News and views

SCIENTIFIC MANPOWER

NSRB ADVISORY GROUP CALLS FOR ACTION

On January 12th, the final report of the Scientific Manpower Advisory Committee of the National Security Resources Board was submitted to President Truman by NSRB Chairman W. Stuart Symington. The report, entitled *Plans for the Development and Use of Scientific Manpower,* is a three-part recommendation asking that a continuous flow of students be insured under the Universal Military Training and Service program, that a National Scientific Personnel Board be established, and that special provision be made for handling present reservists possessing scientific and technical skills.

Both the immediate build-up of strength and the nation's long-range mobilization potential will be jeopardized, the report points out, unless the available scientific manpower is judiciously distributed among those activities in which scientifically trained men can make the most effective contribution to the strength of the nation and unless a continuous flow of adequately trained manpower is maintained from colleges and universities. At present, it is emphasized, there are about 65,000 scientists and engineers of age 25 or less, and they represent less than one percent of the civilian male population in this draft age group. Last year's science and engineering graduates represented an all time high, the Committee observed, but unless suitable measures are taken, the flow of students receiving such training will be so sharply curtailed during the next two or three years as to be wholly inadequate to meet national needs.

To insure training of a sufficient quantity of students in critical scientific fields essential both to military and supporting civilian activities, the Committee recommended that when Universal Military Training and Service is in full operation, all physically fit youths should be inducted into service at age 18 (plus 17-year olds with parents' consent). Those who have not graduated from high school should be deferred until 19 or graduation, whichever is sooner. All of those inducted would have a basic training period of about four months, after which a relatively small number, who so elect and qualify, might enter colleges and universities as members of the Reserve Officers Training Corps or as members of a Reserve Specialists Training Corps. The great majority would serve an additional period of approximately 23 months in the armed forces and then be discharged with reserve status, free to enter employment or to continue their education.

In order to prevent any serious disruption of the flow of students during the transitional period of the above program, the report suggests as advisable the deferment in 1951 of all college sophomores and juniors and 75,000 screened freshmen in science, engineering, and premedical fields. The Committee's recommendations regarding the Reserve Specialists Training Corps call for the assignment of approximately 75,000 students for scientific and engineering study each year after they have completed their four months' basic training period. Those chosen would be selected on the basis of competitive examinations by a board of competent educators with both civilian and military representation. Members of the RSTC would be permitted to take training at any accredited institution of higher learning, and upon completing undergraduate training, a number of them would be selected for graduate training. All RSTC members would be liable to complete the remaining 23 months of the proposed 27-month period under Universal Military Services although liability for military service might be discharged by service in other activities essential to the national defense upon the recommendation of the National Scientific Personnel Board and a determination of need by the President.

The National Scientific Personnel Board, as recommended by the Committee, would include among its members outstanding scientists and engineers as well as representatives of education, industry, research institutions, the military, and other groups concerned with the manpower problem. Its function would be to determine available resources and to estimate the outstanding needs prevailing for scientific manpower. It would also be responsible for defining essential professional skills and for identifying persons possessing them, and would in general coordinate the nation's scientific effort in terms of securing the optimum distribution of available scientific manpower. As component elements of the NSPB, there would be created in appropriate regions of the country regional boards responsible for handling the individual cases of persons possessing critical scientific and engineering skills who are liable for military service. An individual in this category would be referred to the regional board by his local draft board, the person himself, his employer, or other interested parties. At the discretion of the regional scientific personnel board, the individual would then be assigned a deferred classification and recommendations regarding him would be made by the regional board to the National Scientific Personnel Board.

A significant portion of the Scientific Manpower Advisory Committee's report is devoted to the pressing question of how to insure the best use of large numbers of scientists and engineers who now possess military reserve status. The creation of a National Scientific Personnel Board does not solve this problem, the Committee emphasizes, particularly when their reserve status fails to reflect the technical skills many have developed since entering the reserve. The danger of loss is particularly acute, the report adds, if the present machinery of mobilization removes them from occupations which upon examination prove to be more valuable to national defense than their projected military assignments.

In this connection, the Committee recommended that the Department of Defense immediately establish at the highest level of authority special machinery capable of developing armed forces policies and programs by which the call-up of all reservists will be reconciled with the needs for scientific manpower for essential educational, research, and production activities. The report also asks that the Defense Department set up a program by which appeals from call-ups originating from reservists or their employers might be heard and acted upon and by which employing establishments can obtain clearance on reservists. Advanced undergraduates and graduates in critical fields who are in the military reserve constitute a similar problem, the report holds, and it asks that a policy be developed to act on appeals initiated by such students or by their institutions, and to assist in seeing that deferred students, when called up after completion of their studies, use their skills in a manner which will make the greatest contribution to national security.

The NSRB Scientific Manpower Advisory Committee

which authored the report has as its chairman Charles A. Thomas of the Monsanto Chemical Company; its other members are Chester I. Barnard, J. Douglas Brown, Vannevar Bush, Ralph Connor, Everette L. DeGolyer, Jacob L. Devers, Lee A. Du Bridge, Gordon Gray, Ben Moreell, J. C. Warner, and Harry A. Winne.

