Federal Radiation Council Established; States to Get New Responsibilities

The President has issued an executive order that establishes a Federal Radiation Council. This action centralizes the responsibility for providing general standards and guidance to executive agencies for their use in developing operating rules and regulations for radiological health protection. Members of the new council are the heads of the agencies most significantly involved with radiation: the Secretary of Health, Education and Welfare, the Chairman of the Atomic Energy Commission, the Secretary of Defense, and the Secretary of Commerce. The President's Special Assistant for Science and Technology will participate as an adviser in the discussions of the council.

In developing its advice to the President, the council will consult with appropriate agencies, such as the Departments of Labor and Agriculture, and will solicit the views of scientific bodies —for example, the National Committee on Radiation Protection and Measurement and various committees of the National Academy of Sciences. The Federal Radiation Council will also take steps designed to further the interagency coordination of measures for protection against radiation, and to that end will consult with all federal agencies that have radiological health responsibilities.

Establishment of the council follows recommendations made to the President by the Secretary of Health, Education, and Welfare, the Chairman of the Atomic Energy Commission, the Special Assistant to the President for Science and Technology, and the Director of the Bureau of the Budget.

In addition, the President has approved a series of recommendations to be carried out upon enactment of proposed legislation endorsed by the Administration (S.1987 and H.R.7214) under which certain regulatory responsibilities of the Atomic Energy Commission will be transferred to the states by agreement with the commission. The recommendations are that:

1) The AEC have the principal federal responsibility for preparing the states for the proposed transfer of certain of its regulatory responsibilities.

2) The training programs necessary for such transfer be financed and planned by the commission, and that in order to make maximum use of existing facilities and competence, such programs be conducted under cooperative arrangements between the AEC and the Department of Health, Education, and Welfare.

3) At the termination of this special training program, any training of state personnel be conducted within the continuing programs of the Department of Health, Education, and Welfare and other federal agencies.

4) The Department of Health, Education, and Welfare continue as the federal focal point for guidance and assistance to the states with respect to contamination by and biological effects from radiation sources not now under control of the AEC.

Overseas Research Council Announced in Britain

Great Britain has announced the formation of the Overseas Research Council, a coordinating agency for scientists both within and without the Commonwealth. The new organization, probably to be known as "Oresco," has been established primarily because of the pace of political change in Britain's overseas territories, according to the *Manchester Guardian*. The announcement of the project was overshadowed by the almost simultaneous announcement of Britain's space research program. The *Guardian* observes that the result of this timing was to "muffle the start of a project that may well prove more important to this country in the long run than the launching of a few satellites."

The Overseas Research Council was established to advise the Privy Council's newly formed Committee on Overseas Research, which consists of the Lord President of the Privy Council and the Secretaries of State for Commonwealth Relations, the Colonies, and Foreign Affairs. In a statement about the new council, Lord Hailsham, the Lord President, said:

"The United Kingdom Research Councils—Department of Scientific and Industrial Research, Medical Research Council, and Agricultural Research Council—are willing to provide advice and assistance on research matters falling within their respective fields to any Commonwealth country desiring such assistance, wherever this can be done within the funds available. The Overseas Research Council will provide for the co-ordination of this assistance, and for the formulation of general U.K. policy in this field. The Council will provide a central point to which Commonwealth Governments and research institutions can refer for advice and information, and will advise generally on U.K. co-operation in scientific research overseas.

"There are no geographical restrictions in the Council's terms of reference. Matters concerning scientific development in Colonial territories, in Commonwealth countries and in countries outside the Commonwealth, can equally be referred to it. Moreover, in promoting such development, the Council can look to possible collaboration between this country and other Commonwealth countries, countries outside the Commonwealth, such as the U.S.A., and international agencies (such as U.N. agencies and the charitable foundations)."

The members of the Council are: R. S. Aiken (chairman), vice chancellor, University of Birmingham, and chairman, Committee of Vice-Chancellors and Principals; Sir Jock Campbell, chairman, Booker Bros., McConnell & Company, Ltd., and chairman, Imperial College of Tropical Agriculture; Sir Charles Dodds, Courtauld professor of biochemistry, University of London, and director of Courtauld Institute of Biochemistry, Middlesex Hospital; Sir Harold Himsworth, secretary, Medical Research Council; Sir Joseph Hutchinson, professor of agriculture, Cambridge University; R. Lewthwaite, director of colonial medical research, Colonial Office; John McMichael, professor of medicine, University of London, and director, department of medicine, Postgraduate Medical School of London; Sir Harry Melville, secretary, Department of Scientific and Industrial Research; G. W. Nye, agricultural adviser to the Secretary of State for the Colonies; Sir Arnold Plant, Sir Ernest Cassel professor of commerce in the University of London at London School of Economics; Sir William Slater, secretary, Agricultural Research Council; H. G. Thornton, foreign secretary, Royal Society, and former head of the department of soil microbiology, Rothamsted; and Sir Solly Zuckerman, deputy chairman, Advisory Council on Scientific Policy.

Canadian Oceanographic Institute

Canada, which possesses the longest coastline of any country in the world, is establishing a $3-million oceanographic institute on the east coast, in Bedford Basin near Halifax. The new institute, which will be under the Department of

Mines and Technical Surveys, will take 5 years to complete. When in operation, it will have a staff of some 300 oceanographers, hydrographers, submarine geologists, and other scientific personnel, plus supporting staff, and an operating fleet of ten oceanographic vessels. A multi-million-dollar ship-building program is already under way to provide the fleet of vessels; it is expected that the first of these, the $7-million *C.G.S. Hudson,* will be commissioned in 1961.

