in estimates made by the Department of Defense that a nationwide fallout shelter system might save between "25 and 65 million people in a wide range of hypothetical nuclear attacks," and it found itself, in the words of its chairman, Edward Hébert (D.-La.) unwilling to "play God" or to "pass judgment on the lives of tens of millions of people."

Despite the Armed Services subcommittee's change of heart, the adminisstration's new shelter program is still in the thick of the congressional forest and will not have an easy time finding its way out. The subcommittee's decision is important because the members are resolved to fight for it and because this is the first time civil defense has had such a cadre of informed congressional supporters. But even assuming that the subcommittee's influence, plus the administration's entreaties, leads to approval of the new authorization by the House and Senate, the way out of the maze of authorizing committees leads right to another maze of appropriations committees in both Houses.

Appropriations committees do not always act as if they were members of the same body that authorized particular expenditures, and this is especially true of civil defense in the House. Civil defense appropriations are doled out, not by the subcommittee that has jurisdiction over the armed services (although under Kennedy the Office of Civil Defense became part of the operations of the Pentagon), but by a subcommittee that deals with independent agencies. The chairman of that subcommittee, Representative Albert Thomas (D.-Tex.) is no friend of shelter construction. Only 3 months ago, as chairman of another appropriations subcommittee, he presided over the rejection of a supplemental budget request that would have enabled the Office of Civil Defense to continue, without interruption, its present program of stocking shelters. Between the House and the Senate the supplemental request for \$61.9 million got whittled down to \$15 million, and this put a crimp in civil defense activities. The difference, about \$46 million, has been added to the administration's current request, which now is \$346.7 million.

Thus, though the support of the Armed Services subcommittee gives civil defense something of a boost, it is not quite the same as having money in the pocket, and whether the appropriations subcommittee will find itself converted to civil defense is

a matter of serious doubt. Of the \$346.7 million requested, about \$149 million is for civil defense programs already in operation. Of the rest, the major portion, \$175 million, is for the new program of shelterdevelopment (Science, 7 June), under which the government would assist communities in adding shelter spaces to existing buildings and buildings under construction. An estimated 10 million shelter spaces would be produced this year under the program, in addition to the 70 million that the present effort has produced. The remainder of the request, about \$22 million, is in some ways the keystone of the program, for it is to be used to add shelter space to federal buildings, and civil defense officials feel that a clear demonstration of federal leadership will do a great deal to stimulate what has often seemed a lagging public interest in civil defense. Money was appropriated for shelters in government buildings last year, but a question arose as to whether such construction was legal and work was never begun. The new authorization would remove all doubts about legality; whether federal buildings will actually get their shelters depends on whether the appropriation follows.

The motto of the new civil defense program, as Secretary Pittman described it to the Armed Services subcommittee, can be summed up as "walk before we run." Civil defense is no longer to be the subject of "scare" speeches during international crises, as it was during the Berlin crisis in the summer of 1961, and it is not to be developed under a crash program such as the administration wanted to initiate last year. The new strategy is to take one step at a time, to keep pace with congressional and public sentiment. This year's program is designed to slide into a more extensive one (a fact that has not escaped the subcommittee's attention), but it will not automatically do so unless sanctioned by Congress. At the same time, under another provision of the current proposal, civil defense activities will be merged to some degree with existing state and community disaster relief programs, in a clear attempt to transfer fallout from a unique to a more general category of disaster. In sum, the administration's hope is that, as civil defense grows and becomes more flexible organizationally, it will also become more palatable emotionally.

-Elinor Langer

Announcements

Graham Phillips DuShane, 52; dean of graduate sciences at Vanderbilt University and former editor of *Science*, July 19.

Dr. DuShane last summer assumed the newly created administrative post at Vanderbilt, in which he was responsible for graduate research in the natural sciences, engineering, and medicine. He also served as head of the department of biology.

He became editor of *Science* and the *Scientific Monthly* in early 1956. The two publications were combined in 1958, and under his editorship circulation of *Science* increased sharply. Among the innovations he made was the introduction of articles reviewing current research in various fields.

