

atom for trade and commerce; (iii) to demonstrate that nuclear-powered ships are dependable and safe; (iv) to stimulate study of such problems as international liability and legal security against accidents and to win acceptance of nuclear ships in the world's ports; and (v) to give the Maritime Administration and the Atomic Energy Commission opportunity to assess the potential contributions of atomic power to American commerce.

## Seven NATO Allies To Get Atomic Data from U.S.

On 11 August the last of seven atomic cooperation pacts between the United States and certain of her NATO allies will go into effect. The agreement, through which Greece will receive from the United States training, equipment, and information which will enable her to use and to defend herself against nuclear weapons, is similar to other pacts the U.S. signed last May with Canada, Turkey, West Germany, and the Netherlands. Related agreements with a somewhat different purpose were made at the same time with Britain and France. These atomic cooperation agreements, which were among the last official actions of the late John Foster Dulles, automatically became effective during the last half of July. They had been signed 60 days earlier in Bonn, Ankara, and The Hague and in the capitals of other NATO countries, but the U.S. Congress, before approving them, made provision for a 2-month interim period to permit further deliberation on the part of its members. During the 60-day period the pacts could have been repudiated by the passage of a concurrent, or combined, House and Senate resolution. No such action was taken, and there was almost no debate on the pacts. Senator Hubert Humphrey (D-Minn.) raised questions about the agreements on the Senate floor, and five Representatives spoke against them in the House. There was, however, no organized opposition, and on the effective dates six of the pacts become operative. Four days from now the last one—the Greek-U.S. agreement, will be established.

Under the pacts, the U.S. will provide the signatory countries, other than Britain and France, with the means to train personnel in the use of atomic weapons and in defense measures; with information which will enable these countries to develop defense plans and

systems for delivering atomic weapons; and with nonnuclear components of atomic weapons systems, the "gear" that is used to attach a nuclear warhead to a missile or a plane. Under the agreement the U.S. will not furnish information on the design of the weapons themselves, or on the electronic devices that are incorporated in them.

The agreement with Britain differs significantly. In accepting the pact proposals Congress specified that information on design be given only to nations which had made "substantial progress" toward the manufacture of atomic weapons. Britain alone qualifies under this stipulation, and she will receive information on design, materials, and other matters relevant to bomb construction. France will receive information on constructing power plants for atomic submarines together with about half a ton of enriched uranium to fuel the prototype of such a plant.

### Spurred by Sputniks

The NATO pacts which have just become effective had their origin in the conferences that followed the launching of the first Soviet satellite, on 4 October 1957. At those conferences it was decided that "an enlarged Atlantic effort in scientific research and development" was necessary to meet the challenge of the sputniks. At a later meeting of the North Atlantic Council, in December 1957, it was further decided that atomic weapons should be stockpiled in certain NATO countries and that systems for delivering them should be developed in those countries.

At the time this decision was made, the laws of this country, specifically the Atomic Energy Act of 1954, prevented the United States from cooperating to the extent the NATO leaders felt necessary. This law was amended, and, with the fulfillment of the pact with Greece, the sharing of American atomic defense information with NATO allies has now become a reality.

### Williams Named for AEC Post

John Harry Williams, a physicist at the University of Minnesota, has been named by President Eisenhower to succeed Willard F. Libby as a member of the Atomic Energy Commission. Williams, who has been director of the commission's programs of basic research, will be the scientist on the five-man commission. It has become customary in the

last 12 years to have at least one scientist among the five commissioners. The nomination, which was announced 16 July, must be confirmed by the Senate. Quick, favorable action is expected because the nomination was informally approved by the members of the Joint Atomic Energy Committee of the Congress before the announcement was made.

Most of William's teaching and research career has been at the University of Minnesota, where he has been a professor of physics since 1946. During World War II he participated in the development of the atomic bomb at the Los Alamos Laboratory in New Mexico.

Williams was born in Asbestos Mines, Quebec, Canada, on 7 July 1908. He was graduated from high school in Kelowna, British Columbia, and received his B.A. degree from the University of British Columbia in 1928. As a teaching fellow at the University of California he received his master's degree in 1930, and as a Whiting fellow, received his Ph.D. in physics in 1931. From 1931 to 1933 he was a National Research fellow in physics at the University of Chicago. He joined the University of Minnesota as a physics instructor in 1933, became assistant professor in 1934, associate professor in 1937, and professor on his return from Los Alamos. In 1942 he became a naturalized citizen of the United States.

### Radioisotope Training Program

The Atomic Energy Commission has announced a new program which will give students of small undergraduate colleges opportunity for specialized training in the techniques of using radioisotopes. The program will utilize a 35-foot, bus-type mobile training laboratory, which can be moved to the college campus for presentation of a two-week, concentrated course on the basic techniques of handling radioisotopes. The mobile laboratory will be similar to one presented last year to the International Atomic Energy Agency by the United States.

The program is expected to begin in the fall of 1959, and initially the course will be available to colleges in the South and Southeast. The project is designed to serve in particular the smaller colleges whose nuclear facilities are limited.

