

ment pay hearing costs, including the use of military counsel for the individual charged with doubtful loyalty.

The Attorney General's List. Among the dozen criteria which the commission suggests as bases for doubting an American's loyalty is membership in one of the 287 subversive organizations proscribed by the Attorney General's List. However, the commission recommends that the future listings be authorized only after an FBI investigation of the suspected organization and an opportunity for a hearing by examiners of the Central Security Office and the right of appeal to the Central Review Board.

The commission's report also points out that membership in proscribed organizations should be viewed in the light of the member's knowledge of the purposes of the organization. The commission further recommends that former Communists may be considered for clearance or employment if they have recanted and given convincing evidence that they no longer adhere to the aims of the Communist party or movement.

Refusal to testify on grounds of possible self-incrimination is also on the commission's list of criteria which may be considered in determining an American's loyalty. The recommendation is qualified, however, by the phrase, "unless the individual, after opportunity to do so, satisfactorily explains his refusal to testify."

Classified Documents. The report of the commission stresses the dangers to national security arising from overclassification of information which retards scientific and technologic progress and thus may deprive the nation of lead time that results from the free exchange of ideas. Consequently, the commission recommends abolishing the classification of "confidential" in the matter of documents and materials, pointing out that at present a defense contractor may clear a worker for access to "confidential" documents without reference to government security officers. "Secret" and "top-secret" classifications would be maintained. Documents previously classified "confidential" would be declassified gradually.

At present, only Government employees may be prosecuted for "willful disclosure to unauthorized persons" of classified information. The commission recommends enactment of a criminal statute that would provide penalties for anyone, in or out of the Government, who makes public the content of secret or top-secret documents. The proposed penalty is a fine of not more than \$10,000 or imprisonment of not more than 5 years, or both.

Another piece of legislation proposed by the commission would authorize the

introduction of wire-tapping evidence that is procured by Federal officers in the investigation of criminal violations of security laws only. The specific approval of the Attorney General would be required in every case, and the Attorney General would report semiannually to the President and the National Security Council, enumerating the authorizations granted and stating the nature of each offense involved.

Seaport Security. The commission urges strengthening the present port security program by requiring that Coast Guard officers be assigned to screening duties for seamen's or dock workers' clearance on a full-time basis, and that they be trained in security techniques. Other recommendations would give the Commandant of the Coast Guard full jurisdiction over the program; place hearings in the hands of examiners from the proposed Central Security Office to promote uniformity in standards and procedures; make Army, Navy, and Coast Guard clearances for port workers interchangeable; and give detailed notice of reasons to persons who are denied clearance.

A security program similar to that governing seamen and dock workers would be set up for civilian air transport employees, if the commission's recommendations are followed. At present, only employees of the Civil Aeronautics Administration, the Civil Aeronautics Board, or other Federal agencies involved in air transport are subject to clearance. The commission proposes that all crewmen on international flights be screened and that ground personnel be denied access to restricted areas of civilian airports unless cleared by the CAB. The new program would be administered by the Secretary of Commerce and the CAB.

The commission recommends that the present loyalty program covering Americans working for the United Nations or other international organizations should be continued and extended to those who are security risks for reasons other than doubtful loyalty to the United States.

Passports. The commission has proposed a number of important changes in the present use of passports and visas as instruments to protect the national security. One recommendation would transfer the control of visas, except those for diplomatic and official passports, from the Department of State to the Department of Justice, with specially trained officials of the Immigration Service attached to U.S. embassies and consulates abroad to administer the program. This would avoid the confusion of the present dual system under which an immigrant may be granted a visa by a U.S. consul abroad but is denied admission by an immigration officer at the

port of entry. The commission also recommends continuation of the registration and fingerprinting of aliens.

The commission urges Congressional clarification of the parole provisions of the Walter-McCarran Act. It also recommends withholding change in status of refugees already admitted under those provisions until they have all been adequately screened.

The commission believes that the practice of withholding a passport as a security measure should be continued, but that the standards and criteria for denying a passport should be clarified and fixed by legislation. The commission proposes that a single fingerprint be required on both application and passport, and that, in case a passport is refused, the reasons should be stated in writing as specifically as security permits.

The commission also recommends legislation making it a criminal offense for an American citizen to travel to any country in which his passport is declared to be invalid, or to refuse to surrender a passport that has been lawfully revoked.

U.N. Report on Uses of Nuclear Energy

A United Nations report on the prospects for the use of nuclear energy by the peoples of the world has recently been issued in a limited edition. The 250-page mimeographed document, perhaps the most comprehensive of its kind prepared so far, has been submitted to the U.N. Economic and Social Council, which began consideration of its contents in Geneva on 2 July.

The volume deals with applications of atomic energy to power production, industry, and agriculture, as well as with labor problems and technical training facilities associated with the use of atomic energy.

One section of the report summarizes the current and future nuclear power programs in Canada, France, Soviet Russia, the United Kingdom, and the United States. The material was collected through questionnaires sent to the various governments.

Borden Awards

A total of 1344 college and university students have received Borden Company Foundation scholarship awards and prizes over the past 13 years. This is reported in a new Borden Company Foundation directory which, for the first time, lists all the college and university scholarship awards and prizes sponsored by the foundation. There are 176 such awards made annually. These are admin-

istered by 113 different colleges and universities, located in 38 states. The awards are based on academic attainment, and most of the awards go to senior students who stand highest in their class for the first 3 years of college work.

Scott's Polar Rations

The Atomic Energy Commission plans to examine canned food that was taken to Antarctica in 1910 by the British explorer Capt. Robert F. Scott. Investigators will measure the background radiation in Capt. Scott's rations to see whether it is appreciably less than that of comparable foods today. The cans, which were stored at the British camp on Cape Evans in McMurdo Sound, were brought to this country by Sidney A. Schwartz, a physiologist who has been serving with the U.S. Navy in Antarctica.

