

418 cases were submitted for Pentagon screening; in 250 cases lower authorities were overruled and clearances were granted. This is a 60-percent approval rate, compared with 37 percent during the previous 2 years, when only 622 of 1672 appeals for clearance were granted. In addition, a much larger percentage of cases was settled before the people involved had to be notified and hearings held, with the consequent harm done to those concerned.

In a news conference about the report, Jerome D. Fenton, director of the Defense Department Office of Personnel Security Personnel Policy, stated that of all the cases considered, about half involved loyalty questions and half personal charges such as homosexuality, drunkenness, and criminal records. He said that, although the number of cases has decreased, the percentage of clearances remains about the same.

U.S.-Soviet Cooperation

The U.S. Government has offered to enter into an agreement with the U.S.S.R. under which Soviet and American planes would fly between Nome, Alaska, and Murmansk in the U.S.S.R. for observation of Arctic ice in connection with the International Geophysical Year. The reciprocal agreement would include exchanges of landing rights and the use of equipment, facilities, and personnel related to the flights.

At the Arctic conference of the IGY in Stockholm in May 1956, the U.S. National Committee for the IGY had suggested coordination of the ice observation flights of the two countries. The Soviet representatives then proposed that alternate flights be exchanged "in order to obtain a more comprehensive photographic record of the polar icepack and its changes."

New ARDC Research Branch

The Air Research and Development Command has established a new branch to conduct research, development, evaluation, and integration of flight-control systems displays in all Air Force aircraft. The new design engineering branch of the Flight Control Laboratory at ARDC's Wright Air Development Center, Dayton, Ohio, will carry out plans of the Control-Display Integration Working Group, which is composed of representatives from several laboratories and other units at WADC concerned with aircraft instruments.

The new branch is headed by C. J. Snyder and is composed of three sections: the display engineering section, with Jack Kearns as chief, which con-

ducts research and development on whole panel instrumentation concepts for new weapon systems; the systems integration section, headed by Maj. B. S. Emrick (who is also chairman of the Working Group), which conducts research and development on problems of integration of whole panel instrumentation concepts with other subsystems; and the specifications and standards section, under John Hart, which provides engineering guidance and formulates general requirements for test procedures, acceptance standards, and reliability criteria.

News Briefs

■ The ministers of education of Central America recently took part in a meeting at which all five of the republics represented agreed to coordinate their systems of instruction. The participants have agreed to meet again on 5 Dec. in San Salvador to work out arrangements for a permanent organization to be established in Managua under the auspices of the Organization of Central American States.

■ The U.S. Atomic Energy Commission has announced that a hearing on the safety of the reactor being constructed by the Power Reactor Development Company of Detroit, Mich., will be held in Washington, D.C., on 13 Nov. Jay A. Kyle, assistant chief hearing examiner for the Federal Communications Commission, will be the presiding officer.

■ The effective tagging of fleas with radioactive isotopes for the study of the epidemiology of plague has been reported by the University of California Medical Center and the U.S. Public Health Service's communicable disease laboratory in San Francisco. Cerium-144, an isotope of one of the rare earths, has proved a practical and simple tracer for fleas, which heretofore have been especially difficult to tag. With the new technique, fleas can now be released on wild rodents and their life-cycle can be studied with radiation-detecting equipment.

Scientists in the News

THOMAS M. RIVERS of New York City, formerly vice president of the Rockefeller Institute for Medical Research, has been appointed medical director of the National Foundation for Infantile Paralysis. He succeeds HART E. VAN RIPER, who is leaving the National Foundation on 31 Oct. to become medical director of Geigy Pharmaceuticals of Ardsley, N.Y.

Rivers, who has been closely associated with the development and testing

of the Salk vaccine, takes over his new post on 1 Nov., 1 year after joining the National Foundation's professional staff as assistant to the president of the foundation.

The following scientists received awards during the American Chemical Society's 130th National Meeting.

ROBERT B. WOODWARD, professor of chemistry, Harvard University, the ACS award for creative work in synthetic organic chemistry, sponsored by the Synthetic Organic Chemical Manufacturers Association, "for brilliant achievements in the synthesis of alkaloids."

WARREN K. LEWIS, professor emeritus, Massachusetts Institute of Technology, the ACS award in industrial and engineering chemistry, sponsored by the Esso Research and Engineering Company, "for his major part in developing fluidized bed systems for gas-solid contacting and chemical reactions."

MELVIN CALVIN, professor of chemistry, University of California, the ACS award for nuclear applications in chemistry, sponsored by the Nuclear Instrument and Chemical Corporation, "for skillful and diverse demonstrations of the power of radioisotopes in experimental chemistry."

