News of Science

European Manpower Mission

The Organization of European Economic Cooperation is sponsoring a survey of scientific manpower for its 16 member countries. Recognizing that an adequate supply of such manpower is the key to the future of Western Europe as a political, sociological, and economic entity, the OEEC's European Productivity Agency has organized a project to study the problem. During the next 6 weeks a small internationally representative group of specialists will visit the OEEC countries for discussions with governments, industrial institutions, private industry, and foundations. A national expert will accompany the group in each country to serve as a liaison man.

The project description proposed that the consultants assess the present situation and ascertain what future steps can be taken to (i) increase the training of scientists and technicians, (ii) attract more men and women into science, and (iii) create new systems of education more appropriate to current needs.

Dael Wolfle, executive officer of the AAAS and former director of the Commission on Human Resources and Advanced Training, is the leader of the team of scientific manpower specialists. Other members are L. Weil, professor of physics at the University of Grenoble; George S. Bosworth, director of technical personnel, recruitment, and training for the English Electric Company; and Toralf Hernes of the Norwegian Research Council for Technology and Sciences, rapporteur for the group. Six weeks after their return, these men will submit a report to the OEEC that will constitute the first step in the development of an extensive European program designed to meet collectively the need for a greatly increased supply of scientific manpower.

American Academy Grants

The American Academy of Arts and Sciences at its meeting in March reviewed 37 applications for grants from its Permanent Science Fund. Awards are made in support of research in any field of science whatsoever in amounts that ordinarily do not exceed $1500. Applications for grants to be made in the early fall should be filed *by 1 Sept.* on forms available from the Chairman, Permanent Science Fund Committee, American Academy of Arts and Sciences, 280 Newton St., Boston 46, Mass.

Special consideration will be given to projects on new frontiers of science; those that lie between, or include, two or more of the classical fields; and those proposed by investigators who may be on the threshold of investigational careers or who are handicapped by inadequate resources and facilities. The committee does not ordinarily approve grants for research the results of which constitute partial fulfillment of requirements for an academic degree.

Satellite Observing Test

The first nation-wide test alert for satellite observers was held on 17 May under the direction of the Smithsonian Astrophysical Observatory, headquarters of Project MOONWATCH in Cambridge, Mass. Nearly 80 teams of visual observers, comprising about 1600 members, participated in the practice session, which provided the first trial of procedures to be followed when the earth satellite is launched during the International Geophysical Year.

The primary goal of the test exercise was to evaluate observing and communication techniques and to determine the state of readiness of the individual stations throughout the continental United States. This was the first national satellite alert ever to be held, and represented the largest organized astronomical observation ever to be made in this country. Throughout the country the test began 30 minutes after local sunset and ended 90 minutes later. Each team leader reported the results of his team's observations to MOONWATCH headquarters by code; Smithsonian Astrophysical Observatory officials collected and evaluated this information as it was received.

Although the practice session was only for the continental United States, MOONWATCH teams are being organized in other parts of the world. There are teams in Honolulu, Hawaii; and on the three Pacific Islands of Wake, Truk, and Yap. Three teams are already registered in the Union of South Africa and several more are organizing there. Japan has 30 such visual observing teams. It is expected that 12 to 18 teams will be set up in South American countries, and there is organizational activity in the British Isles and Germany.

When the satellite is launched, position and time observations will be used to determine its orbit. The data will be fed into an electronic computer, which will calculate the predicted orbit. This information will then be transmitted to the 12 Smithsonian telescope-camera stations located at strategic points throughout the world. These cameras will make photographs from which precise measurements may be made and scientific conclusions deduced.

Texas Instruments British Subsidiary

Texas Instruments, Incorporated, electronics and geophysics firm in Dallas, Tex., has announced the formation of Texas Instruments, Limited, a wholly owned subsidiary to manufacture and sell semiconductor products in the United Kingdom. The new plant is now under construction in Bedford, 50 miles north of London. Both factory and offices will be contained in the 12,000-square-foot building that is scheduled for completion in June. Dudley Saward, a British citizen who has been associated with British European Airways, International Aeradio, and Barratt and Company, Ltd., has been appointed managing director of Texas Instruments, Limited.

Antarctic Manganese

An article for the *New York Times* by Walter Sullivan reports that a small vein of manganese silicate has been found in Antarctica. So far as can be determined, this is the first discovery of high-grade ore on that continent. The ore is in a rare form, known as tephroite, and was found on Clark Peninsula in Wilkes Land. The peninsula was visited for the first time in January of this year.

According to available records tephroite has been discovered in only three other places: Franklin, N.J.; Varmland, Sweden; and in the French Pyrenees. Brian H. Mason, curator of geology and mineralogy at the American Museum of Natural History, who identified the specimens, notes that in both Sweden and New Jersey tephroite is found in conjunction with extensive and valuable mineral deposits.

The ore has not been found in sufficient quantity in its three previously known locations to justify its being mined. Nevertheless it is a rich ore, bear-

ing from 60 to 70 percent manganese oxide.

