

avoid the financial reverses that the atomic power program, for example, has experienced. One of the principal strengths of space is that no vested interest is against it. Labor and industry are for it, since it means contracts and jobs; the farm interests are at worst indifferent to it, and educational interests are growing increasingly aware of its potential as a source of money. NASA officials readily concede that they have not been aloof from political realities in selecting sites for installations and in assigning contracts. Political considerations, they say, come last, but they are not absent. The \$90 million manned spacecraft center under construction near Houston sits next to the congressional district of Albert Thomas, who is chairman of the appropriations subcommittee that passes on NASA funds. The majority of NASA installations are in the south, where they are doing an invaluable job of upgrading the technological skills of long-neglected regions; they are also helping win the favor of a large bloc of congressmen who might tend to support a call for economy.—D. S. GREENBERG

Civil Defense: Administration Says Poll Shows Heavy Public Support

In one of its few pronouncements on civil defense in recent months, the Administration has released a public opinion poll which shows overwhelming support for the proposed community fallout shelter program.

The poll was designed for the Office of Civil Defense by Michigan State University and was conducted by Elmo Roper Associates. The findings conflict sharply with virtually every poll that congressmen have conducted among their constituents. A review of a dozen of these congressional polls shows that regardless of their wording and the political complexion of the recipients, the results were overwhelmingly against the fallout shelter program.

The Office of Civil Defense poll found 77 percent in favor of the Administration's program, which would provide matching funds for the construction of shelters in public buildings. The issue is moot at this point, since congressional action on the community shelter program has been sidetracked and is likely to remain so for the remainder of the session.—D.S.G.

Announcements

The National Bureau of Standards, in cooperation with universities in the Washington, D. C., area, has instituted a **work-study program** which will allow graduate students to complete courses for advanced degrees in science while employed by the bureau and earning 70 percent of a junior scientist's salary. Beginning in September, students with a B.S. degree in physics, chemistry, mathematics, or mechanical or electrical engineering, may work in an NBS laboratory 3 days and attend classes on alternate days; summer employment will be on a full-time basis. It is expected that the course work can be completed in 4 years, after which participants may complete thesis research at the bureau or the university.

Suitable part-time course programs are available in physics, chemistry, and mechanical engineering at Catholic University, and in physics at the University of Maryland. Payment of tuition and fees will be the responsibility of the participants. (Ruth B. Armsby, Personnel Division, NBS, Washington 25)

A 3-man **self-propelled deep sea vehicle**, capable of operating at a depth of 12,000 feet, will be built by Westinghouse Electric Corporation as its own laboratory facility for marine studies. Designed by Jacques-Yves Cousteau, director of the Institut Océanographique at Monaco and developer of the Aqualung, the 7-ton spherical vessel, to be called *Deepstar*, is 6 feet in diameter and has remotely controlled mechanical arms. The craft, capable of traveling about 3½ miles per hour over a range of 20 nautical miles, will rise and descend almost vertically. Changes in attitude will be effected by pumping mercury from one tank to another. The maximum period of submergence will be 24 hours, the effective life of the propulsion batteries.

The outer spherical portion of *Deepstar* will be fabricated and tested in Europe; final assembly, scheduled for completion in late 1963, will take place in the United States.

The Birla Institute of Technology, Ranchi, India, plans to establish a **rocketry department** to undertake research in the science and technology of rockets. A small two-stage rocket is scheduled to be built and launched **late** this year.

Australia's Commonwealth Scientific and Industrial Research Organization has announced plans to construct a **radio heliograph** to take detailed radio pictures of the sun. The instrument, financed with the assistance of a \$550,000 grant from the Ford Foundation, will consist of 100 saucer-shaped aerials, each measuring 42 feet in diameter, which will be arranged in a 2-mile-wide circle. Receivers and computers will combine the waves received by the dishes to give a motion picture of explosions and storms in the sun's atmosphere, and of accompanying radio flares that occur near sunspots.

Although the exact location of the instrument is yet to be decided, tentative plans call for construction at Parkes, N.S.W.

Grants, Fellowships, and Awards

Applications are being accepted for the 1963-64 Glorney-Raisbeck fellowship in the **medical sciences**, to be awarded for 1 year of research and study in any field of medicine or its allied sciences. The \$6000 fellowship is renewable for 2 years on a yearly basis. Applicants must have the M.D. degree, and should have an institutional appointment in the United States; preference will be given physicians from the New York area. Deadline: *1 December*. (Aims C. McGuinness, New York Academy of Medicine, 2 E. St., New York 29)

The State University of New York is offering two-year fellowships for post-residency research training in **psychiatry**, leading to the Doctor of Medical Science degree, available to M.D.'s who have completed 3 years of resident psychiatric training. Fellowships will amount to \$6000 for the first year and \$7000 for the second, and may be supplemented by stipends for special research or teaching.

Candidates who have completed only 2 years of residency will take the final year of residency at Kings County (N.Y.) Hospital concurrently with this program, receiving the regular third-year residency stipend in addition to the fellowships. Deadline for the 1963-64 academic year: *1 February 1963*. (Office of Admissions, State University of New York, Downstate Medical Center, 450 Clarkson Avenue, Brooklyn 3, New York)

Applications for postdoctoral fellowships in **oceanography** are being accepted by the Scripps Institution of Oceanography. Applicants must be prepared to undertake research in physical, chemical, or biological oceanography, or submarine geology or marine geophysics. Appointments are for 1 year, with the possibility of 1-year renewal; the stipend is \$6000, plus allowance for dependent children, to a maximum of \$7500, and an additional travel allowance. (Scripps Institution of Oceanography, La Jolla, Calif.)