A native of South Bend, Indiana, he was graduated from Wabash College in 1930 and received his doctorate from Yale in 1934. From 1936 to 1946 he taught at the University of Chicago and for the decade following was professor of biology at Stanford. He was recognized for his work in amphibian morphology, and at Stanford he is remembered for effective service on faculty committees on educational planning and curriculum.

He was a member of the American Society of Zoologists and the American Association of Anatomists and served on the advisory council of the American Cancer Society. He was a consultant to the life sciences panel of the President's Science Advisory Committee. A fellow of the AAAS, Dr. DuShane was en route to a meeting in Palo Alto of the association's commission on science education when he was stricken fatally with a heart attack in Los Angeles.

Investigators at the National Institutes of Health are requesting physicians' help in projects involving craniofacial malformations in infants and endocrine disorders. Scientists studying congenital malformations of the mouth and pharynx associated with respiration and feeding difficulty need young infants with Pierre Robin syndrome and hypoplasia of the mandible, ptosis of the tongue, and cleft palate. They also need cleft palate patients, aged 7 to 12; open bite patients aged 10 to 15; and children with micrognathia, early prognathism, and some types of facial asymmetries. Physicians and dentists who have patients suitable for these studies

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may contact Y. Tagaki, National Institute of Dental Research, Bethesda 14, Md.

Researchers working on the **endocrine studies** need children with disorders of sexual development, women with primary amenorrhea, untreated acromegalics, and men with breast cancer. Physicians interested in having their patients considered for these studies may contact M. B. Lipsett, National Cancer Institute, Bethesda 14, Md.

A permanent center for **marine biology** studies will be developed at the University of California's Bodega Marine Laboratory, under a \$1.1 million National Science Foundation grant. The award provides for construction of two laboratories designed mainly for teaching, about 25 laboratories for research projects, and specialized areas which include salt water and algae culture rooms. The new facility is scheduled to be operational by the middle of 1965. Cadet Hand, zoology professor at the university's Berkeley campus, will direct the Bodega Laboratory.

The University of Michigan's Survey Research Center (SRC) has formed an organization to conduct research in political behavior. Twenty-five U.S. universities are members of the Inter-University Consortium for Political Research, which will provide a collection of national election statistics. This collection includes opinion samplings, census materials, and congressional and political action data. The Consortium also plans a program for stimulation and communication of political science research, and for providing a facility to train political scientists in the techniques of behavorial science. Warren E. Miller, program director in the SRC, is the new organization's executive director.

Meeting Notes

"Land, Water and People" is the theme for the 19th meeting of the Soil Conservation Society of America, 25– 28 August, in Logan, Utah. Approximately 1500 U.S. and foreign conservation leaders are expected to attend. Symposia conducted during the meeting will feature important aspects of soil and water conservation, research, education, and action programs. (B. Frank, College of Forestry and Range Management, Colorado State University, Fort Collins) The Society of General Physiologists will present a symposium on the cellular function of **membrane transport**, at Woods Hole, Mass., 4–7 September. The meeting will center on the interrelationships of membrane transport with the other activities of the cell. (D. W. Bishop, Carnegie Institution of Washington, Baltimore, Md.)

The American Meteorological Society has scheduled its 44th annual meeting 29–31 January, in Los Angeles. Short papers are invited on a variety of subjects including mesoscale circulations, climatic change, planetary atmospheres, radiative transfer, numerical and probability forecasts, atmospheric pollutions, cloud physics, and new instrumentation. Deadline for submission of titles and abstracts: *3 September*. (A. Court, 17168 Septo St., Northridge, Calif.)

