News Notes

New Children's Science Book List Issued by AAAS Library Program

The AAAS Science Library Program has begun distribution of its new *Science Book List for Children* to all state school systems in the United States. The list, which contains 1105 titles, is designed as a guide to recreational and collateral reading in the sciences, including mathematics, for elementary-school students up to and including the eighth grade, and as an acquisition guide for elementary-school and public libraries. Its publication by the AAAS was made possible under a grant from the National Science Foundation.

The Selection Process

The new list is based substantially on selections by four college students outstandingly competent in science. In establishing the selection process, the AAAS followed the counsel of the late eminent historian of science George Sarton, who said: "Such elementary books deserve to be criticized with particular care, but it is very difficult to find reviewers who are willing, competent, and reasonable. Good scholars are often too snobbish and supercilious to judge elementary books as they ought to be judged, severely with regard to essentials, leniently with regard to details, kindly always. Perhaps the best judge of an elementary book is a young man, not yet too far removed from the elements, provided he is sufficiently modest and generous."

The four undergraduates chosen to assist in evaluating the scientific content of the books were William B. Blacklow of Ohio Wesleyan University; Delio Gianturco of Georgetown University; Robert W. Lynn of Haverford College; and Douglas E. Miller of the University of Michigan.

The selections were reviewed by an advisory group of librarians recommended by the American Association of School Librarians, who appraised the books for potential interest, suitability of content, and vocabulary and designated comparative difficulty. Finally, the list was reviewed by Hilary Deason, director of the AAAS Library Program, in collaboration with Ruth N. Foy, library consultant for the Baldwin-Whitehall Schools, Pittsburgh, Pa.

Deason comments that the list gives "preference to books that are the most valuable for the purpose of developing a child's mind and teaching the basic concepts of science. No fiction has been included. We have excluded whenever possible those books that are overly sentimental, that are anthropomorphic in style, and that cover so much subject matter superficially that the reader actually learns nothing by reading the book. Such books convey erroneous ideas and are repugnant to many bright children.

"The best science books for children are those that deal with a single basic idea, concept, or subject, which is developed accurately and completely, using whenever possible the appropriate technical terms. By reading such books a child may progress from the very simple book to those that are a little more difficult in accordance with his natural interests and curiosity, and thus each book read will add to his total fund of knowledge."

Developed specifically as a guide to the purchase of books (other than textbooks for class use) under provisions of Title III of the National Defense Education Act, the list is recommended by the AAAS for adoption by state educational departments and local school systems as a standard which satisfies the requirements of the Act. Any interested person may obtain a copy of the list by sending $1 to AAAS headquarters in Washington.

Other Science Library Programs

Distribution of the *Science Book List for Children* is only one of the Science Library Program's activities supported by the NSF. The Traveling High School Science Library Program, initiated in 1955, will in the 1960–61 school year lend a collection of 200 science books to more than 1600 high schools in every state and territory. The Traveling Elementary School Science Library, begun in 1959, will for the same period lend a collection of 160 science books to 800 elementary schools and central libraries.

The popular annotated list of paperbound science books, entitled *An Inexpensive Science Library*, goes into its fourth edition this year. It gives recommended reading for high-school and college students and for the general adult public. The book is available to schools on request and to the public at 25 cents a copy.

European Science Institute Proposed at NATO Conference

Senator Henry M. Jackson (D–Wash.) last week urged establishment of an International Institute of Science and Technology in Western Europe, an "M.I.T. of Western Europe," to help assure "the continuing scientific preeminence of the NATO Community." Jackson, chairman of the Scientific and Technical Committee of the NATO Parliamentarians Conference, meeting in Paris, made his proposal in his science report to the conference.

Jackson pointed out that educational institutions like the Massachusetts Institute of Technology have played a central role in promoting scientific and technical development in North America and that Western Europe has no comparable institutions. Expressing doubt that any one European country, by itself, could mobilize the financial and manpower resources needed to establish the proposed science center, Jackson added that "the Western European nations acting *in concert* could easily mobilize the money, skills, and facilities required."