Reports on research, critical reviews of literature, and theoretical papers in any biological or behavioral science bearing upon **child development** are being solicited for the monograph award of the Society for Research in Child Development. The winning work is to be published in the society's monograph series; the author will be invited to present a paper, based upon the monograph, to the biennial meeting of the society in the spring of 1963. Deadline for submission of manuscripts, in triplicate: *15 January*. (Roger G. Barker, Midwest Psychological Field Station, University of Kansas, Oskaloosa)

Publications

A catalog of **computer programs** written for PERT (Program Evaluation and Review Technique), Critical Path Method, and similar management systems is available free of charge. The catalog, described as including over 80 percent of all existing programs, will be continually updated as new programs are created. Most of the listed programs are available cost-free from the originating agency. (Catalog of Computer Programs for PERT, 8605 Cameron St., Silver Spring, Md.)

The U.S. Public Health Service has compiled a **Research Grants Index** listing all scientists supported through the PHS research-grant program. The 680-page volume contains cross-indexed subject headings, project titles, an appendix listing the scientists' names and addresses, and references to recent publications describing the projects. An updated version of the index is to be published each year. (Superintendent of Documents, Government Printing Office, Washington 25, D.C. \$4. Order PHS publication No. 925)

20 JULY 1962

Scientists in the News

William T. Lhamon, formerly chairman of the department of psychiatry, Baylor University, has become psychiatrist-in-chief of New York Hospital, director of the Payne Whitney Psychiatric Clinic, and chairman of the department of psychiatry at Cornell University Medical College, succeeding **Oscar Diethelm**, who retired.

John A. D. Cooper, associate dean and professor of biochemistry of Northwestern University Medical School, has been named editor of the *Journal of Medical Education*, to succeed **John Z. Bowers**, who is leaving for Japan on an Alan Gregg travel fellowship in medical education.

National Bureau of Standards appointments include:

Samuel E. Chappell, formerly of Pennsylvania State University, has joined the staff of the x-ray section.

Thomas Cessel James, formerly of Northwestern University, has joined the infrared spectroscopy section.

R. E. Krauss, former executive secretary of the agricultural board and Agricultural Research Institute, National Academy of Sciences—National Research Council, is now editor and research information specialist at the New York Agricultural Experiment Station, a unit of Cornell University.

Henry Mack Parrish, former medical director and director of medical education of the Marion County (Indiana) General Hospital, has been appointed associate professor of community health and medical practice at the University of Missouri.

George H. Wiedeman, of the New York Psychoanalytic Institute, has been appointed Marion E. Kenworthy professor of psychiatry at the New York School of Social Work of Columbia University.

Barry R. Norman, formerly with Pacific Semiconductors, has become reliability manager for Wyle Laboratories' West Coast Testing Division.

At the National Institutes of Health:

Louis J. Olivier has been given 2 years' leave of absence from the Laboratory of Parasitic Diseases to accept an appointment in the World Health

Organization's section of parasitic diseases, Geneva.

Herbert B. Nichols, information officer of the U.S. Geological Survey, has been appointed information officer for the Division of General Medical Sciences.

Harold Edelhoach, of the National Institute of Arthritic and Metabolic Diseases, has won the \$500 Van Meter prize of the American Thyroid Association for his paper on a new spectrophotometric technique for analyzing iodoamino acid residues in thyroglobulin.

Kenneth A. Simon and **Sjoerd L. Bonting**, of the National Institute of Neurological Diseases and Blindness, are joint recipients of the \$500 Fight-for-Sight Award presented by the National Council to Combat Blindness, New York.

Recent Deaths

Arthur Bloomfield, 74; professor emeritus of the Stanford University School of Medicine; 5 July.

Benjamin M. Gasul, 64; heart specialist and professor of pediatrics at the University of Illinois College of Medicine, and director and founder of the cardiophysiology departments at Hektoen Institute for Medical Research and County Children's Hospital, Chicago; 3 May.

William C. Hoad, 88; professor and founder of the sanitary engineering program at the University of Michigan; 2 July.

Clarence Marsh, 79; developer of the educational program of the Civilian Conservation Corps; 7 July.

Charles F. Mitchell, 86; former chief of staff and chief surgeon at Pennsylvania Hospital; 4 July.

Erratum: The announcement concerning postdoctoral fellowships at Woods Hole Marine Biological Laboratory [*Science* 136, 1109 (1962)] should have stated that a program has been inaugurated on the systematics and ecology of marine organisms of the Woods Hole region, and that fellowships are available in systematics *only*, not in ecology. The fellowships in systematics are open to all systematists, whether they have worked on marine organisms or not.

Erratum: The announcement regarding the American Academy of Arts and Sciences award [*Science* 137, 26 (1962)] should have stated that authors of discoveries or useful improvements of heat and light, not authors of publications on such discoveries or improvements, are eligible for the Rumford prize. Nominations should consist of a brief biography of the candidate, with reference to his pertinent publications.

Erratum: The general assembly of the International Union of Geodesy and Geophysics will be held at Berkeley, Calif., 19–31 August 1963, not 1962, as indicated in the list of forthcoming events in several recent issues.