

While several different agencies could conceivably sponsor such field studies, only the Pentagon is in a position to predict where the major impacts of its procurement policies will occur in the future. Information about future changes in weapons schedules is classified, and not available outside the Pentagon. This not only handicaps outside scholars who might otherwise be encouraged to interest themselves in the field but even hampers the attempts of the Pentagon's economic adjustment advisory office to forewarn the Department of Labor.

Business Buries Its Head

What little work has been done has been concentrated on the effects of government's relationship with particular industries, but for the most part even here the Pentagon's attitude is to let business take care of itself—something most defense-dependent businesses have shown little inclination to do. The Pentagon's advice to its contractors has consistently been that they should turn their attention to the civilian market, to the 90 percent or so of the gross national product which is not related to defense. But while there has been some tendency among the big military supply industries to diversify their interests somewhat, there has been almost no serious talk of conversion, despite repeated urging from a variety of Pentagon and other government officers. Essentially, the Pentagon can do no more than try to stimulate businesses and communities. It is forbidden by law to award contracts or to create price differentials to relieve economic distress caused by changes in its procurement policies. As one Pentagon official put it, "we are not running a relief agency, and communities as well as businesses will have to look out for themselves."

This has been the general attitude of government on the question of its responsibility for solving problems caused by changes in government spending patterns. The Pentagon is planning to begin some broader research into the subject next year, and other agencies are becoming more alert to the problems, but though interest is growing, action is still far behind. It is safe to say that a lot of hard work remains to be done before President Johnson's new committee can hold intelligent, well-informed discussions, let alone plan for actual accommodation to the new developments in defense.

—ELINOR LANGER

Announcements

President Johnson has announced that the 1963 National Medal of Science will be presented to five persons at a special White House ceremony this month. The awards will be made to:

Luis Walter Alvarez, "for inspiring leadership in experimental high energy physics, continuing development of the bubble chamber, discovery of many states of elementary particles, and contributions to National defense." Alvarez, 52, is a physics professor and associate director of the University of California's Lawrence Radiation Laboratory.

Vannevar Bush, "for distinguished achievements in electrical engineering in the technology of computing machines, in the effective coupling of the physical and life sciences; and in mobilizing science, engineering and education in enduring ways in the service of the Nation." Bush, 73, during World War II was director of the Office of Scientific Research and Development, and Advisor to the President. He has been vice president and dean of engineering at M.I.T., and president of the Carnegie Institution of Washington.

John Robinson Pierce, "for outstanding contributions to communications theory, electron optics, and travelling wave tubes, and for analysis leading to world-wide radio communications using artificial earth satellites." Pierce, 53, is executive director of the Bell Telephone Laboratories research-communications principles and communications systems divisions.

Cornelius Bernardus van Niel, "for fundamental investigations of the comparative biochemistry of microorganisms, for studies of the basic mechanisms of photosynthesis, and for excellence as a teacher of many scientists." Van Niel, 66, is professor emeritus at Stanford's Hopkins Marine Station.

Norbert Wiener, "for marvellously versatile contributions, profoundly original, ranging within pure and applied mathematics, and penetrating boldly into the engineering and biological sciences." Wiener, 69, is professor emeritus of mathematics at M.I.T.

The National Medal of science was established by Congress last year, and is awarded by the President to persons "who in his judgment are deserving of special recognition by reason of their outstanding contributions to knowledge in the physical, biological, mathematical, or engineering sciences." Recom-

mendations for the awards are made by the 13-member President's Committee on the National Medal of Science. The late Theodore von Karman was the first recipient.

Two University of California geologists last week received the \$1000 AAAS Newcomb Cleveland Prize for the paper they presented during the 1962 AAAS meeting. **Jack Evernden**, a professor of geology, and **Garniss Curtis**, associate geology professor, at the university's Berkeley campus, received the award for their paper, "The dating of early man and his cultures by the potassium-argon method." It provided more precise information on the dates of the Late Tertiary and the Pleistocene eras.

The Newcomb Cleveland Prize, begun in 1923, is the oldest award offered by AAAS. It is given annually for a paper representing "an outstanding scientific contribution," and which was presented during the previous year's meeting.

Morris Rosenberg and **William J. McGuire** last week won the AAAS Socio-Psychological prize for their research on human attitudes. Each received a \$1000 honorarium.

Rosenberg, social science analyst at the National Institute of Mental Health, was cited for his paper "Society and the adolescent self-image," in which he describes the differences in self-esteem of high school juniors and seniors in varying social, cultural, and economic conditions. McGuire, in the department of social psychology at Columbia University, won the prize for his research on "Immunization against Persuasion," a study of the ways attitudes toward unquestioned beliefs are best reinforced.