In support of his plan, Jackson also criticized the view that NATO is only a military alliance: "NATO was formed and exists to promote cooperation in every field where the 15 members of our Community can do together what they cannot do apart. What better way to re-affirm this cardinal principle of our Community than by applying it to the problem of education in science and technology."

Oceanographic Cruise Ends

The research vessel *Chain* of the Woods Hole Oceanographic Institution returned to her home port in mid-November after a 5-month cruise which took her north of the Arctic Circle and into five European seaports. The expedition had a strongly international aspect, with scientists from several European nations aboard. In addition, during various portions of the trip the American scientists worked with the Norwegian research vessels *Helland-Hansen* and *H. U. Sverdrup*, the British *Discovery II*, and the Scottish *Explorer*.

Most of the work was in the North Sea, the Norwegian Sea, and the North Atlantic between Iceland and the British Isles. A variety of old and new

techniques was used to examine the ocean waters, the bottom sediments, and the underlying crust. Many seismic observations were made at locations suggested by the foreign scientists in connection with their own research projects.

Almost continuous use was made of the thermistor chain, a 600-foot instrument-carrying chain that is towed astern to get continuous temperature recordings from the upper layers of the water. It was towed nearly 20,000 miles.

About three dozen scientists took part in the expedition for varying lengths of time. Among them were ten students doing summer work at the oceanographic institution.

Planet Earth Film Series Completed

The National Academy of Sciences has announced the completion of its "Planet Earth" film series. Produced under a grant from the Ford Foundation, the series includes 13 16-mm, 27-minute educational films, available in both color and black-and-white, covering the principal fields of geophysical research which have been stressed in connection with the International Geophysical Year.

The film series, the academy's first, synthesizes man's knowledge of his physical environment and also delineates the powerful new tools for gathering data on space and the cosmos, such as rockets and satellites. Extensive footage was shot for the series in all parts of the world, both during and after the International Geophysical Year, to provide the viewer with a stimulating film of field work being done in his own country and in distant places.

Although the inspiration for the program came from the IGY, the films give a rounded picture of man's quest for knowledge in each field, outlining the principal discoveries and ideas and raising questions, concerning both the cosmos and the earth itself, that still challenge science. While utilizing the striking results of the IGY, the films range in content from early ideas and experiments to current ones, with some projection into the future.

In the production of the films, specialists in each of the 13 fields, from this country and abroad, were called upon for guidance. Because many of the ideas in geophysics are abstract, animation is used as needed.

Hugh Odishaw of the National Academy of Sciences is director of the series. Lothar Wolff of Louis de Rochemont Associates, Inc., is the producer. The series was produced by the academy in cooperation with the WGBH Educational Foundation, Cambridge, Mass.

To assist in the development of the films, an Advisory Committee on Education (IGY) was established by the president of the academy. In addition, a working group drawn from the U.S. Office of Education, the National Science Teachers Association, the National Education Association, the National Academy of Sciences, and the National Science Foundation gave advice on production of the series from the standpoint of stimulating interest in science in general and geophysics in particular.

The academy has concluded an agreement with the McGraw-Hill Book Company, Inc., under which McGraw-Hill will distribute the films, either severally or in sets, both in the United States and abroad, to educational and research institutions at a price of $80 for the black-and-white film and $150 for the color film. The entire series is now available for preview at McGraw-Hill Text-Films, 330 W. 2nd St., New York, N.Y.

U.S. Sponsors Space Research at Northern Ireland University

Queen's University in Belfast, Northern Ireland, may become one of Great Britain's chief centers of pure research in space as the result of a recent agreement with the U.S. Advanced Research Projects Agency. The agreement contracts for the largest amount of financial assistance ever provided by the United States Government in this field in Western Europe. Cost for the first year is estimated at about $182,000, and support will continue at the rate of about $56,000 a year for approximately 5 to 7 years.

The project will be conducted by the university's applied mathematics department, headed by David R. Bates, who suggested the space program when he visited Washington last year. Bates's department is engaged in two main activities—upper-atmosphere space research and study of the properties of atoms and molecules. It is the latter field which is being expanded. Although the research will have obvious military implications, it will not be secret.

