

EMERGENCY USE OF MANPOWER

A PROPOSAL

Some months ago, the National Security Resources Board asked that the American Chemical Society, the National Research Council, the Engineers' Joint Council, and the American Institute of Physics consider ways in which the skills and training of scientists and engineers might best be used in the event of large-scale mobilization. The NSRB, which has been given the responsibility for developing a realistic and effective manpower program in the national emergency, asked in particular that recommendations be made concerning a proposal that such men be reserved from military duty subject only to induction on the basis of military requirements for the specific requisitions in question.

The Institute accordingly called together a group of experienced advisers for the purpose of reviewing this aspect of the manpower problem and, on the basis of ideas brought out during the discussion, a reply was drafted and sent to the director of the manpower office of the NSRB, Robert L. Clark, who had written the original request. It should be pointed out that although this letter was sent with the approval of the Executive Committee of the Institute, the proposals which it contained were by no means represented as being those of the membership of the Institute as a whole.

The letter to Mr. Clark (dated November 8, 1950) is reproduced below in the hope that its publication here will stimulate further discussion among persons working in the physics field. It should be remarked that the proposal for the creation of a National Board of Scientific and Technological Personnel, to be composed of scientists or other persons actively involved in research activities, has been suggested as a least objectionable alternative to the present Selective Service procedures for drafting scientists, among others, into the Armed Forces. The critical question of whether this nation's scientific manpower can be adequate to meet the challenge of the years ahead will in large measure be answered by the steps which will or will not be taken immediately to insure the most effective use of people with advanced professional training during emergency situations.

"Dear Mr. Clark:

"The questions in your letter of September 7th, together with an appraisal of the international situation and the obligations it places on scientists in free nations, have led us to propose tentatively the early adoption under the *present* degree of mobilization of the following procedure. We say tentatively because we would wish to advocate it finally only if it proves to meet requirements in other fields of science and technology as well as physics, succeeds in attracting the endorsement of a great majority of scientists and technologists and clearly demonstrates to the public that scientists and technologists would, under the proposal, be accepting their full obligation to the national security.

"The proposal is that suitable regulations be ordered (or legislated if need be) to expand the concept of Selective Service to include Scientific and Technological Service as well as Military Service. That is, at the time of classification of a man by his Local Board, a decision would be

made, under regulations established by the President, whether this man should be ordered to Scientific or Technological Service instead of being placed in one of the existing classes for induction or deferment.

"It is suggested that any man of draft age who has achieved a certain degree of competence in science or technology (defined in terms of civil service ratings, academic degrees, experience or otherwise) be classified for Scientific or Technological Service. All men so classified would constitute a pool which we prefer not to call by the name of 'Reserve' or 'Corps', but merely as men classified by the Local Boards for such service. The numbers involved would constitute only a small percentage of all who are handled by Local Boards. Consequently the introduction of this new class would not seriously upset other mobilization plans. Local Boards should be permitted to credit to their quotas any men classified as here suggested.

"It would not seem pertinent to consider deferment from classification for Scientific or Technological Service on dependency grounds, or on physical grounds short of major handicaps like blindness. Furthermore, in view of the present and continuing urgent role of science and technology in building up the national strength for a possible future military emergency, it is proposed that *all* properly qualified men of draft age be placed at once in an active status under this category, rather than step-by-step according to the years of their birth.

"The result would be that under processes of the Selective Service System and action by the Local Board, essentially all men of *draft age* who possess suitable training and ability would appear at once in a pool subject to disposition in the national interest.

"This pool would constitute a national resource of great importance, a resource in all too short supply, a resource which must be conserved, reserved for essential uses only, and augmented and refined through all possible means. Obviously there must be established in the Government a board which we will call 'The National Board of Scientific and Technological Personnel' with the responsibility, and adequate power and staff, to insure the maximum use of the essential resources pooled by the above procedures.

"The powers of this National Board must be defined with great care to achieve the broad purpose of enhancing the scientific and technological strength of the Nation. One function would obviously be that of examining the evidence of professional training and competence of men classified to the pool by the Local Boards and the return of the unqualified to the Local Boards for reclassification.

"The primary function of the National Board, however, would be to see to it, by whatever means it found most effective, that those in the pool were engaged in activities of greatest importance to the national need, with due regard to the suitability of their individual talents, the latter factor being of unusual importance in areas of great specialization requiring long training such as commonly exist in scientific fields.

"The National Board should have the authority to assign

to the Armed Services suitable individuals from the pool to meet specific requisitions of the Armed Services for men needed for work requiring the types of training represented in the pool. The designation of individuals should be discussed with the Service concerned prior to decision.

