
Miscellany

Publications

A 350-page basic work on vacuum technology has been assembled by a team of members of the French Society of Vacuum Engineers and Technicians, under the direction of Max Morand, and has been published by the French National Association for Technical Research under the title, *Practical Treatise on Vacuum Technique*. The *Treatise* will be followed by the publication of a series of specialized pamphlets dealing with various applications or problems involving vacuum technique. Topics to be covered will include vacuum in metallurgy, vaporization and metallization under vacuum, quantity determination of gases under low pressure, molecular distillation, vacuum in pharmacy and food industries, impregnation and drying under vacuum, the manufacture of vacuum tubes, and glasses and ceramics used in vacuum technique. Further information concerning the *Treatise* (priced at \$11.25) may be obtained from GEP Publicity, 13 rue de Téhéran, Paris 8, France.

A bibliography of 2274 references to published unclassified information concerning both theoretical and applied aspects of space exploration has been compiled by M. Benton of the US Naval Research Laboratory. Included are books, periodical articles, research reports, and some news reports covering the period from 1903 through June 1958. Information on the Navy's Vanguard, the Russian Sputniks, and the Army's Explorers is also included. The 278-page publication, PB 131755, *The Literature of Space Science and Exploration*, may be ordered from the Office of Technical Services, US Department of Commerce, Washington 25, D. C., for \$4.

The publication *Physics Abstracts* is understood to be in need of the services of physicists who are competent to prepare abstracts from original articles written in Slavic languages, particularly Russian. Those interested in further details should write to the editor of *Physics Abstracts*, Dr. B. M. Crowther, c/o The Institution of Electrical Engineers, Savoy Place, London, W. C. 2, England.

A new editorial staff has taken over the direction of the quarterly journal, *Mathematical Tables and Other Aids to Computation*, which is published by the Division of Mathematics of the National Academy of Sciences—National Research Council. Harry Polachek, technical director of the Applied Mathematics Laboratory of the David Taylor Model Basin, Washington 7,

D. C., has been named chairman of the journal's editorial committee and all contributions to the publication should be sent directly to him. Other members of the committee are C. C. Craig, A. Fletcher, E. Isaacson, D. Shanks, C. V. L. Smith, A. H. Taub, C. B. Tompkins, and J. W. Wrench, Jr. Correspondence on non-editorial matters should continue to be sent to the National Academy of Sciences, Printing and Publishing Office, 2101 Constitution Avenue, Washington 25, D. C.

The Technology Press of the Massachusetts Institute of Technology has published a pamphlet entitled *Selected Books and Journals in Science and Engineering*, which is designed to be helpful in the assembling of a basic library collection of publications covering the various fields of science and engineering. The 58-page list is intended primarily for undergraduates, but includes reference works and some treatises and journals for faculty and graduate-student use. Compilation was done by Irma Johnson and other members of the MIT library staff.