One immediate result of the new agreement is an arrangement for scientists from Belfast to spend periods of from 3 to 4 months in U.S. research plants. Another is the establishment at Queen's University of a digital computing unit. Alexander Dalgarno is director. Money is also to be supplied for additional research staff for the unit.

News Briefs

Basic research institute. The Basic Health Research Institute, a nonprofit entity chartered by the State of Illinois, has recently been transferred to Tucson, Ariz., and has started operations in a small building there. Current and planned programs are concerned with cellular processes, considered from various angles, such as growth, fertilization, behavior, and physiology.

Additions to the group of researchers will be made only after careful study of the qualifications of those concerned. Each member must find his own financial support, although sponsorship of the institute will be available when applications are to be filed with grantor agencies. Overhead from grants is enabling the institute to supply necessary facilities and services until it is sufficiently well established to enlist the support of private foundations. For further information, communicate with Dr. Beatrice Gelber, President, Basic Health Research Institute, 509 North Santa Rita Ave., Tucson, Ariz.

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Biology film program launched. Roman Vishniac, a leading photographer of microscopic life, will produce the first part of a series of educational films entitled "Living Biology," under an initial National Science Foundation grant of $112,340 awarded recently to Yeshiva University. The 18-month grant will cover production of eight 28-minute films for use by secondary schools and five 45-minute films for colleges and universities. All will be 16-mm sound-color pictures.

These 13 films are only the first part of a larger program. The complete series will include 40 films, 24 for high-school use and 16 for college use. The work will take 3½ years to complete.

The Audio-Visual Center of Yeshiva University, headed by Sidney Pleskin, and the university's film library will promote and distribute the "Living Biology" series under direction of the National Science Foundation.

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Yale science center. Yale University has received a gift of approximately $10 million from C. Mahlon Kline of Philadelphia for the construction of a new science center. Kline, a graduate of the Yale Sheffield Scientific School, is honorary chairman of Smith, Kline and French Laboratories. The new center, which will be known as the Kline Science Center, will consist of a chemistry laboratory, a library and laboratories for the biological sciences, a geology building, and a central auditorium for the sciences.

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AEC reactor training. Thirty-seven scientists and engineers—15 from eight foreign countries and 22 from the United States—have started reactor technology training at the Atomic Energy Commission's Oak Ridge National Laboratory. The group is enrolled in the third session of 1-year courses in either nuclear reactor hazards evaluation or nuclear reactor operations supervision. The two courses were started in early 1959, following announcement of the programs in 1958 at the Second United Nations International Conference on the Peaceful Uses of Atomic Energy at Geneva. Students from noncommunist foreign nations and the United States may enroll.

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Canadian Medical Research Council. The Canadian National Research Council has announced the establishment of a Medical Research Council with responsibility for all activities formerly conducted by NRC's Division of Medical Research. The new council will have virtually complete autonomy but will function under the general administration of the National Research Council.

The setting up of the Medical Research Council is an interim measure pending the government's future consideration of appropriate legislation. The eventual establishment of a completely independent Medical Research Council was implied in a statement in Parliament last summer. Chairman of the new body is R. F. Farquharson, professor emeritus of medicine, University of Toronto and vice-president (medical) of NRC.

Grants, Fellowships, and Awards

Atomic energy. Students in chemistry, engineering, mathematics, or physics may pursue graduate studies under Atomic Energy Commission special fellowships in nuclear science and engineering which are administered by the Oak Ridge Institute of Nuclear Studies. Some 150 fellowships are available, for first-, intermediate-, and terminal-year graduate study at a school selected by the fellow from a list of more than 50 designated universities. Stipends range from $1800 to $2200 per year. An additional $500 is allowed for a spouse, and $500 each for a maximum of two dependent children. Tuition, fees, and a limited travel allowance are also provided.

Graduate students, or seniors who will have received their degrees by the beginning of the 1961–62 academic year, may apply for a fellowship to begin in the fall of 1961. Applications must be received by *6 January 1961*. For further information, write to the Nuclear Science and Engineering Fellowship Office, Oak Ridge Institute of Nuclear Studies, Box 117, Oak Ridge, Tenn.