The food is being tested with the permission of the British Government. Some of the rations have been turned over to Great Britain's Tin Research Institute at Greenford, where Peter Scott, son of the British explorer, recently tested samples and found them to be in excellent condition.

If Captain Scott had reached these few cans of food on his return march from the South Pole in 1912, he might have survived. As it was, he and two companions died of starvation and cold within 11 miles of a well-stocked depot.

Industry Sponsors \$10-Million Thermonuclear Research Program

The Texas Atomic Energy Research Foundation has announced the signing of a contract with General Atomic Division of General Dynamics Corporation for a 4-year, \$10-million jointly sponsored research program in the field of controlled thermonuclear reactions. The private electric utility companies operating in Texas recently organized the foundation to consolidate and make more effective their participation in the development of atomic energy in the United States.

The thermonuclear research will be carried out at General Atomic's new John Jay Hopkins Laboratory for Pure and Applied Science, San Diego, Calif. Research work is already under way. The staff of the laboratory now includes more than 150 scientists, engineers, and technicians.

The aim of the research program is an understanding of heavy hydrogen reactions at high temperatures under controlled conditions. In such fusion reactions large amounts of energy are released. The ultimate goal of controlled fusion research is to develop a system in which more energy is created than is

consumed in achieving control of the reaction.

This first large-scale private program, in common with those now being undertaken by the U.S. Atomic Energy Commission, aims first to demonstrate controlled thermonuclear energy conditions without immediate prospects for economical energy production from this source. If, ultimately, the latter can be achieved, there is promise of an almost unlimited energy source because of the great quantities of heavy hydrogen (deuterium) in the sea.

Indian Scholarships for Foreign Students

To promote cultural relations between India and foreign countries, the Government of India will award 140 scholarships to non-Indian students and students of Indian origin permanently domiciled in 50 foreign countries. The scholarships will be available for higher studies in India under the General Cultural Scholarships Scheme, 1958-59.

The awards will be made for studies in arts and humanities, sciences, agriculture, medicine, technology, education, law, commerce, forestry, veterinary science, engineering, and so forth, subject to the availability of seats in the various institutions in India. Preference will be given to postgraduate students. Recipients will be encouraged to learn at least one of the Indian languages, particularly Hindi.

The stipend has been set at 200 rupees per month. Students must pay their own travel expenses.

Applications for these scholarships are being invited by Indian Government representatives abroad, and scholarships will be awarded on their recommendations. All applications should, therefore, be made to appropriate authorities.

Zoological Nomenclature

The International Commission on Zoological Nomenclature has announced that, beginning 28 Dec., it will start voting on the following cases involving the possible use of its plenary powers for the purposes specified against each entry. Full details of these cases were published on 28 June in the *Bulletin of Zoological Nomenclature* (vol. 13, parts 6 and 7): (i) *musculus* Linnaeus, 1758 (*Turdus*), suppression; *iliacus* Linnaeus, 1758 (*Turdus*), validation of neotype for (Cl. Aves); (ii) *Oeobia* Hubner, [1825], and emendation *Oebia*, suppression (Cl. Insecta, Order Lepidoptera); (iii) *Indiana* Matthew, 1902, designation of type species for (Cl. Crustacea, Order Ostracoda); (iv) *Globigerinidae* Carpenter,

Parker and Jones, 1862, to be given precedence over *Orbulinidae* Schultze, 1854 (Cl. Rhizopoda, Order Foraminifera); (v) *Labeceras* Spath, 1925, designation of type species for (Cl. Cephalopoda, Order Ammonoidea); (vi) *Calycoceras* Hyatt, 1900, designation of type species for (Cl. Cephalopoda, Order Ammonoidea); (vii) *Hoplitoplacentoceras*, validation of, as from Paulcke, 1906, with *Hoplites plasticus* Paulcke, 1906, as type species (Cl. Cephalopoda, Order Ammonoidea); (viii) *Kotoceras* Kobayashi, 1934 (Order Nautiloidea) and *Damesites* Matsumoto, 1942 (Order Ammonoidea), validation (Cl. Cephalopoda).

Proposals are also made for the adoption of *Declarations*: (i) clarifying the provisions of the "Code of Ethics," the procedure to be adopted when a specific name is published in an abbreviated form, and the status of names published in works written in Latin; (ii) determining the gender to be attributed to generic names with the terminations "-ides," "-ites" and "-oides." Comments should be sent as soon as possible in duplicate to the secretary to the commission, Francis Hemming, 28 Park Village East, Regent's Park, London, N.W.1.

Congo Apes Get Live Poliovirus

Strains of the live type of antipoliomyelitis vaccine from the United States are being tried out on a colony of captive chimpanzees in Lindi, 70 miles west of Stanleyville, Belgian Congo. The new project is being sponsored by the Medical Department of the Belgian Congo and Hilary Koprowski of the Wistar Institute, Philadelphia, Pa.

All chimpanzees in the colony are vaccinated with a living, nonvirulent type of one or more strains of the three types of poliomyelitis. About 2 or 3 months later the animals are inoculated with a virulent type of virus. Using graduated doses of the vaccine, the researchers are able to record both reactions and the minimum amount of vaccine necessary for immunity.

Meanwhile, the Health Department of the Congo is investigating the incidence of the disease among isolated indigenous tribesmen. Officials say that poliomyelitis is not a disease of civilization, as usually stated.

NSF Research Proposals

The Division of Biological and Medical Sciences of the National Science Foundation has announced that the next closing date for receipt of research proposals in the life sciences is 15 Sept. Proposals received before that date will be reviewed at the fall meetings of the