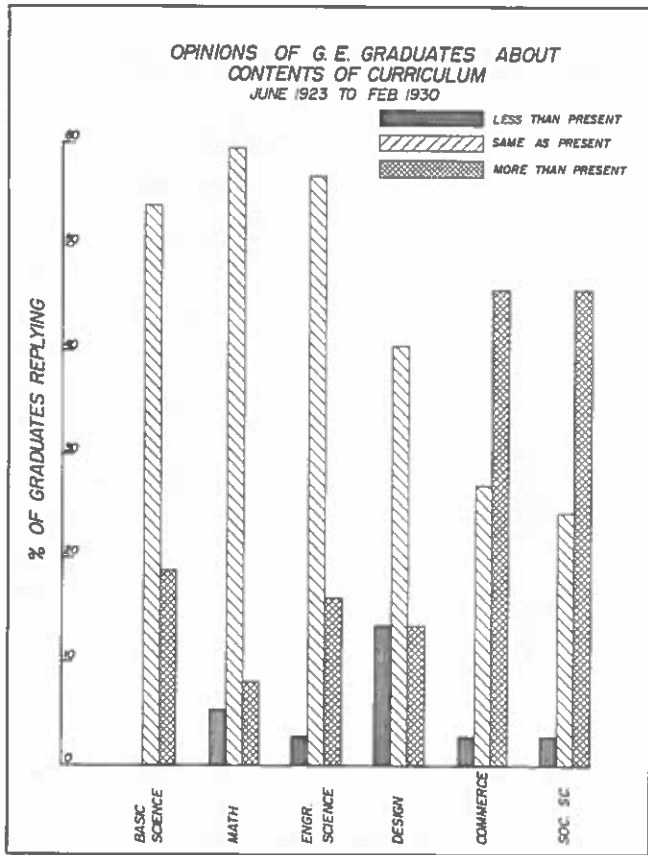
We've saved the best until last and now point with pride to the last set of graphs and the ever increasing number of G.E.'s who we feel may be properly called "big wheels" in their organizations. By this we mean owners, partners, presidents, vice-presidents, general managers, etc. The graduates out of school from 10 to 20 years in this category number about 35%. This percentage continues among the grad-