Fertility. The Lalor Foundation has announced its 1961 program of awards in support of research on the fundamental biochemical and physiological mechanisms concerned with fertility and the early stages of reproduction in various forms of life. The awards may range up to $8000 per year, depending upon the scope and duration of the projects approved. Preference will be given to younger members of university and college faculty and staff, with an upper age limit of 41 years. The work may be carried on at the applicant's own institution or elsewhere.

The foundation will also grant postdoctoral summer or short-term research awards at the Marine Biological Laboratory, Woods Hole, Mass., or elsewhere, for appropriate projects in the fields specified. These awards will normally not exceed $1000 for a single man or a woman, $1200 for a married man working at his home institution, and $1350 for a married man with his principal program at another institution.

Requests for information and for application forms should be directed to the Lalor Foundation, 4400 Lancaster Pike, Wilmington 5, Del. The final date for receipt of executed application forms, complete with supporting data, is *16 January 1961*. Notification of appointment will be on or before 15 March.

Psychometrics. The Educational Testing Service is offering for 1961–62 two fellowships in psychometrics leading to the Ph.D. degree at Princeton University. These are renewable research fellowships of $3750 per year, plus dependency allowances, which provide for part-time training in the general area of psychological measurement in the Princeton offices of the Educational Testing Service, in addition to the normal program of graduate studies at Princeton University. To be considered, a candidate must either have taken the Graduate Record Examinations in 1960 or register by 6 January to take these examinations on 21 January 1961. Fellowship applications must be submitted before *6 January 1961* to the Director, Psychometric Fellowship Program, Educational Testing Service, Princeton, N.J.

Scientists in the News

The Royal Society has announced the election of two new foreign members, both of the United States. They are **George W. Beadle**, chairman of the division of biology at California Institute of Technology and former president of the AAAS, and **George B. Kistiakowsky**, professor of chemistry at Harvard University and chairman of the President's Science Advisory Committee.

The National Science Foundation, which administers the United States Antarctic Research Program, has announced the appointment of four scientists to top posts at U.S. antarctic stations. In addition, two men have been named to represent the United States in programs operated cooperatively with Argentine and Australian scientists. The new appointees, listed below, will arrive in Antarctica this month and will remain from 1 year to 15 months.

George H. Meyer of the University of Texas will be station scientific leader at McMurdo, where geology, biology, and exploration geophysics projects are being carried on by a nine-member staff. Meyer will continue the bacteriological survey of the McMurdo Sound area that he initiated a year ago.

Norman S. Benes, who was meteorologist-in-charge at Hallett Station in

1958, will be scientific leader at Byrd Station, where he will coordinate the activities of 11 scientists working in meteorology, geomagnetism, seismology, ionospheric physics, auroral physics, and glaciology.

Ben W. Harlin, a U.S. Weather Bureau meteorologist of Louisville, Ky., will direct scientific work at the South Pole Station for the coming year. He participated in the International Geophysical Year-Antarctic program as meteorologist-in-charge at Little America Station, 1957–58.

Robert W. Titus of Reno, Nev., and Santa Rosa, Calif., also a U.S. Weather Bureau meteorologist, will head the scientific program at Hallett Station, where the U.S. is engaged in cooperative research with New Zealand.

Two other Weather Bureau meteorologists have been assigned to cooperative scientific programs. **L. David Drury** of St. Louis, Mo., will be the U.S. representative at the Ellsworth Station on the Weddell Sea Coast, where the U.S. and Argentina conduct research. **John E. Breckinridge** of Binghamton, N.Y., will be the U.S. senior representative at Wilkes Station, where U.S. and Australian scientists are conducting research.

Vincent D. Perry, vice president and chief geologist of the Anaconda Company, will receive the 1961 Jackling Award of the Society of Mining Engineers, a constituent of the American Institute of Mining, Metallurgical and Petroleum Engineers, on 1 March 1961 during the annual meeting of AIME, to be held from 26 February to 2 March in St. Louis. Perry, who is being honored for his contributions to geology and geophysics, will deliver the annual Jackling lecture after the presentation.