The AAAS Socio-Psychological Prize is awarded annually for a "meritorious essay in socio-psychological inquiry," which "further the comprehension of the psychological-social-cultural behavior of human beings."

Grants, Fellowships, and Awards

Applications are being accepted for the S. F. Emmons fellowship in **economic geology**. Applicants must be qualified for graduate work, and must present a suitable topic for study. Application deadline: *1 February*. (C. H. Behre, Jr., Department of Geology, Columbia University, New York 27)



Among the recipients of the 1963 National Medal of Science will be (left to right) Luis Walter Alvarez, Vannevar Bush, John Robinson Pierce, and Norbert Wiener.

The American Museum of Natural History is accepting applications for the Ogden Mills fellowships for **anthropology research**. The fellowships carry a \$5000 stipend for a year's work, to begin about 1 September. There are no requirements as to age, degrees, or academic background, although preference will be given to recent Ph.D. recipients. Applicants should submit a *curriculum vitae*, a letter describing their research aims, and a proposed program for the fellowship year. Deadline for receipt of applications: *15 February*. (H. L. Shapiro, Department of Anthropology, American Museum of Natural History, New York 24)

Educational Testing Service is accepting applications for a new postdoctoral program in **personality research**, sponsored by the National Institute of Mental Health. The program provides two fellowships a year, each for a 2-year period. The stipends are \$6000 the first year, \$7000 the second. Further information is available from Dr. Samuel Messick, Personality Research Group, Educational Testing Service, Princeton, N.J.

The New England Institute for Medical Research is offering approximately 12 postdoctoral fellowships "for individuals interested in **fundamental research** without disciplinary limitations." The awards are open on a competitive basis to scholars in their first through fifth postdoctoral years who have training in physics, mathematics, electronics, biology, or medical science. Recipients may choose their own area and subject of research. The initial annual stipend is \$8000 for a first year postdoctoral fellow, with an additional \$500 for each postdoctoral year. The fellowships last 5 years, with annual salary increment of \$500, plus allowance for each de-

pendent. (J. H. Heller, Box 308, New England Institute for Medical Research, Ridgefield, Conn.)

Scientists in the News

Erwin Chargaff, professor of biochemistry at Columbia University, has been awarded the Charles-Leopold Mayer prize by the French Academy of Sciences. He received the 80,000-franc award (approximately \$16,000 in U.S. currency), for his research on nucleic acids.

Glenn T. Seaborg, chairman of the U.S. Atomic Energy Commission, has been named to receive the 1963 Franklin Medal, highest honor of the Franklin Institute, Philadelphia.

Paul B. Kannowski, associate professor of biology at the University of North Dakota, has been appointed head of the school's biology department.

The American Society of Plant Physiologists has given its 1963 Kettering award for excellence in photosynthesis to **William A. Arnold**, principal biologist at Oak Ridge National Laboratory. The award carries an honorarium of \$1000.

Alan Garen, associate professor of microbial genetics at the University of Pennsylvania, has been appointed professor of molecular biology at Yale University.

Walter E. Dahlke, head of the Solid State Group, Research Institute of Telefunken, Germany, plans to join Lehigh University as a visiting professor of electrical engineering. He will serve for a year, beginning with the 1964 spring semester.

The Chicago Medical School has appointed **Jack Metcalf** chairman of the pediatrics department. He will retain his position of chairman of pediatrics at Michael Reese Hospital. **Emanuel A. Friedman**, formerly associate professor of obstetrics and gynecology at Columbia's College of Physicians and Surgeons, has joined the Chicago Medical School and Michael Reese Hospital as chairman of their departments of obstetrics and gynecology.

Claire E. Graham, former research director of the Wilson Laboratories, has become American representative for the Huntingdon Research Centre of Huntingdon, England.

John T. Cowles, formerly president of the Maurice Falk Medical Fund, has become professor of psychology and education at the University of Pittsburgh, Pittsburgh, Pa.

Leon Cooper, professor of engineering science at Washington University, St. Louis, Mo., has been named to head the school's newly formed department of computer sciences.

Kenneth Jarmolow, director of applied research at the Martin Company's Baltimore division, has been named director of the company's Research Institute for Advanced Studies.

Walker L. Cisler, president of the Detroit Edison Company, has been elected president of the Engineers Joint Council, a federation of 20 national engineering societies. He will take office 12 January.

Vanderbilt University has formed a department of molecular biology, with **Oscar Touster**, professor of biochemistry, as chairman. **Robert Channell**,

associate professor of biology, has been named chairman of the university's new department of general biology.