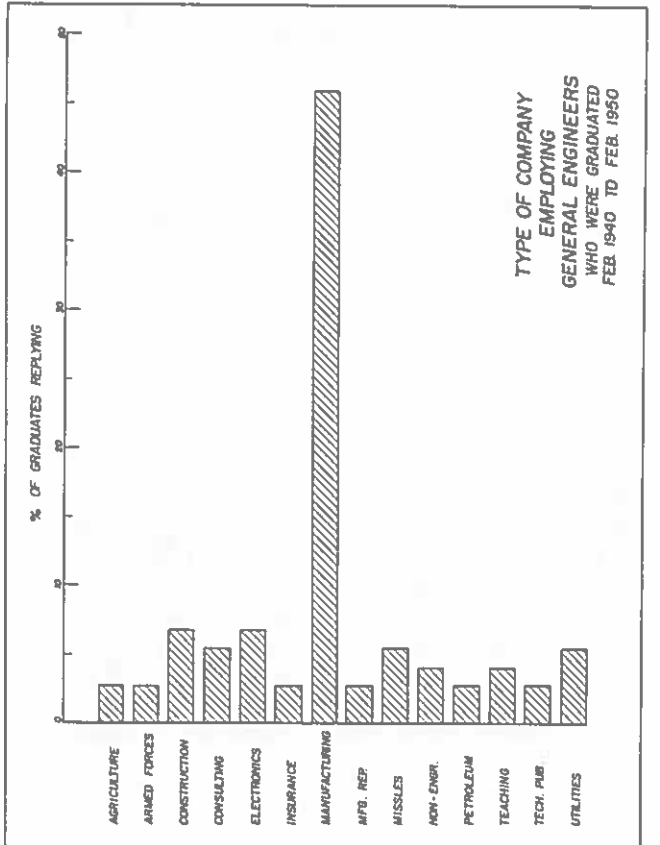
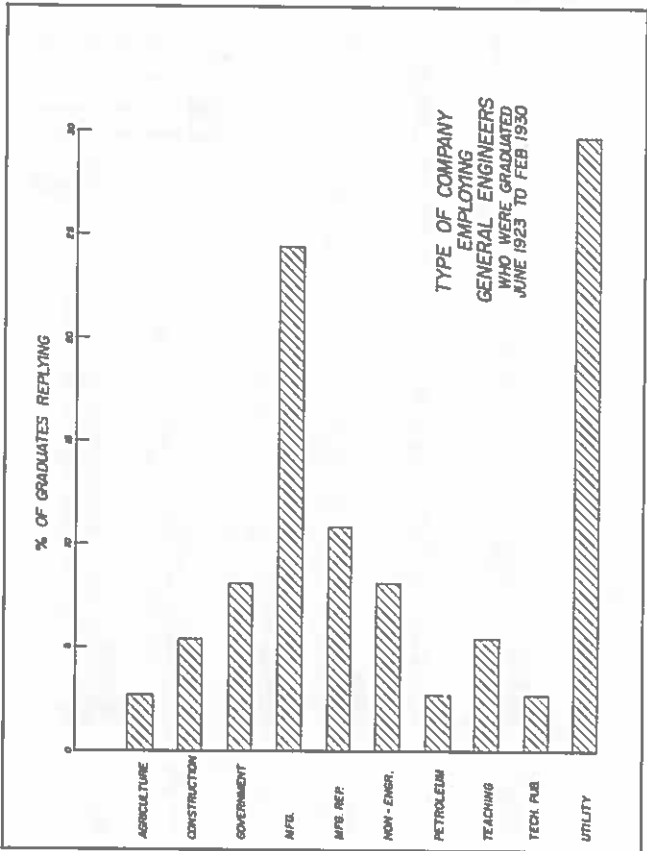
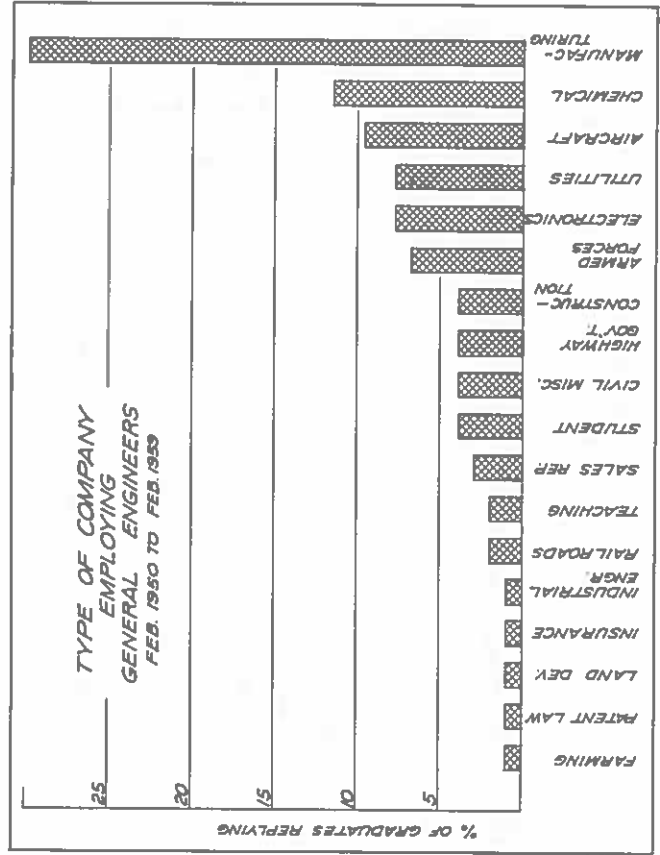
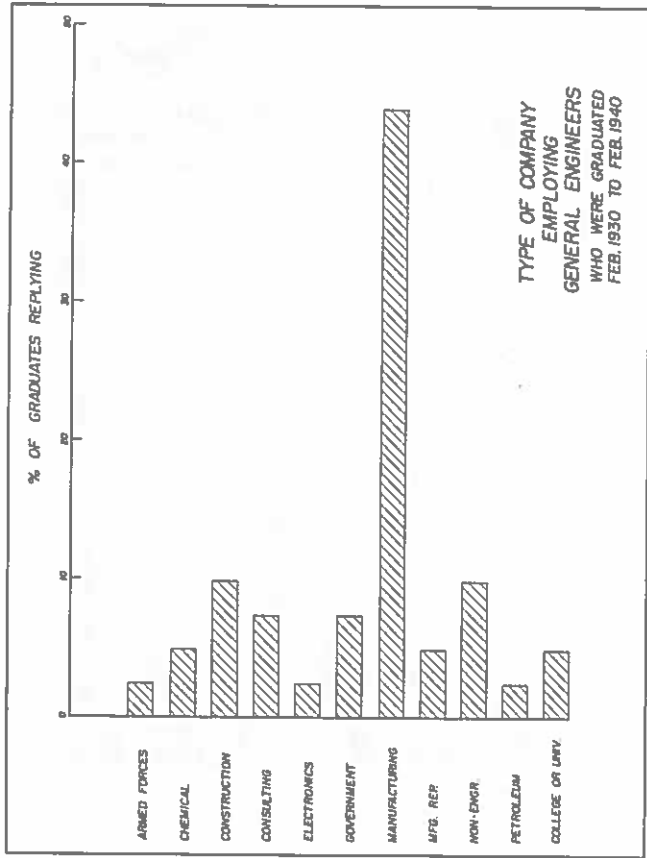
uates in industry between 20 and 30 years, then climbs to a whopping 51 percent among those out of school 30 to 37 years. We feel this is a real tribute to the caliber of men taking the G. E. curriculum and to the quality of the curriculum itself. "Take G. E. and you have a 50-50 chance of owning the joint before you retire."