"Men in the pool not assigned to the Armed Services would be held in approved civilian positions of employment or training for such periods of time as may be designated by the Board appropriate to each case. A continuing review of all cases would be provided. It is contemplated that employment not making full use of the scientific or technological qualifications of a man in the national interest would fail to be approved by the Board, so that such a man would be forced by the Board to transfer to an approved position or face induction into the Armed Services.

"An all-important part of the National Board's responsibility would be the maintenance of an adequate flow of scientists-in-training through professional (graduate) schools and other procedures to augment and improve the quality of the scientific and technological force of the United States against the possibility of all-out emergency, and the rehabilitation needs after such an emergency.

"The Board would have the power to refer any uncooperative individual, however qualified he might be, back to his Local Board for reclassification.

"The proposal thus far outlined has for clarity been confined to the pool of men of draft age. Actually we propose a much broader plan to ensure the effective employment of scientific and technological personnel in the national interest.

"The National Board we have in mind should continually inform itself concerning the distribution of scientific and technological personnel of all ages whether they are engaged in military, industrial, educational or other work, and if necessary bring about changes in this distribution as may be required by developments in the international situation. We believe that the Board could bring about desirable changes in the distribution of personnel *through its persuasive powers* and its connections with the scientific and technological societies, relying in the case of individuals not coming under Selective Service on their patriotism and good will rather than on absolute enforcement power. (In event of an emergency requiring national service legislation, scientific and technological personnel would obviously be included thereunder.)

"The National Board should be given whatever powers may prove necessary to enable it to assist in the completion of the National Science Register, now in preparation, through obtaining personnel information from employers, scientific societies, universities and colleges, or other sources to supplement the Register as compiled from questionnaires voluntarily returned by individuals. With such assistance available it would probably not be necessary to provide for the compulsory registration of individuals above draft age. The Board would have full access to the Register and could require such statistical analyses of the Nation's Scientific and Technological Personnel as it needed.

"In the matter of information about the kind of work any man is doing, the Board should have equal authority to obtain it from military and civilian sources. This does not contemplate delivery of classified information but only enough information to indicate to the Board that a job really requires the special proficiency of the holder. In short, the Board must have authority to audit the effectiveness of use of scientific and technological personnel wherever situated.

"Along with the power to designate individuals [of draft

age] for assignment, on requisition, to the Armed Services, the Board must, consistent with the over-all objectives of the plan, be empowered to require the release of specified numbers of Scientific and Technological personnel of specified qualification from the active or reserve forces of the Armed Services whenever it appears to the Board that such transfers are necessary to the maximum utilization of such personnel in the national interest. The selection of actual individuals for such transfer should be made in consultation between the Board and the Service concerned. Presumably no individual who originally volunteered for the Service he is in should be selected for transfer without his consent.

"Short of national service legislation, the Board could not require transfer from one to another organization outside of Government. It could, however, declare any of these to be nonessential or overstuffed. It could then withhold from such employment all Scientific and Technological Personnel of draft age and exert persuasion on older personnel to make transfers in the national interest. Stronger powers such as the fixing of 'employment ceilings' could be provided on a standby basis.

"We understand that responsibility for policy in regard to manpower rests with the National Security Resources Board, and presume that the NSRB would decide where in the Government the operating National Board that we suggest should be placed. It should be so placed as to give it the necessary authority with both civilian and military agencies.

"The Board's membership should reflect military, industrial, educational, and other interests, clearly related however to the scientific and technological aspects thereof. Its members should themselves be persons of scientific and technological background. This we wish to emphasize. The Board will have an extraordinarily difficult task. The most enlightened understanding of the nature of scientific and technological work and of the ideals and motivations inspiring those engaged in such work is of the essence.

"It is not clear to us in physics that a supporting regional organization is necessary to the operation of the proposed National Board. If such appears to be needed in other more densely populated fields, however, we will be glad to discuss the procedure with their representatives.

"In this letter we have proposed a plan for the present rather than for a time of large scale mobilization. The plan, being partly geared to the designated draft ages, will automatically reflect varying degrees of mobilization. If large scale mobilization occurs, we will have already provided under this plan the essential and appropriate machinery for full scale mobilization of scientists and technologists, and will have gained experience in dealing with some of the problems of such mobilization.

"We are aware of the recommendations which have been made by General Hershey's Advisory Committees to defer undergraduate students on the basis of their scholastic achievement and promise, but without regard to their early choice of field of study. We have reviewed the reasons for this choice of policy. We consider them good and urge that the recommendations be adopted. This should assure the necessary flow of preprofessional trainees for the program we have outlined in this letter.

"We are at your disposal for further consultation on the whole subject. We appreciate the cooperative implications of your letter and will not fail to reciprocate.

Sincerely yours,
(signed)
Henry A. Barton, Director
AMERICAN INSTITUTE OF PHYSICS"