GILBERT J. STORK, professor, Columbia University, the ACS award in pure chemistry, sponsored by Alpha Chi Sigma Fraternity, "for extraordinary work in the structure and stereospecific synthesis of natural products."

Ralph H. MÜLLER, staff member, Los Alamos Scientific Laboratory, University of California, the Beckman award in chemical instrumentation, sponsored by Beckman Instruments, Inc., "for a long series of 'firsts' in better ways to get chemical information from physical measurements."

STUART PATTON, associate professor, Pennsylvania State University, the Borden award in the chemistry of milk, sponsored by the Borden Company Foundation, Inc., "for ingenious application of organic chemistry techniques to problems of heat-induced deterioration of milk."

HAROLD A. SCHERAGE, associate professor, Cornell University, the Eli Lilly and Company award in biological chemistry, "for valuable additions to the knowledge of protein interactions and protein and macromolecular structure."

JOHN H. YOE, chairman, department of chemistry, University of Virginia, the Fisher award in analytical chemistry, sponsored by the Fisher Scientific Company, "for pioneering work in colorimetric analysis and organic analytical reagents."

D. H. R. BARTON, Regius professor of chemistry, University of Glasgow, the Fritzsche award, sponsored by Fritzsche

Brothers, Inc., "for many difficult structural elucidations of complex essential oils, particularly caryophyllene."

LUCY W. PICKETT, chairman, department of chemistry, Mount Holyoke College, the Garvan medal, "for developing pivotal information on molecular structure, especially through far ultraviolet spectroscopy."

DAVID H. KILLEFER, consultant, the James T. Grady award, "for many years of successfully spelling out chemistry for the lay and professional public, both young and old."

PETER DEBYE, professor emeritus, Cornell University, the Kendall Company award in colloid chemistry, "for important work on polymer solutions and solutions of soaps and silicates including development of pertinent light-scattering techniques."

C. GARDNER SWAIN, associate professor, Massachusetts Institute of Technology, the Precision Scientific Company award in petroleum chemistry, "for work in physical-organic chemistry of extreme importance to fundamental petroleum chemistry."

NORRIS W. RAKESTRAW, professor of chemistry, Scripps Institution of Oceanography, the Scientific Apparatus Makers award in chemical education, sponsored by Scientific Apparatus Makers Association, "for outstanding service to teachers of chemistry and chemical engineering."

G. ROBERT GREENBERG, associate professor of biochemistry, Western Reserve University, the Paul-Lewis Laboratories award in enzyme chemistry, "for unusual contributions to the knowledge of purine metabolism."

HUBERT L. ROSOMOFF, of the Naval Research Institute, Bethesda, Md., has won the American Academy of Neurological Surgery award for 1956. He has selected for his paper: "Hypothermia and cerebral vascular lesions, II, experimental middle cerebral artery interruption followed by the induction of hypothermia."

C. P. RHOADS, director of the Sloan-Kettering Institute for Cancer Research, New York, and scientific director of Memorial Center for Cancer and Allied Diseases, New York, has received the Walker prize of the Royal College of Surgeons, England. Scientists from all parts of the world, as well as from Great Britain, are eligible for this prize, which is awarded once every 5 years "for the best work in advancing the knowledge of the Pathology and Therapeutics of Cancer done, either partially or wholly, within the five years preceding the year in which the Prize is awarded." Rhoads was honored because he has had "a distinguished career as an experimental Pa-

thologist and over the last ten years as the Scientific Director has built up at the Sloan-Kettering Institute and the Memorial Hospital, New York, the largest and most efficient cancer research organization in the world."

GEORGE W. BEADLE of the California Institute of Technology, retiring president of the AAAS, will deliver the Charles E. Dohme memorial lectures at Johns Hopkins University on 27, 28, and 29 Nov. The subject will be "The nature of the gene: (i) in heredity, (ii) in function, (iii) in evolution."

DAVID HOWE of Dallas, Tex., formerly associate plant physiologist at the Texas Research Foundation, has become agronomist for the research development and engineering staff of the Commercial Solvents Corporation. He will make his headquarters at the company's research laboratories in Terre Haute, Ind., where he will direct his attention to the development of agricultural chemicals products.

DAEL WOLFLE, executive officer of the American Association for the Advancement of Science, is in Hamburg, Germany, attending a seminar on science education that is being held by the UNESCO Institute for Education, 22-27 Oct.

HAROLD S. JOHNSON of Stanford University has been named associate professor of chemistry at California Institute of Technology.