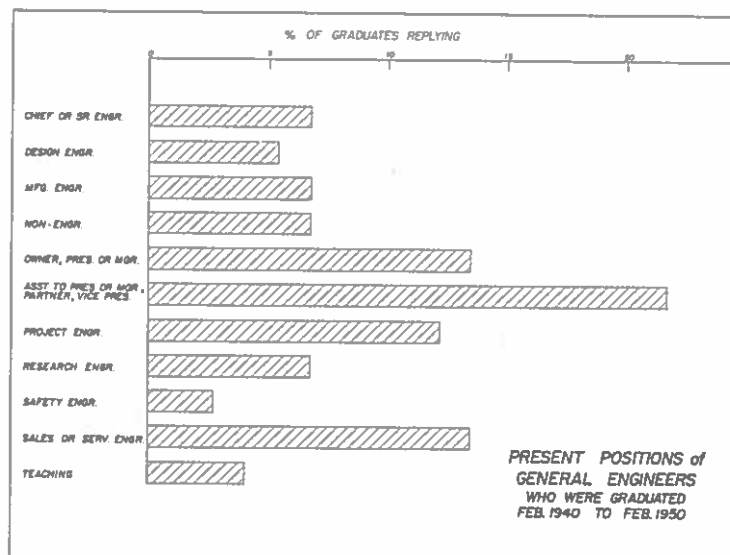
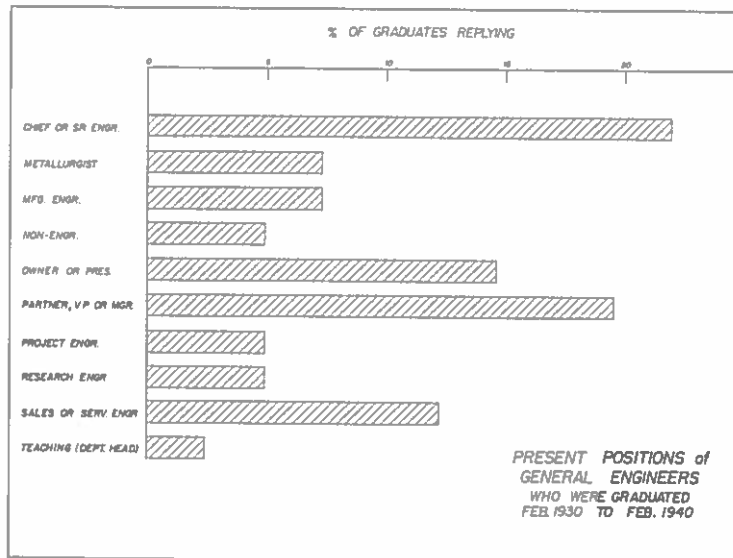
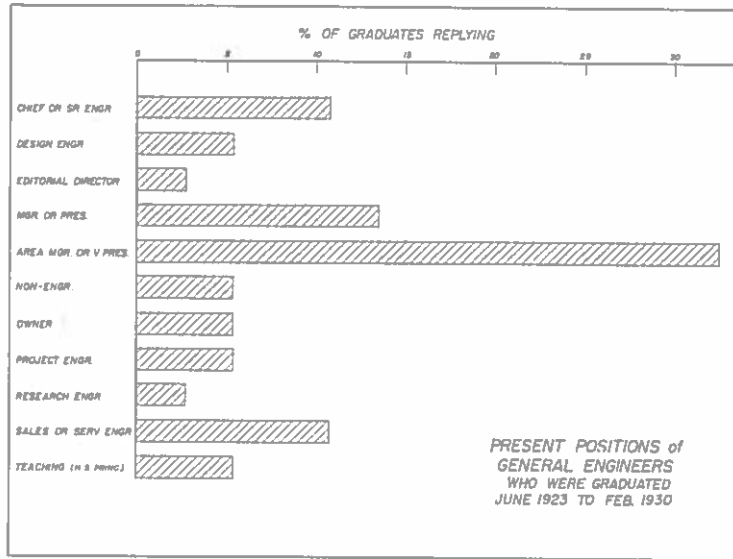
Two other facts were pleasant for us to learn. In each group of grads a substantial number proceeded with additional study and received advanced degrees. The percent varied from 10 to the high of 25 percent of the most recent graduates who have received or are studying for advanced degrees. This is further evidence of the fundamental soundness, with flexibility, of the G.E. curriculum over the years and now. Apparently, G.E.'s feel the same way, as an overwhelming 85 to 90 percent of those answering would take G.E. again if they were starting over. This, we feel is the best and ultimate evidence of having met the needs of the large number of G.E.'s during the years since 1923. In short we feel we've been getting the job done pretty well, and we'll continue to do so to the best of our ability in the future.