Although the Antarctic Continent is far larger than Europe, no important mineral deposit has yet been discovered there. This is largely because of inaccessibility and because most of the continent is buried under an ice sheet that in places is more than 2 miles thick. Clark Peninsula lies on a part of the Antarctic coast from which the ice sheet has withdrawn, leaving about 100 square miles of land free from ice and snow.

Manganese has become a strategic metal because of its role in strengthening steel. The deposit on Clark Peninsula may not, of itself, be of commercial value, but it indicates that the region would be well worth exploring.

Wilkes Land lies in the sector claimed by Australia, although this claim is not recognized by the United States. A Soviet outpost has been established 265 miles to the west in an area known as Bunger's Oasis. The Australians, in recent months, have built a station still farther west, in the Vestfold Hills. These outposts were established for the International Geophysical Year and their stated objectives are nonpolitical.

The only overt rivalry is in the overlapping claims of Argentina, Britain, and Chile for Palmer Peninsula on the opposite side of the continent. This is a promising region because it appears to be a continuation of the Andes Mountains, which have enriched Bolivia with tin and Peru and Chile with copper.

Adolescent Sex Behavior

The American Social Hygiene Association will begin studies early this summer on sex behavior and venereal disease among adolescents. The first study, by the University of California in Los Angeles, probably will last a year. Martin Loeb, associate professor of social welfare, will direct the project, which is subsidized by the Mary Reynolds Babcock Foundation and the Child Welfare Foundation of the American Legion.

National Air Pollution Committee

Establishment of a National Advisory Committee on Community Air Pollution has been announced by the U.S. Public Health Service. The committee's first meeting will be held on 3 June in Washington. It will review the objectives, policies, and accomplishments of the program established by the USPHS under a 1955 Act of Congress and will make recommendations to the Surgeon General. The program has been basically one of research and technical assistance to states and communities attempting to cope with the growing problem of community air pollution. Membership of the Advisory Committee will consist of Surgeon General Leroy E. Burney as chairman and 12 members representing state and local air-pollution control agencies, universities, industry, professional associations, and private consulting firms.

Jackson Memorial Laboratory Alumni Activities

The Alumni Association of the Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Me., has announced a plan to encourage the research interests of students and facilitate their preparation for careers in biological and behavioral science. Two alumni scholarships will be awarded at the end of the summer. One will enable a summer student in the laboratory's 1957 college and secondary-school groups to return for an additional apprenticeship in research in 1958. The other will aid a research assistant employed by the laboratory to continue advanced scientific study at a recognized graduate school.

Another program, still under development, calls for the establishment of a roster of Alumni Science Advisers. These older alumni throughout the country who are professionally established will be available to offer career advice and information to younger student alumni who reside or study in nearby areas.

The Jackson Laboratory is believed to be the only institution of its kind with a formally organized alumni unit. Members of the alumni association have been associated with the laboratory in various capacities ranging from assistants and student apprentices to professional scientists.

Carnegie Expands

The Carnegie Institute of Technology has announced the start of a $24,350,000 building and development program. Of the total, $7 million will go toward an expansion of the faculty and an increase in faculty salaries, at the rate of $700,000 a year for 10 years.

Because the program will enlarge the College of Engineering and Science, another engineering and science building will be erected for $2 million. Among many other improvements, a library building will be built for $1.8 million.

The average yearly day-school enrollment at Carnegie is 3300 men and women. About 1800 students attend evening and summer sessions each year. To improve facilities for them, a campus activities center will be established for $2.3 million. This project includes housing for married graduate students.

Buffalo Master's Program

New programs leading to master's degrees in the natural sciences and in the social sciences have been established by the University of Buffalo Graduate School of Arts and Sciences. These programs are particularly designed for teachers, librarians, technicians and others who desire additional work in a broad area while meeting special professional requirements.

Fields from which the courses may be chosen for the master of science degree in the natural sciences are biology, geology, mathematics, physics, and chemistry. Among the various fields of study in the social sciences program are anthropology, economics, geography, psychology, and sociology.

The Scientist and the Politician

Roger Revelle of the Scripps Institution of Oceanography recently made the following comments in a talk about "The scientist and the politician":

"It seems to me that the political education of scientists is a relatively straightforward problem. It can be accomplished primarily through training in the humanities. The essence of politics is that it deals with particular problems, not with generalities, and with unique problems that are never exactly the same as those that have arisen before. . . . The scientist must learn that men do not behave reasonably but in accordance with the patterns of their culture, that the human mind is not a logical machine. . . .

"In carrying out their political tasks scientists need also a breadth of knowledge of science itself. One essential part of the political education of scientists must therefore be to avoid a too narrow specialization. The physicist must be taught something of biology and geology if he is to play his proper role in political society.

"As for the scientific education of the politician I feel myself on less certain ground. I am convinced that it is not sufficient or perhaps even useful to offer him a series of survey courses in various scientific fields. These will serve only to freeze his understanding at a particular stage in the advance of science. It is far more important, it seems to me, to teach the future politician something of the nature of scientific discovery, the difficulty of finding out the truth, the objectivity, imagination and selflessness that are required, the fact that major discoveries always lie close to the frontier of science and not far beyond it, that such discoveries cannot be hurried by increasing money or effort but that once they are made they ramify in many directions with almost explosive speed. The politi-