Scientists and technicians from the Oak Ridge Institute of Nuclear Studies, which will administer the program for

the commission, will accompany the mobile radioisotope laboratory to the colleges to lecture and direct experimentation. The course will be a condensed version of a basic course which has been conducted at Oak Ridge by the institute since 1948, to train several thousand research workers from the United States and from many countries abroad.

### Loyalty Oath Provision of Education Act to Remain

The Senate, on 23 July, voted 49 to 42 to recommit to one of its committees a bill that would have amended the loyalty oath provision of the National Defense Education Act of 1958. The action effectively precludes any further action this session on the controversial oath and disclaimer clauses and any attempts to eliminate or modify them.

Passed last year, the National Defense Education Act requires that a student seeking an educational loan from the government must take the oath of allegiance and submit an affidavit, disclaiming membership in, or support of, any organization advocating illegal overthrow of the government. Objection to these provisions, which many feel imply that students are "particularly suspect," has been voiced by numerous academic groups. During debate on the issue, Senator John Kennedy (D-Mass.) argued for the repeal of both provisions. This proposal and others modifying the controversial provisions were defeated in the voting.

### Survey of Soviet Science Literature

A detailed survey of the present effort to supply United States scientists with Russian scientific literature was released 19 July by the National Science Foundation; it lists 76 Soviet journals now available in English. The survey reports on the sources of Soviet scientific literature, the availability of such literature in the United States, and the current translation programs of professional and academic groups and government agencies. Current methods of providing comprehensive covering of untranslated Russian material are also analyzed. Revised and expanded from an earlier edition, the survey, *Providing U.S. Scientists with Soviet Scientific Information*, was prepared by the foundation's Office of Science Information Service.

According to the survey, 2026 scien-

tific journals and serials are being published in the U.S.S.R. Since 1956, Soviet scientific publications have become increasingly available in the United States. They are listed in the *Monthly Index of Russian Accessions*, published by the Library of Congress and available from the Superintendent of Documents of the Government Printing Office. Many, although not all, publications of individual institutions in the Soviet Union are available on an exchange basis, the survey states. The processing department of the Library of Congress maintains a list of Soviet institutions with which the library exchanges publications on an exchange basis.

Translations of Soviet scientific journals are made available by three methods. (i) A large number of translations are made under grants by federal agencies to nonprofit scientific societies or research institutions. Most National Science Foundation grants are of this type. (ii) Other translations are produced under government contract with translating agencies. (iii) A number of publications are translated by individuals or private organizations, without governmental subsidy.

The two main translation depositories in the United States are listed as the Special Libraries Association Translation Center, located at the John Crerar Library in Chicago, which collects translations from nongovernment sources, and the Office of Technical Services, Technical Information Division, Department of Commerce, which collects from federal agencies and foreign sources.

All translations are listed, with abstracts, in *Technical Translations*, published bimonthly since January 1959 by the Department of Commerce. Translations of Russian scientific books are made by commercial publishers, by government agencies through contract or grants, or directly by the agencies themselves.

According to the survey, translation programs in the United States have tended to provide cover-to-cover translation of selected journals and abstracts rather than to select individual papers for translation. To provide full translations in broad subject fields has been found preferable, to guard against inadvertent omissions and to facilitate bibliographic handling. An economic study of this approach has been made, and the results show that even if only one paper in 40 is of general interest, it is cheaper to translate all 40 than to determine which one to translate.

### News Briefs

The extension of U.S. "ocean" ports as far inland as Duluth, Minn., by the opening of the St. Lawrence Seaway has presented new problems for plant, livestock, and meat regulatory workers of the U.S. Department of Agriculture. Discovery by plant quarantine inspectors of khapra beetles, pests that destroy stored grains, aboard a freighter putting in at Cleveland, Ohio, is an example of this new problem in combating foreign plant and animal pests. The tiny khapra beetle, a native of the Far East, has invaded the U.S. only in the Southwest. An intensive federal-state fumigation effort is in progress to eradicate it there. The Cleveland finding placed the pest unpleasantly close to the grain belt of the Midwest.

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An open-pool reactor, the first to be built in the Philippines, is under construction at the University of the Philippines at Diliman, Quezon City, 8 miles northeast of Manila. The reactor will produce 1000 thermal kilowatts initially, and its design will allow for expansion and production later of 3000 thermal kilowatts. It is scheduled to be placed in operation by the fall of 1960. Purchase of the reactor was made possible by a \$500,000 economic grant from the U.S. Atomic Energy Commission, made available under President Eisenhower's "Atoms for Peace" program.

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A report on the watershed problems of New England's forested areas has recently been published by the Northeastern Forest Experiment Station. The report, "A Problem Analysis and Program for Watershed-Management Research in the White Mountains of New Hampshire," describes the problems faced, the research needed, and the priorities for various study projects. Copies of the report are available from the Northeastern Forest Experiment Station, 102 Motors Avenue, Upper Darby, Pennsylvania.

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The John A. Hartford Foundation reports that during 1958 it appropriated \$5,585,066 for 66 new or continuing grants to medical institutions. The first formal report in the organization's 30-year history shows that in the 7 years following the founder's death in 1951, the foundation made grants and gifts totaling more than \$18 million. The report listed the foundation's assets at more than \$166 million at the start of this year.