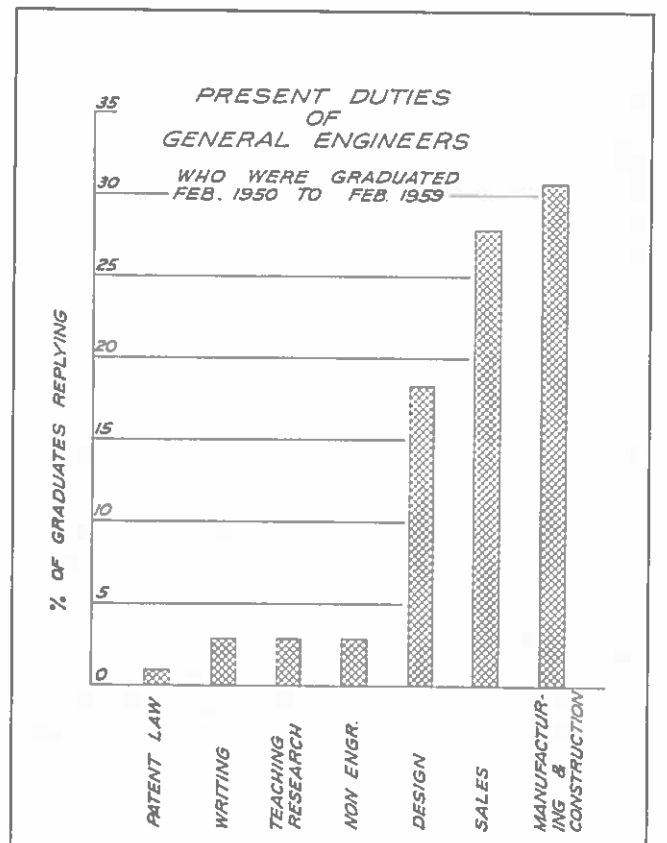
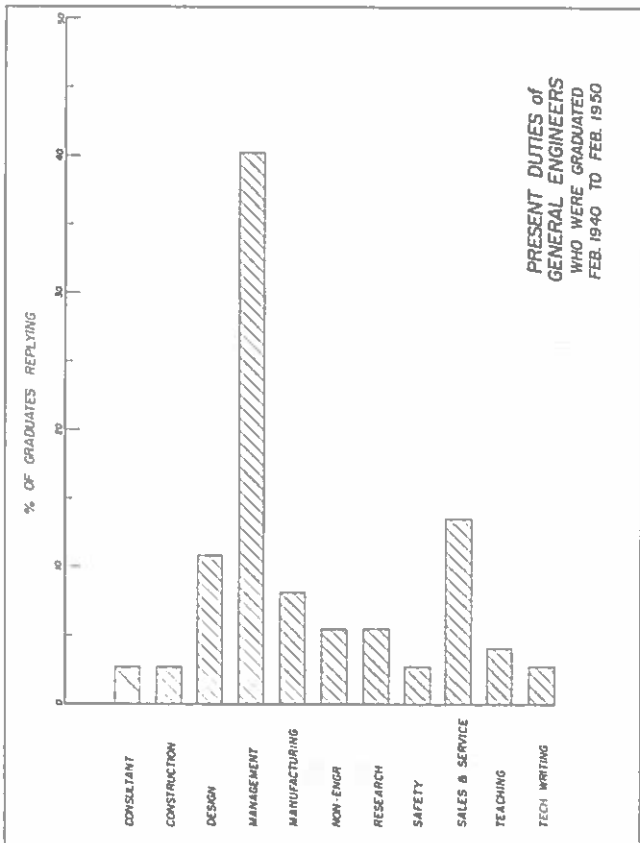
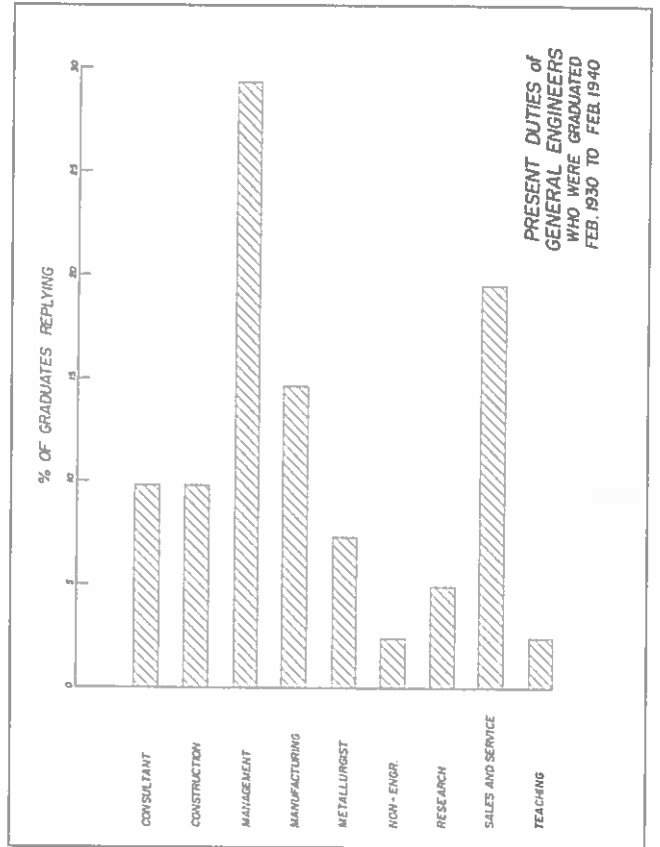
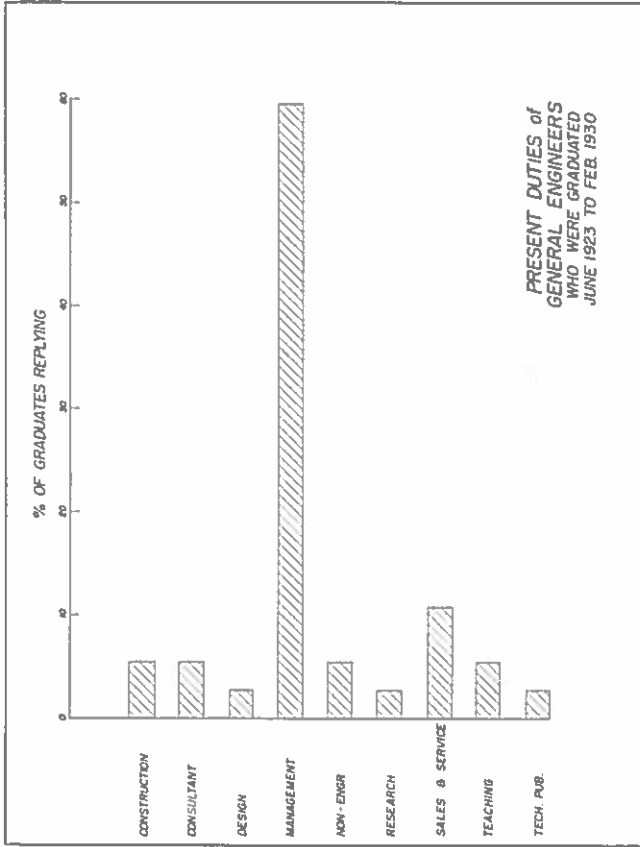
JOB OPPORTUNITY

