ENGINEERING AND SCIENCE

Monthly



Vol. VI. No. II

November, 1943

The Month in Focus

Research Under Bureaucratic Control

bill was introduced in Congress that should be of interest to scientists and engineers. The Kilgore Bill (S. 702) is entitled "A bill to mobilize the scientific and technical resources of the Nation, to establish an Office of Scientific and Technical Mobilization, and for other purposes." This bill may gain headway under the guise of war legislation, but actually it intends to continue in effect in peacetime. An analysis of the bill may be found in the August 6 issue of the magazine, "Science."

The act is intended to eliminate delay and ineffectiveness in meeting urgent scientific and technical problems and to correlate and more effectively utilize the work of scientific personnel. The Office of Scientific and Technical Mobilization is by this act to have power to establish rules and regulations concerning research and development by any agency or establishment which includes government, educational, private or industrial efforts. The controlling board is to consist of six members and an administrator appointed by the President. On this board there is to be a representative of industry. agriculture, labor, the consuming public, and two members who are scientists or technologists. A scientist or technologist is defined in this act as an individual who has had no less than an aggregate of six months training or employment in any scientific or technical vocation. The rules and regulations prescribed by this board are to have the force and effect of law of Congress. If such an organization were to be set up it would greatly confuse the work of the National Research Council, an agency of the National Academy of Science which was established by the government as an advisory group on research matters of importance to the United States. At the present time the National Research Council is closely allied with the Office of Scientific Research and Development.

Many technical organizations already have voiced their opposition to enactment of any bill of this character. This measure is a further indication of the tendency to vest more rights in political bodies. During wartime, personal liberties must be sacrificed, but we must be certain that such waiver of liberty is not permanent.

While these pages should not be devoted to political discussion, they will be used to bring important facts to the attention of our readers when the subject affects technical personnel. This particular matter of the attempt to establish an Office of Scientific and Technical Mobilization has more fundamental significance than the bill itself. A principle is involved which leads to a general discussion on increasing tendency toward greater government control. In a recent address to the Army Meteorologists receiving diplomas from the Institute, Dr. Robert A. Millikan pointed out the dangers of this tendency toward centralized control especially in education and research. This address is printed in this issue with Dr. Millikan's permission.

Cooperative Research

In contrast to the previous discussion there is considerable evidence to show that in time of stress the fund of information owned by competitors can be and is being thrown into the common pot for the solution of technical problems. Dr. Zay Jeffries in the October issue of Metals and Alloys points out that in World War I the "know how" of an individual company was used by that company in assisting its customers, but in the present war a new broader cooperative spirit has developed. Industries actually have shared their production information with competitors, and further they have made their research information and their plant equipment available to all for the solution of other difficult problems. The committees under the War Production Board and the National Defense Research Committee are cooperative groups of industry and technological institutions who are striving to solve the technical problems for the Army, the Navy and industry. The work of these committees includes also the development of new methods and devices. Very little can be published at present of the work of these committees, but it can be said that they are getting the work done. In view of the great progress made with this cooperative arrangement, the question has been asked whether or not its success did not prove the advisability of socialized research in peacetime. Actually it proves the reverse. In peacetime institutional and industrial research operating individually have supplied the stimulus of competition which is essential in a free economy. In wartime they have shown themselves capable of effective cooperation to meet the needs of the emergency. Why then should we sacrifice a system which has demonstrated by its flexibility its capacity to answer the needs of any situation?