# ENGINEERING AND SCIENCE

monthly



Vol. VIII, No. 8

August, 1945

## The Month in Focus

### **Technical Employment**

WITH the surrender of the Japanese there are likely to be many employment changes among technically trained men. Those who have been on war research and production activities of known temporary character may well be wondering what the future has in store for them. While a crystal ball has not been developed by which such a question can be answered, an estimate of the situation may be of some value.

During the past four years there has been a constantly decreasing supply of technically trained men with a constantly increasing demand. At the time hostilities ended in Europe, some of the technical personnel began to inquire about changes of position in the hope of lining up work that would provide postwar employment. A rather small number of these individuals were successful. but on the whole regulations prohibited such transfers. With the cancellations of contracts, the situation is changed markedly. The staffs of industrial concerns are reduced somewhat in proportion to the decreased business. In many cases the men with the most experience and possibly efficiency are retained to carry the burden of reconversion or the development of new designs. Those who have been on war research projects will in the very near future be seeking new and permanent employment since their work was known at the beginning to be for the duration of the war. Men who have served under these conditions deserve honor.

At present and probably for several months to come, industrial and research organizations will be very busy in reestablishing themselves on a peacetime basis. During this period the demand for technically trained people will undoubtedly continue. The supply will be somewhat greater than heretofore and the demand may be somewhat less. However, there will probably not be enough personnel to fill all of the requests. Those who are picayunish may require a lengthy period before finding the type of position they are especially looking for. The salary situation may not be quite as attractive as it has been in the past few years and some may be very much disappointed in the result of their search for the ideal position.

After the period of early readjustment, the men of more recent technical training will be available. Those

returning from service either will have completed their college training or will have completed some further training for the purpose of getting back into the technical field. It would appear that positions will be available for these men whose places will have been taken temporarily by older men who should be doing more advanced work. A recent survey made by the California Institute of Technology seems to indicate that a rather good proportion of the men who have been in service will go further with their formal education before returning to normal employment. A very large portion of those service men whose technical education was halted by their entry into the armed services are planning to continue with their college training. This all seems to give further strength to a moderately optimistic view of the employment situation for technically trained men.

Possibly what has been said here is too optimistic because the greatest demand seems to be for younger men. In view of the immediate unavailability of men less than 26 years of age, these positions must be filled by older men having more experience than the job may require. This situation may cause considerable difficulty for men who are in the age bracket of 26 to 30. Naturally, the whole situation will depend upon the character of the recovery to peacetime business. Let us hope that the experts are correct when they say that business will not be poorer than in 1939.

#### Technical or Vocational?

Many who have been and are actively participating in military operations have become for the first time more closely associated with activities involving technical skill. For many men, these associations have provided a real aptitude test whereby they have found that they do or do not possess a natural ability and liking for some technical skill. Previously, some of these men did not have the opportunity of testing their technical ability. Because of circumstances, they were forced into training along certain lines. Some were not adapted to certain fields and were transferred into other lines. Probably the largest number of these men possessed a high-school education upon entering military service;

(Cantinued on Page 16)

found. For example, 415 requests for full-time services were received, many of them for more than one man, but only 18 men were placed. This is a ratio of at least 25 positions per man placed. In addition, 89 men, mostly students, were placed in part-time jobs. You should have received a questionnaire recently, a copy of which was sent to all alumni and students on leave whose addresses we knew. It may interest you that about 1,000 of these have been returned, 300 by alumni in military services, 200 by students on leave from the Institute, and 500 from civilian alumni. These questionnaires were sent out to aid the Institute in better serving its students and graduates and to aid the Placement Service in being of maximum benefit to alumni.