A. F. Frederickson, formerly of the Pan American Petroleum Corporation, has been appointed chairman of the department of geology at the University of Pittsburgh. Before he joined Pan American, Frederickson was a professor of geology at Washington University (St. Louis).

A. C. T. North, member of the Medical Research Council's staff at the Davy Faraday Research Laboratory, The Royal Institution, London, is spending the academic year at the Massachusetts Institute of Technology, in the department of biology.

Richard S. Caldecott, geneticist with the U.S. Agricultural Research Service and associate professor at the University of Minnesota, has taken a 2-year leave of absence to work as a geneticist with the Division of Biology and Medicine, U.S. Atomic Energy Commission, Washington, D.C.

Sidney L. Pressey, professor emeritus of psychology at Ohio State University, has been given an honorary degree by that institution for his pioneering work on educational automation, acceleration, and the life-span approach to problems of psychological development.

Frank H. Healey has been promoted to research and development director for Lever Brothers Company, in which post he will be responsible for operations at the company's Research and Development Center, Edgewater, N.J. Healey previously was development manager for processing.

James V. Warren, well-known cardiologist and chairman of the department of internal medicine at the University of Texas, will become chairman of Ohio State University's department of medicine on 1 April. He will succeed the late **Bruce K. Wiseman**, noted hematologist, who died in March.

Martin J. Swetnick, chief physical scientist of the Defense Atomic Support Agency's Radiation Division since 1958, has resigned to accept a position with the National Aeronautics and Space Administration, where he will be responsible for the instrumentation of the lunar and planetary exploration programs.

Stephen J. Smith, physicist in the atomic physics section of the National Bureau of Standards, has been appointed chief of the section. Typical work now underway in the section includes determining the properties of negative ions from photodetachment and electron collision studies, and developing a rubidium vapor frequency standard.

Herbert McKennis, Jr., professor of pharmacology at the Medical College of Virginia, who has recently returned from 6 months as visiting professor in the University of Chile's Institute of Physiology, has been made an honorary member of the Chilean university's faculty of medicine. He has also been named an honorary member of the Society of Biology of Santiago.

Paul E. Gagnon of Canada has been appointed director of the International Atomic Energy Agency's Division of Exchange and Training of Scientists and Experts. Gagnon, a chemist, has been associated with Laval University, Quebec, since 1921. In 1940 he was appointed governor of the university and also dean of the graduate school, positions which he held until his transfer to IAEA.

Recent Deaths

Bert S. Butler, Tucson, Ariz.; 83; former professor and head of the University of Arizona's department of geology and mineralogy in the College of Mines; 13 Nov.

John B. Gibson, Upton, N.Y.; 33; associate physicist at the Brookhaven National Laboratory; 15 Nov.

John T. Manter, Augusta, Ga.; 50; assistant professor of neurology and microanatomy at the University of Georgia College of Medicine; 5 Nov.

William E. Mordoff, Ithaca, N.Y.; 70; professor emeritus of engineering at Cornell University; served Cornell 42 years before retiring in 1956; 15 Nov.

Joseph W. Roe, Bridgeport, Conn.; 89; professor and chairman of the department of industrial engineering at New York University from 1921 to 1937; past president of the Society of Industrial Engineers; 9 Nov.

Emery A. Rovenstine, New York, N.Y.; 65; internationally known anesthesiologist and professor and chairman of the department of anesthesiology at the New York University Medical Center; 9 Nov.

Margaret L. Varley, Chestnut Hill, Mass.; an instructor in public health education at Boston College and at the Simmons College School of Nursing; assistant professor at the Harvard School of Public Health, 1950–57; in 1947, went to Egypt, Iraq, Iran, Syria, and Lebanon to establish nursing schools for the Rockefeller Foundation; 8 Nov.

Leonard Worley, Manhasset, N.Y.; 55; professor of biology at Brooklyn College and deputy chairman of the department; specialist in histology and cytology.

Robert E. Wright, Canberra, Australia; 33; research microbiologist at the Division of Plant Industry, CSIRO, Canberra; specialist in the genetics of respiratory factors in yeast; 3 Nov.