The establishment of the institute, which is to be known as the Bedford Institute of Oceanography, was announced on 5 August by Paul Comtois, Minister of Mines and Technical Surveys. He reported that the Bedford facility will study the physical characteristics of the waters and underlying sea bed of Canada's Atlantic and subarctic coasts. The resultant data are needed for anti-submarine defenses and to ascertain the resource potential of the continental shelf in these regions.

The new organization will also permit the expansion of the Atlantic and subarctic sections of the Canadian Hydrographic Service. These sections will be moved from Ottawa to Bedford Basin, a reorganization that will greatly facilitate hydrographic operations in eastern and northern areas, where most of the coastline is uncharted. In addition, the institute will house the regional office of the Geological Survey of Canada.

Comtois pointed out that the project will mean the building up, near Dartmouth, of a strong center of marine science. There will be liaison with the Fisheries Research Board, the Atlantic Oceanographic Group (to be housed in the new institute), and with Dalhousie University, which is setting up—with the help of the National Research Council grant—an Institute of Oceanography for the training of scientists, many of whom will be employed by the new federal institute. The center will also be the headquarters of the polar group of oceanographers, hydrographers, geologists, and other scientists working in the icebound sections of the remote arctic. They will carry out a broad program of oceanographic research on the rim of the Arctic Basin.

Canada possesses little knowledge of the oceans which surround it. Except for a specialized program in oceanography by the Fishieries Research Board, conducted over the years, oceanography in Canada has been a neglected science, mainly because of the size and great expense of the job to be done.

Project Teepee Monitors Missile Shots and Upper Air Explosions

An electronic surveillance system, capable of detecting missile firings and explosions of nuclear weapons in the upper atmosphere, has been monitoring Soviet space activities for the past several months. The system, which is operated from bases within the continental U.S., can pick up such firings regardless of their point of origin. Missile launchings in this country and Russia have been successfully monitored by the new system, as well as some of the atomic weapon tests that were conducted in the Pacific before the suspension last October.

The Teepee system was developed by members of the Office of Naval Research working under W. J. Thaler. It is able to detect targets beyond the horizon by bouncing signals in a zig-zag pattern between the earth and the ionosphere. At each point of bounce there is some reflection of the signal back to its point of origin. This return, called backscatter, has certain characteristics as it appears on receiving screens at the transmitting-receiving station. If the radio signals encounter large volumes of hot gases, such as those created by rocket firings or atomic weapon tests in the upper atmosphere, the characteristics of the backscatter are significantly different. By analysis of these characteristics, operators at Teepee stations can identify the source of the gases. The new system is said be capable of distinguishing between large and small missiles and between successful and unsuccessful firings. It is also said to be able to discriminate between natural phenomena, such as lightning and aurora, and man-made disturbances.

The Teepee system, which Thaler believes can be much improved, complements other missile and test detection systems which are now in use, or planned, such as the Ballistic Missile Early Warning System, certain powerful radar sets in Turkey which can scan much of the Soviet Union, and a proposed satellite system which would use infrared sensors to detect launchings and blasts.

These systems, supported by the new Teepee technique, which is said to be able to detect more than 95 percent of all atmospheric weapons tests and rocket launchings, are believed by many observers to give the United States fairly thorough and current knowledge of Soviet progress in missile and weapons development.

Mueller Is Commerce Secretary

Frederick H. Mueller, who served as acting Secretary of Commerce following the resignation of Lewis L. Strauss after his long and unsuccessful confirmation fight, was given the oath of office for the top Commerce position on 10 August. He had been nominated to the cabinet post 21 July and was confirmed for the job in early August.

Mueller, who has been with the department since November 1955, has held the posts of Assistant Secretary for Domestic Affairs and Under Secretary. He was born in Grand Rapids, Mich., and was educated in the state, receiving his bachelor of science degree from Michigan State University in 1914.

As Secretary of Commerce, Mueller will have responsibility for many units of the department which carry on scientific work. Among these are the National Bureau of Standards, the Weather Bureau, and the U.S. Coast and Geodetic Survey.

Dismissed Arkansas Professors Receive Aid from Fellow Teachers

Four University of Arkansas professors, dismissed for refusing to file affidavits under a new Arkansas law, will receive the full support of the American Association of University Professors in finding posts elsewhere. William P. Fidler, AAUP General Secretary, has also announced that the professors will get significant financial assistance from the association's Academic Freedom Fund.

Act 10 of the Arkansas Statutes, passed at a special 1958 session, requires all publicly employed teachers to list the organizations to which they have belonged or to which they have contributed during the past 5 years. The act is generally regarded as an anti-NAACP measure, but the language covers churches, political parties, social clubs, and professional societies. A test case has been started, but a final legal verdict, especially if it involves constitutional questions pertaining to civil liberties, may be delayed.

Max Carr, Frederick G. Friedmann, John L. McKenney, and Thelma W. Taylor (whose fields are philosophy and music) base their refusal on principle. One of the teachers quotes Jefferson: "to suffer the civil magistrate to intrude his powers into the field of opinion and to restrain the profession or propagation of principles, on the supposition of their