You may recall that we said a year ago that the subject of the amount of annual dues and of Life Memberships would be studied with a view to increasing them if it appeared that doing so would benefit the members. The finance committee, consisting of our treasurer, Karl Hegardt, our vice-president, Earle Burt, and Henry Freeman and Al Hall studied this subject and found that our dues are lower than those of any other alumni association on which information was available. They recommended, however, and your Board approved, that dues not be raised this year. The chief reason for raising the dues is the expense of Engineering and Science Monthly. However, this expense has been kept within our budget, and we have some reason to believe that Engineering and Science will more nearly pay its way as it becomes more mature in its comparatively new form. We still have a job to do, however, to reach our goal of advertising income. From all of you who are in positions where you buy, specify, or recommend advertised goods or materials, we here and now solicit letters stating what your duties are and that you read Engineering and Science regularly. Such letters will help in getting more advertising and thus allow us to make the periodical larger and better. Will you please address such letters to Engineering and Science in care of the Institute.

Our membership now is about 1,485, including 227 Life Members, as compared with 1,396, including 154 Life Members, last year. Although this is a small increase, your Board of Directors feel that the increase would be greater if we would all help in getting new members. Our ratio of members to total eligible is almost 30 per cent which, so far as we know, is higher than in any other alumni association. Earle Burt, as membership chairman this year, has planned what we believe will be an effective campaign for members during the next year. We hope you will support it.

Receipts during the year closed are estimated at \$4,250.00 and expenses at \$4,200.00, compared with \$3,855.15 receipts and \$4,250.24 expenses for the preceding year.

Our Life Membership Funds in perpetual trust have grown more than \$2,500 this year to a total of about \$13,000. The interest from this fund represents annual dues from Life Members and is used in meeting our general expenses. From the growth of the number of Life Members and the size of the Life Member Fund, you can see that an increasing number of our members have decided that Life Membership at \$50 is a bargain. We hope that such increase will continue.

In closing, I should like to ask you to interest inactive alumni in supporting and becoming active in the Association for, as you and other active members know, real pleasure is experienced in taking part in our activities where you have, as I have had, the companionship of and association with other Tech men. Furthermore, those who plan and carry out Association activities are en-

couraged and repaid by the appreciation expressed in your attendance at our functions, in your contribution of articles, letters, and news notes to *Engineering and Science*, and in your aid in carrying out the alumni program.

I thank you all for the opportunity to serve you. It has been a real pleasure.

Harry K. Farrar, President, Alumni Association.

#### MONTH IN FOCUS

(Continued from Page 3)

however, quite a number had started college courses of non-technical character.

The G. I. Bill of Rights entitles veterans to a certain amount of education under certain conditions. Many have availed themselves of this opportunity to continue their education, and many more will follow. With a taste of training in a technical skill sometimes comes the belief that aptitude along these lines is ample evidence of engineering or scientific ability. In some cases this may be true, but in the majority it is only an indication that the individual has an inherent ability to coordinate his hands and to practice certain techniques in a skillful manner.

Already many of these men have applied to engineering and scientific schools for admission. The colleges and universities must exert every possible effort to clarify the character of these technical fields for the applicant so that he may have warning of the type of thing he is getting into. The engineering schools must not lower their requirements for entrance or their standards of instruction to permit men who are best qualified for employment in the crafts of industry to pass through such courses only to find that they are below average engineers. Such action is unfair to those students who have the ability to hecome engineers and to the men who do not make good. It is definitely not a disgrace to be a skilled technician and not to have a college education. Industry badly needs the skillful hands of young men; several years have passed without the usual recruiting of apprentice groups.

Where are these men to be trained for industry? Who will give them the instruction required to convert their skill from military activities to industrial activities? Vocational schools have been established for this type of training. There are many good ones and many inferior ones. The good ones may not guarantee each student who enrolls a high salaried job at the end of the training period. The success of the student is a function of his own ability and the quality of instruction. Industry can help in this problem by putting its house in order so that it may give council and employment to skilled labor of the younger group which has been absent for so long. Engineers and scientists can do well to assist in clarifying the work in engineering and science to their non-technical friends so that a minimum of errors will be made in the training of veterans for useful and enjoyable work by which they can earn a respectable living in the American way.

#### UNIDENTIFIED CHECK

A check, No. 1733 dated June 5, in the amount of \$2.50 written on The Anglo California National Bank, Bakersfield, California, was sent to the Alumni office without signature. Will the alumnus who issued this check please contact the Alumni Office immediately?