STUDY ABROAD

OVER 30,000 OPPORTUNITIES LISTED

More than 30,600 foreign study opportunities are reported in Volume III of *Study Abroad,* published annually by the United Nations Educational, Scientific and Cultural Organization, which lists awards for the 1950–51 academic year available from donors in 54 countries, from the dependencies and trust territories of five governments, and through the United Nations and its specialized agencies. The United States is represented in the handbook with a listing of over 12,750 study opportunities, about 1,600 granted by colleges and universities and over 2,250 from educational foundations and private organizations. The remainder are made possible by government grants through the Office of Educational Exchange of the Department of State, often in cooperation with private institutions. Approximately one-third of the reported grants provide opportunities for U. S. citizens to travel abroad; two-thirds are bringing people to the United States to study. The handbook tells qualified students where they may apply for study opportunities and provides information regarding qualifications, stipend rates, subjects, and countries of study.

An increase in the number of awards shown in the new volume is attributed by Unesco largely to additional opportunities reported under the Fulbright program, which are double the number reported last year; to the expansion of travel and study grants available in connection with the UN program of Technical Assistance; and to reports received for the first time from Austria, El Salvador, Haiti, Honduras, Panama, and Peru. Reports are also included from a number of international nongovernmental organizations such as the International Union of Students, the World Council of Churches, the International Federation of University Women, Rotary International, and the World's YWCA. Volume III lists 2,586 awards reported by this group.

Over 100 American universities and colleges offer fellowships or exchange opportunities for graduate study to students outside the United States. Undergraduate awards covering tuition, supplemented by partial or complete maintenance, are available from 55 colleges and universities, according to *Study Abroad,* while additional scholarships in the form of whole or partial tuition are offered by 67 U. S. institutions. 1,000 study opportunities are listed as available through UN, the Food and Agriculture Organization, the World Health Organization, and other UN agencies. Many are directly related to providing leadership in extending technical assistance to underdeveloped areas.

Emphasis on technical studies has been increased by extensive programs of Near Eastern and South Asian nations, including the government of Turkey. A number of awards to French colonial areas is reported, as is a large scale program for German nationals totalling close to 3,000 awards which has been sponsored by France, the United Kingdom, and the U. S. Unesco has listed approximately 50 fellowships directly financed by the international agency in fields directly related to programs of Unesco interest. Additional Unesco fellowships fall within the scope of Technical Assistance, while others have been donated by other agencies and Unesco has been asked for help in planning or administration.

Also announced in *Study Abroad,* Volume III, are the results of a study conducted by Unesco covering the exchange of teachers. A second survey was conducted by the International Labour Office on opportunities for apprentice training abroad; recommendations include increasing opportunities for the interchange of industrial and commercial workers, and for agricultural producers and workers. Unesco is continuing an inquiry initiated last year on the activities of youth and student organizations in Europe and other regions. The results of this survey are expected to appear in a *Study Abroad* supplement to be published in the spring, which will serve as a guide for young people seeking information concerning vacation study in foreign countries.

Copies of Volume III of *Study Abroad* are on sale from the Columbia University Press, 2960 Broadway, New York City, for $1.25.

RUTHERFORD MEMORIAL

LECTURES AND SCHOLARSHIPS PROPOSED

The Council of the Royal Society of Great Britain desires to create a suitable memorial to the late Lord Rutherford, and in this connection has circulated an appeal for financial help within the United Kingdom and the Commonwealth countries. Although the solicitations have been thus limited by the Council it is expected that contributions from any source will be welcome.

It has been suggested that the memorial take two forms: 1. Rutherford Scholarships tenable for three years, to be awarded to postgraduate students within the British Commonwealth for research in the natural sciences with a preference for experimental physics. A scholar will normally be required to carry out his research in an institution in some part of the British Commonwealth other than that in which he graduated; and 2. A Rutherford Memorial Lecture to be delivered at intervals at selected universities in the Commonwealth countries—at least one in three to be given in New Zealand, Lord Rutherford's birthplace.

Contributions may be sent to the Rutherford Memorial Committee, The Royal Society, Burlington House, London, W.1., England.

NEW COURSES

INFRARED SPECTROSCOPY AT MIT

Designed chiefly for those who wish to investigate the usefulness of infrared methods in their own research fields, a special course in infrared spectroscopy will be offered jointly by the Spectroscopy Laboratory and the Department of Chemistry at the Massachusetts Institute of Technology during the 1951 Summer Session. The course will be conducted by Professor Richard C. Lord, Director of the Spectroscopy Laboratory at MIT, and Dr. Foil A. Miller, who is in charge of the Spectroscopy Laboratory at Mellon Institute of Industrial Research.

Two identical one-week programs beginning July 9 and July 16 will be offered on the techniques and applications of infrared spectroscopy. Each will be divided equally between lectures and discussions in the morning and laboratory work in the afternoon. Lectures will cover the basic principles of infrared instrumentation and laboratory tech-