The International Council of Scientific Unions has elected as its new president **Harold W. Thompson**, of Oxford University; **Dionyz Blaskovic**, vice chairman of the Czechoslovak Academy of Sciences, has been elected secretary-general.

Karl F. Lagler, chairman of the department of fisheries at the University of Michigan, has been elected president of the American Institute of Fishery Research Biologists.

Thomas K. Oliver, Jr., formerly of Ohio State University, has been appointed associate professor of pediatrics at the University of Washington's medical school.

Stuart T. Schy, formerly with Thompson Ramo Wooldridge computer division, has been named chief engineer at Medicon, a Los Angeles, Calif., manufacturer of medical electronic instrumentation.

Henri Bader, research professor at the University of Miami, Florida, has been appointed scientific attaché to the American Embassy, Bonn, Germany.

Mac V. Edds, Jr., chairman of the biology department at Brown University, has been named chairman of the school's new division of medical science.

Virgil L. Koenig, formerly principal scientist for protein research, General Mills, has become professor and chairman of the department of biochemistry in the University of Texas Medical Branch, Galveston.

The American Chemical Society's Claude S. Hudson award for 1963 was given to **Nelson K. Richtmyer**, of the laboratory of chemistry at the National Institute of Arthritis and Metabolic Diseases. He was cited for his work in carbohydrate chemistry.

Kyu Myong Lee, associate professor of microbiology at the college of medicine of Seoul National University, Korea, has been appointed associate professor of virology at Cornell University's New York State Veterinary College, for 2 years.

Stanley M. Greenfield, of the Rand Corporation, has become head of the company's Department of Planetary Sciences, succeeding **William W. Kellogg**, who has become associate director of the National Center for Atmospheric Research (NCAR), and director of the NCAR laboratory of atmospheric sciences.

Rensselaer Polytechnic Institute has announced the appointment of **John D. Mackenzie** as professor of materials science. He was formerly with the General Electric Research Laboratory, Schenectady, N.Y.

Hermann J. Haas, formerly with the Rockefeller Institute, has been appointed associate professor of experimental embryology at Southern Illinois University, Carbondale.

The new chairman of the Board of Governors of the International Atomic Energy Agency is **Carlo Calvetti**, head of the department of nuclear physics, University of Milan, Italy.

Armon F. Yanders, associate professor of zoology, has been appointed assistant dean of the college of natural science at Michigan State University; **Herman Slatis**, formerly at Argonne National Laboratory, has been named associate professor of zoology.

Foster F. Rieke, former chief physicist and associate director of the laboratories of applied sciences, University of Chicago, has been named senior physicist at Argonne National Laboratory. **Arthur Tevebaugh**, research chemist at the General Electric Research Laboratory, Schenectady, N.Y., has been appointed senior chemist in the chemical engineering department.

James W. Stephens, associate professor at the University of Colorado School of Medicine, has been appointed head of the school's division of neurology.

C. Stark Draper, head of the department of aeronautics and astronautics at M.I.T., has been elected president of the International Academy of Astronautics.

Physics professor **Samuel Devons**, at Columbia University, has been appointed chairman of the school's physics department.

John Hasbrouck Van Vleck, professor of mathematics and natural philosophy at Harvard, has received the first Albert A. Michelson international award for achievement in science and engineering. The award, which carries a \$5000 honorarium, cites Van Vleck for his contributions to theories of magnetism which "provide the essential understanding of properties of solids and have led to important scientific and engineering developments."

Edward D. DeLamater, former research professor and director of the cytology and genetics section of the University of Pennsylvania, has been appointed chairman of the microbiology department at the New York Medical College.

Philip A. Briegleb, director of the Pacific Northwest Forest and Range Experiment Station, U.S. Forest Service, has been elected president of the Society of American Foresters.

R. Walter Schlesinger, formerly at the St. Louis University Medical School, has been appointed professor of microbiology and assistant dean of the medical school at Rutgers University, effective 1 January.

James Merritt Harrison, director of the Geological Survey of Canada, has been named to receive the Kemp Medal from Columbia University, for "distinguished service in geology."

The American Society of Pharmacognosy has elected **Melvin Gibson**, professor of pharmacognosy at Washington State University, president for the 1964-65 term.

The new president of the American Society for Microbiology is **Orville Wyss**, chairman of the department of bacteriology at the University of Texas, Austin.

Roman K. C. Johns, formerly of Aerospace Corporation, has become professor of geophysics and director of geoscience research at Loyola University of Los Angeles, California.

Markus Reiner, research professor at the Technion, in Israel, and co-founder of the science of rheology, has been named visiting professor of mathematical rheology at Brooklyn Polytechnic Institute.