Another appointment at C.I.T. is that of LEON BLITZER, who has been appointed senior research fellow in physics. On leave of absence from the University of Arizona, where he is professor of physics, he will conduct research in spectroscopy.

MASON R. BOUDRYE, associate professor of biology at Moorhead State Teachers College, has accepted the position of permanent executive secretary of the Minnesota Academy of Science. He is the first full-time secretary of the academy, whose offices will be at the Science Museum in St. Paul. After several years of planning, and through the support of the Louis W. and Maud Hill Family Foundation, the office has been established to further the activities of both the junior and senior academies.

E. FINLEY CARTER, formerly associate director of the Stanford Research Institute, has been appointed director of the institute.

MADISON D. CODY, professor of botany at the University of Florida, retired on 1 July.

HOWARD W. HAGGARD, director of the Laboratory of Applied Physiology at Yale University, has retired. An expert on alcohol and its problems, Haggard started Yale's internationally known Center of Alcohol Studies. He has had to curtail his activities in the past few years because of ill health, but he will continue to serve as an adviser to the laboratory and the center. He will also continue as editor of the *Quarterly Journal of Alcohol Studies*, a post he has held since the journal was established in 1940.

Haggard received his B.A. degree from Yale in 1914, after which he enrolled in the Yale School of Medicine, where he earned an M.D. degree in 1917. After serving as a captain of chemical warfare in World War I, he joined the Yale faculty in 1919 and, within a few years, became director of the Laboratory of Applied Physiology. From 1925 to 1940, he conducted an outstandingly popular lecture course in applied physiology that annually attracted an enrollment of more than 600 undergraduates. For many years he has been in constant demand as a lecturer.

In 1929 he published *Devils, Drugs and Doctors*, perhaps one of the first widely popular books on medicine. It was translated into many languages, including the Chinese, and for many years was a best seller. He was also the first person to conduct a weekly health program on radio with a regularly scheduled show started about 1934 over a New York station.

He was mainly instrumental in organizing the widely known Summer School of Alcohol Studies at Yale, now in its 14th year, and was also instrumental in establishing the Yale Plan Clinic, which set a nation-wide pattern for work with alcoholics.

From 1948 to 1950 he served as director of the Yale Office of University Development, during which period he toured the country twice, visiting nearly every Yale Club of alumni in the nation. Even before this time he was a successful fund-raiser for his laboratory. Colleagues estimate that during 30 years he raised more than \$2 million for the laboratory and its projects.

A. S. BENENSON, lieutenant colonel, MC, USA, formerly director of experimental medicine at the Chemical Corps Laboratories in Camp Detrick, Md., has been appointed director of the division of immunology, Walter Reed Army Institute of Research, Walter Reed Army Medical Center, Washington, D.C. LOUIS H. MUSCHEL, major, MSC, USA, has also recently been assigned to the division of immunology. Previously he had been at the 406th Medical General Laboratory of the U.S. Army in Japan.

ELSA KEILES, formerly executive secretary of the metabolism and nutrition study section and the human embryology and development study section of the Division of Research Grants, National Institutes of Health, has recently joined the staff of the grants and training branch of the National Heart Institute.

CHARLES D. SHIELDS has been appointed associate dean of the Georgetown University School of Medicine (Washington, D.C.). Shields has been professor and chairman of the department of physical medicine and rehabilitation at the school since 1954. He will retain that post in addition to the deanship.

LAUREN B. HITCHCOCK has announced that he will resign as president and managing director of the Air Pollution Foundation, Los Angeles, Calif., on 15 Nov. to return to private practice as a management consultant in industrial research and development.

GEORGE S. CRAMPTON, ophthalmologist, teacher, and inventor, has received the 1956 gold medal award of the Illuminating Engineering Society. Although a physician, he is a past-president of the IES. He was accepted for membership 40 years ago because of the special lighting features he devised for each of his prismatic viewing instruments.

Crampton, who is 82, has been a surgeon at Wills Eye and Pennsylvania hospitals, Philadelphia, and is an emeritus professor of ophthalmology at the Graduate School of Medicine, University of Pennsylvania. He now owns and operates the Lenox Instrument Company in Philadelphia.

JOHN D. PORTERFIELD, a career officer of the Public Health Service since 1939 and at present director of the Ohio Department of Mental Hygiene and Correction, has been named assistant to the Surgeon General of the Public Health Service. He will have responsibility for planning and developing new programs, for providing a continuous appraisal and evaluation of existing activities, and for advising on proper balance among the various programs of the service. He will give particular attention to the fields of chronic diseases and aging, in which a variety of programs are developing.