The first international conference on acarology will be held in Fort Collins, Colo., 2–7 September, sponsored by the National Institutes of Health and the National Science Foundation. The conference will cover systematics, soil ecology, medical and veterinary acarology, physiology-behavior-genetics, and acarology of agriculture and stored products. (T. A. Woolley, Dept. of Zoology, Colorado State University, Fort Collins)

The European Society for Biochemical Pharmacology has been formed, to "promote interdisciplinary knowledge in . . . biology and medicine, with special reference to the use of biochemical and allied methods for the investigation of pharmacological agents and their mode of action." Membership is open to scientists in biochemical pharmacology and related fields, but only those currently active in Europe may be officers. The first president is E. B. Chain, scientific director of the International Centre for General Biochemistry and Chemical Microbiology of the Instituto Superiore di Sanità, Rome, and professor of biochemistry, Imperial College of Science and Technology, London. Information on the society is available from the secretary, R. Paoletti, Institute of Pharmacology, University of Milan, Italy.

The University of Bristol, England, will be the site of a conference on surface behavior, 16–17 September, sponsored by the Institute of Physics and the Physical Society. The meeting will feature invited papers on surface adsorption, diffusion, and energy, and on macroscopic effects involving surfaces. (Administrative Assistant, The Society, 47 Belgrave Sq., London S.W.1)

The Institute of Electrical and Electronics Engineers professional technical group on vehicular communications plans its 14th national conference 5–6 December, in Dallas, Texas. Technical papers are invited on vehicular systems, equipment, and circuit design. Deadline for receipt of a 500-word abstract: 17 August. (J. Germain, Motorola, Inc., 4501 W. Augusta Blvd., Chicago 51, Ill.)

Approximately 30 papers will be presented during a symposium on laboratory shear testing of **soils**, scheduled 9–11 September in Ottawa, Canada. The topics to be discussed include theories, stress variation and pore pressures, test methods and new equipment, and test interpretation and errors. (C. B. Crawford, Soil Mechanics Sect., Div. of Building Research, National Research Council, Ottawa 7, Ont., Canada)

The International Union Against Cancer (UICC) conference is scheduled 9–13 September in Amsterdam, Netherlands. The meeting will cover cell regulation as related to the origin and behavior of cancer cells and the basic mechanisms of carcinogenesis. Papers will be presented in English only. (H. G. Kwa, UICC Cancer Conf., c/o Congresidienst Gemeente Amsterdam, 4, St. Agnietenstraat, Amsterdam-C., Netherlands)

Grants, Fellowships, and Awards

The National Science Foundation is offering approximately 65 postdoctoral fellowships in the physical, biological, and social sciences, mathematics, and engineering. They carry stipends of \$5500 per year, plus dependency allowances and limited travel allotments. Applicants must be U.S. citizens and hold a doctorate degree or the equivalent research training and experience. Recipients of the fellowships may engage in study and research at nonprofit American or foreign institutions. Deadline for receipt of applications: 3 September. (Fellowship Office, National Academy of Sciences-National Research Council, 2101 Constitution Ave., NW, Washington 25)

The Eastern National Park and Monument Association announces a grantin-aid program for **research in eastern U.S. national parks**. Grants are for study in history or natural history related to the interpretation, management, or development programs of the national parks in the East. (E. M. Riley, Director of Research, Colonial Williamsburg, Va.)

Applications are available at the National Institutes of Health for appointments as **clinical or research associate** in the NIH investigations programs starting in July 1965. Candidates must have their M.D. degrees and have started internship by this July; persons with more advanced training will also be considered. Deadline for receipt of applications: 15 September. (M. C. Brown, Chief, Clinical and Professional Education, Clinical Center, NIH, Bethesda 14, Md)

Asilomar, Calif., will be the site of an international symposium on hightemperature technology, scheduled for 8-11 September. The meeting will cover recent developments in measurements and devices, physics and chemistry of materials at high temperatures, and materials at high temperatures. Attendance is limited to 400. (T. D. Boyd, Dept. 493, Stanford Research Institute, Menlo Park, Calif.)

The Joseph P. Kennedy, Jr., Foundation is accepting nominations for its 1963 international awards in **mental retardation**. The prizes, from \$5000 to \$25,000, are offered in the general areas of scientific research, service, and leadership. In addition, up to \$50,000 will be awarded to aid current or proposed programs. Institutions, organizations, and individuals involved in work on mental retardation may submit nominations. Deadline: *1 August.* (International Awards, Joseph P. Kennedy, Jr., Foundation, 1413 K St., NW, Suite 306, Washington 5, D.C.)