Word has been received from Ralph H. Vuylsteke, '50, that the city of Freeport has a position open for an engineer in the Water Department, and would gladly consider a man with a G.E. degree who has had four or more years experience. For further information, write Mr. R. H. Vuylsteke, Water Department, City of Freeport, 230 West Stephenson Street, Freeport, Illinois.









SUMMER INSTITUTE
IN
SCIENCE AND ENGINEERING

To stimulate a greater number of the nation's talented youth to follow a career in science and engineering, the National Science Foundation is supporting a series of summer institute programs. The G.E. Department is conducting such a program for high school students whose interests, backgrounds, and capabilities lie in engineering and science. The program will commence June 13 and will be concluded on July 22.

High-standing students, ordinarily in the upper ten percent of their classes, who will be high school seniors in the fall of 1960 are eligible for the current program. Criteria for selection will include general academic standing, proficiency in science and mathematics, extra-curricular activities and interests, and recommendations of high school teachers and principals. Both boys and girls are eligible. This summer there will be 40 students; 31 boys and 9 girls.

The institute will consist of six weeks devoted to the study of past achievements, current research and practice, and future needs of science and engineering.

There will be lecture sessions devoted to the development of the philosophy of science and to applications of the scientific method. Historical examples of scientific discoveries, inventions, and engineering works will be used to show their impact on civilization.

Various laboratories will be visited to observe actual research in progress, with discussions by leading personnel in their respective fields. Experiments will also be conducted by the participants to familiarize themselves with typical patterns of college level studies.

Experimental data collected by the students from the various laboratories will

be plotted and evaluated. Typical engineering problems will be discussed and solved with student participation. Participants will be encouraged to undertake individual problems which will develop initiative and stimulate creative thinking.

Members of the research and instructional staff at the University of Illinois will present lectures and demonstrations in their fields. Distinguished visiting lecturers will also be brought to the campus for the purpose of enriching the program in special areas of engineering and science.

Operating costs of the institute have been provided by the National Science Foundation. It has been suggested that local organizations, such as P.T.A.'s, Kiwanis, or Rotary, may be willing to sponsor participants from their own communities.

Some industrial concerns may wish to sponsor students or possibly underwrite an entire institute. It is hoped these programs may be conducted in future summers. Give us your reaction to such a plan.

HOW ABOUT THE ADDRESS?

The addresses we are using are those supplied by our Alumni Association. We know some are in error, so please send us your current mailing address.

3rd INDUSTRY SEMINAR HELD

This spring the G.E. Department again conducted a seminar for industry, the topic this year being "Aids In Design Room Management". The two-day meeting, April 28 and 29, was attended by 31 representatives from industry. Papers presented included:

"Use of Drawings in the Design of Printed Circuits." D. Udell, Magnavox Co.

"Use of Models as an Aid in Design and Construction in a Process Industry." E. L. Dewey, Procter & Gamble Co.

"Improving Your Managerial Effectiveness." Dr. N. C. Olson, Western Illinois University.

"Auditing Drafting Work and Management." C.H. Bayer, General Electric Co.

"Present and Future Use of Machines in Connection with Engineering Drawings." T.J. Moffett, Convair Division of General Dynamics Corporation.

"The Automation Approach Through Numerical Control." R.K. Sedgwick, Kearney and Trecker Corporation.

"Statistical Control of Tolerance." Arthur Bender, Delco-Remy Division of General Motors Corporation.

After each paper there was time for a question and answer session which was very profitable to all. Similarly, coffee breaks, luncheons, and dinners presented further opportunity for discussion as well as fellowship among those who attended the seminar.

We have a limited supply of some of the papers presented, which we will gladly send upon request. When the supply is exhausted, we will refer your request to the author.

Perhaps some of you G. E. grads and other personnel from your companies may be interested in attending future seminars, which will be held each spring. Look for the announcements in the various engineering journals or contact the G.E. Department for information.

If you have an idea for a paper or a topic for a future seminar, let us know. Special Seminars for one company or one industry are often held, so make your wishes known in this regard.

NEW G.E. DESIGN COURSES

Work is continuing on the development of the new series of design courses to be offered by the GE Department and mentioned in last year's News Letter. The first of the six courses was offered this spring. Course outlines for the others will be submitted for approval early this fall, and one of the subsequent courses will be added each semester until the entire sequence is being offered.

Although creating and giving birth to the series is a large and lengthy assignment, the Design Committee is quite far along in its work. Our purpose is to offer a sequence integrating the fundamental ideas and concepts, procedures, and approaches involved in all engineering design problems. This requires much culling, reworking, and integrating of material from the various disciplines within engineering. For General Engineers whose tasks may be quite varied, we feel the final result will be a very worthwhile design sequence.

ANOTHER NEWS LETTER NEXT FALL