PAUL J. FLORY, professor of chemistry at Cornell University, has been chosen to head the Mellon Institute's investigational activities as executive director of research. He will join the organization for a day a week during this fall, half time in February, and full time in the summer of 1957.

Recent Deaths

HOWARD W. BRUBAKER, Manhattan, Kan.; 79; professor emeritus of chemistry at Kansas State College; 25 Sept.

WILLIAM B. COLEMAN, Philadelphia, Pa.; 68; metallurgist; 30 Sept.

GEORGE A. DAVIS, Mountain Lakes, N.J.; 60; technical director of the Wilputte Coke Oven Division of the Allied Chemical and Dye Corporation; 9 Oct.

RALPH L. DOURMASHKIN, New York, N.Y.; 65; former senior surgeon with the U.S. Public Health Service; 10 Oct.

CAMILLE E. DREYFUS, New York, N.Y.; 78; chemist, chairman of the board of the Celanese Corporation of America; 27 Sept.

HENRY P. FAIRCHILD, New York, N.Y.; 76; professor emeritus of sociology at New York University; 2 Oct.

RICHARD FAIREY, London, England; 69; executive chairman of the Fairey Aviation Company; 30 Sept.

DONALD B. GILLIES, Cleveland, Ohio; 83; vice president of the Republic Steel Corporation until 1948; 29 Sept.

FREDERICK W. HODGE, Santa Fe, N.M.; 91; retired director of the Southwest Museum; 28 Sept.

GORDON F. HULL, Hanover, N.H.; 86; professor emeritus of physics at Dartmouth College; 7 Oct.

HANS S. JOACHIM, Boston, Mass.; 65; physicist at Watertown Arsenal; 7 Oct.

JUSTIN F. KIMBALL, Dallas, Tex.; 84; former vice president of Baylor University in charge of the College of Medicine, the School of Nursing, Baylor Hospital, and the College of Dentistry in Dallas; 7 Oct.

GEORGE M. ROSENBLUM, Merrick, N.Y.; 49; electronic engineer; 25 Sept.

ARCHIBALD SHARPE, London, England; 75; biologist; 4 Oct.

Education

■ The U.S. Office of Education has announced approval of the first two contracts for cooperative educational research in its history. The contracts, with Indiana University and with Vanderbilt University, will be financed from a recent appropriation of \$1,020,000 for research by colleges, universities, and state agencies in the problems of education. Several other projects are under active consideration.

Indiana University will undertake an 18-month investigation to determine why only one-fourth of the top 10 percent of the state's high-school graduates in 1954-55 entered college. Also, studies will be made to learn how many of the

top 20 percent of the state's 1955-56 high-school graduates do not continue their educational programs into college, and why they do not.

Wendell W. Wright, Indiana's vice president, with Christian W. Jung, associate professor of education and director of the university's summer session, will direct the \$15,900 program. About one-third of the cost will be provided by Indiana University.

Vanderbilt University will conduct, under the direction of Albert J. Reiss, Jr., professor and chairman of the department of sociology and anthropology, a 3-year study of causes of juvenile delinquency. The study will be made among children in grades 7 through 11 in Nashville and in Davidson County, Tenn., with the cooperation of public, private, and parochial schools and community agencies. Information will be solicited from teachers, parents, attendance officers, juvenile court officials, and other citizens. Federal funds totaling \$49,060 are planned for the Vanderbilt project.

■ The first annual training institute of the American Group Psychotherapy Association will be held on 9 Jan. 1957 at the Henry Hudson Hotel, New York, N.Y. This will be a 1-day meeting consisting of morning, afternoon, and evening sessions. The institute will be open to AGPA members, psychologists, and social workers who meet the minimum requirements for AGPA associate membership. The fee for participants will be \$15 for members and \$20 for nonmembers. This includes registration, tuition fees, and also dinner in the evening. For further information write to: Director of Training Institute, Room 300, 345 E. 46 St., New York 17, N.Y.

■ The University of Pennsylvania has begun construction of its William H. Donner Center for Radiology. It expects to complete the project in 1957 or early in 1958. Physicians, chemists, and physicists will carry on cooperative research projects in the new three-story building, for which the Donner Foundation has allocated \$750,000.

■ Rensselaer Polytechnic Institute is planning a program that would make possible an increase in its undergraduate enrollment of 80 percent and an increase in its classroom and laboratory buildings of 50 percent. The expansion, which will be under way in the near future, is scheduled for completion during the next 14 years.

The 80 percent jump in enrollment would mean about 2450 more undergraduate students than are now in attendance. This would bring R.P.I.'s undergraduate enrollment to more than