Fellowships are available at the University of Puerto Rico for study in **tropical medicine**, **parasitology**, and **medical entomology**. Applicants must have a Ph.D. or M.D. degree and must desire training for work in tropical countries. The fellowships carry 1-year stipends of \$5000 to \$6000 and are renewable. (I. Fox, Dept. of Medical Zoology, School of Tropical Medicine, University of Puerto Rico, San Juan 22)

Scientists in the News

The following persons have been appointed to the advisory council of the National Institute of Child Health and Human Development:

Robert H. Alway, dean of the medical school, Stanford University.

Urie Bronfenbrenner, professor of psychology and child development and family relations, Cornell University.

Frederic G. Burke, professor of pediatrics, Georgetown University, Washington.

Robert E. Cooke, professor and director, department of pediatrics, Johns Hopkins University medical school.

Wilma T. Donahue, chairman and research psychologist, division of gerontology, Institute of Human Adjustment, University of Michigan.

Nicholas Hobbs, chairman, division of human development and guidance, George Peabody College for Teachers, Nashville, Tenn.

Roy G. Holly, vice chancellor for graduate and professional education and dean of the graduate college, University of Nebraska.

Albert Lansing, professor and chairman, department of anatomy, University of Pittsburgh medical school.

Millicent C. McIntosh, former president, Barnard College.

Florence Mahoney, Washington, D.C., active in local and national mental health activities.

Eunice M. Shriver, executive vice president, Joseph P. Kennedy, Jr., Foundation.

Claude Villee, professor of biological chemistry, Harvard medical school.

The new editor of the Journal of the Optical Society of America is David L. MacAdam, head of the image structure department in the physics division, Kodak Research Laboratories, Rochester, N.Y.

Michael B. Shimkin, retired associate director for field studies at the National Cancer Institute, has been named chief of cancer biology in the Fels Research Institute and professor of medicine, at Temple University.

Lawrence C. Weaver, head of biomedical research at Pitman-Moore Company, has received the 1963 American Pharmaceutical Association Foundation award in pharmacodynamics. The award carries a \$1000 honorarium, and is sponsored annually by Eli Lilly & Company. **S. Dillon Ripley, II**, has been named secretary of the Smithsonian Institution effective 1 January, to succeed Leonard Carmichael, who plans to retire. Ripley, 49, is director of the Peabody Museum of Natural History at Yale University and a professor in the biology department at the university. He is also president of the International Council for Bird Preservation.

The newly appointed chief of the Science and Technology division in the Library of Congress is **Dwight E. Gray**, formerly scientific liaison officer in the office of science information at the National Science Foundation. He will assume the position 19 August.

John E. Murdoch, of Princeton University, has been named associate professor of history of science at Harvard University.

Michael J. Pallansch, chemist at the U.S. Department of Agriculture, has received the Borden award in dairy manufacturing. The \$1000 award cites his research on changes in milk constituents during processing.

Richard A. Chapman, professor of plant pathology at the University of Kentucky, has been appointed head of the new department of plant pathology at the university.

Allan H. Smith, formerly professor of anthropology at Washington State University, has been appointed program director in the National Science Foundation's division of social sciences. Smith also is regional editor for the Ryukyu Islands and Micoronesia for *Asian Perspectives*, the journal of the Far-Eastern Prehistory Association.

William H. Knisely, chairman of the University of Kentucky's department of anatomy, has been named director of the Institute of Biology and Medicine at Michigan State University.

James E. Randall, former associate professor of biophysics, physiology, and electrical engineering at the University of Missouri, has been appointed professor of physiology at Northwestern University.

Jack S. Goldstein, associate professor of astrophysics at Brandeis University, Waltham, Mass., has been named to direct the newly established Astrophysics Institute at the school.