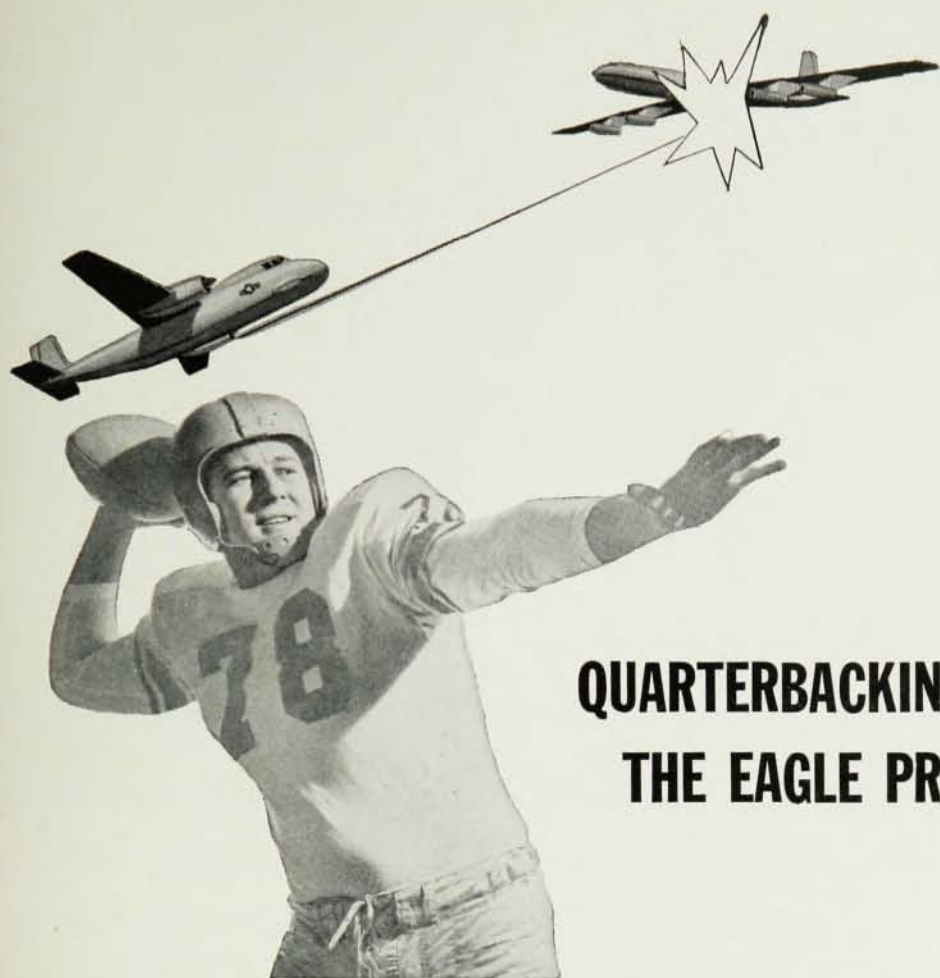
Commerce Department Science Study

Appointment by the National Academy of Sciences of a special committee of scientists and research administrators to study the scientific programs of the US Department of Commerce and to recommend new steps to gear them to the rapidly changing needs of science and industry was announced in December. The Committee, headed by Mervin J. Kelly, chairman of the board of Bell Telephone Laboratories, has the following additional members: Horace R. Byers (University of Chicago), H. A. Leedy (Armour Research Foundation), C. Guy Suits (General Electric Research Laboratories), Abel Wolman (Johns Hopkins University), Augustus Kinzel (Union Carbide Corp.), Michael Ference, Jr. (Ford Motor Co.), and Frank W. Herring (New York Port Authority). John C. Green, director of the Commerce Department's Office of Technical Services, has been named executive secretary.

Commerce agencies under study include the Bureau of Public Roads, Maritime Administration, Patent Office, Weather Bureau, Coast and Geodetic Survey, National Bureau of Standards, and Office of Technical Services. The Committee will spend several months reviewing the operations of these agencies and plans to submit a report to Secretary of Commerce Lewis L. Strauss before next summer.

Awards

The American Physical Society's Oliver E. Buckley Solid-State Physics Prize for 1959 has been awarded to Conyers Herring, theoretical physicist at the Bell Telephone Laboratories, for his interpretation of the transport properties of semiconductors. The presentation was made at the annual joint banquet of the Physical Society and the American Association of Physics



QUARTERBACKING THE EAGLE PROJECT

Bendix Aviation Corporation will be prime contractor for the Eagle missile—and Bendix Systems Division will quarterback the project.

Latest in a series of important defense projects to be assigned Bendix Systems, the Eagle will be a long-range, air-to-air missile designed for fleet air defense and interception missions.

Responsible for systems management and engineering in connection with the project, Bendix Systems Division will also direct the development of the Eagle missile, electronic guidance, and fire control equipment in the launching aircraft.

Engineers and scientists with missile experience may find that their talents are suited to the specialized work involved in the Eagle project and other

important system programs at Bendix Systems Division.

Located adjacent to the Engineering campus of the University of Michigan, Bendix Systems Division offers the better man an outstanding opportunity to join an organization with full facilities for encouraging his finest work. Ann Arbor is a wonderful place to live and raise a family, a town which combines life in a college community with the nearby advantages of a large city.

If you are interested and qualified in weapons system planning, research and development, you are invited to write to Bendix Systems Division, Dept. C3, Ann Arbor, Michigan.

Bendix Systems Division
ANN ARBOR, MICHIGAN





Conyers Herring (right), theorist at Bell Telephone Laboratories, receives the 1959 Oliver E. Buckley Solid-State Physics Prize from Jesse W. Beams, the retiring president of the American Physical Society.

Teachers in New York City on January 30th. Dr. Herring, who served as vice chairman of the executive committee of the APS Division of Solid-State Physics for 1958-59, has been a member of the technical staff at Bell Laboratories since 1945. The award, established by the Society in 1952 under the terms of a \$50 000 trust fund endowed by the Laboratories, consists of an annual prize of \$1000 to be presented by the Society

to a person adjudged to have made a most important contribution to the advancement of knowledge in solid-state physics within the five years immediately preceding the award.

The Oersted Medal of the American Association of Physics Teachers, awarded each year for notable contributions to the teaching of physics, was presented in January to Paul H. Kirkpatrick, professor of physics at Stanford University and a former president (1947-48) of the Association. A member of the Stanford faculty for twenty-seven years, Prof. Kirkpatrick received the medal and its accompanying certificate at the joint ceremonial session held on the afternoon of January 29th during the combined winter meeting in New York City of the AAPT and the American Physical Society.

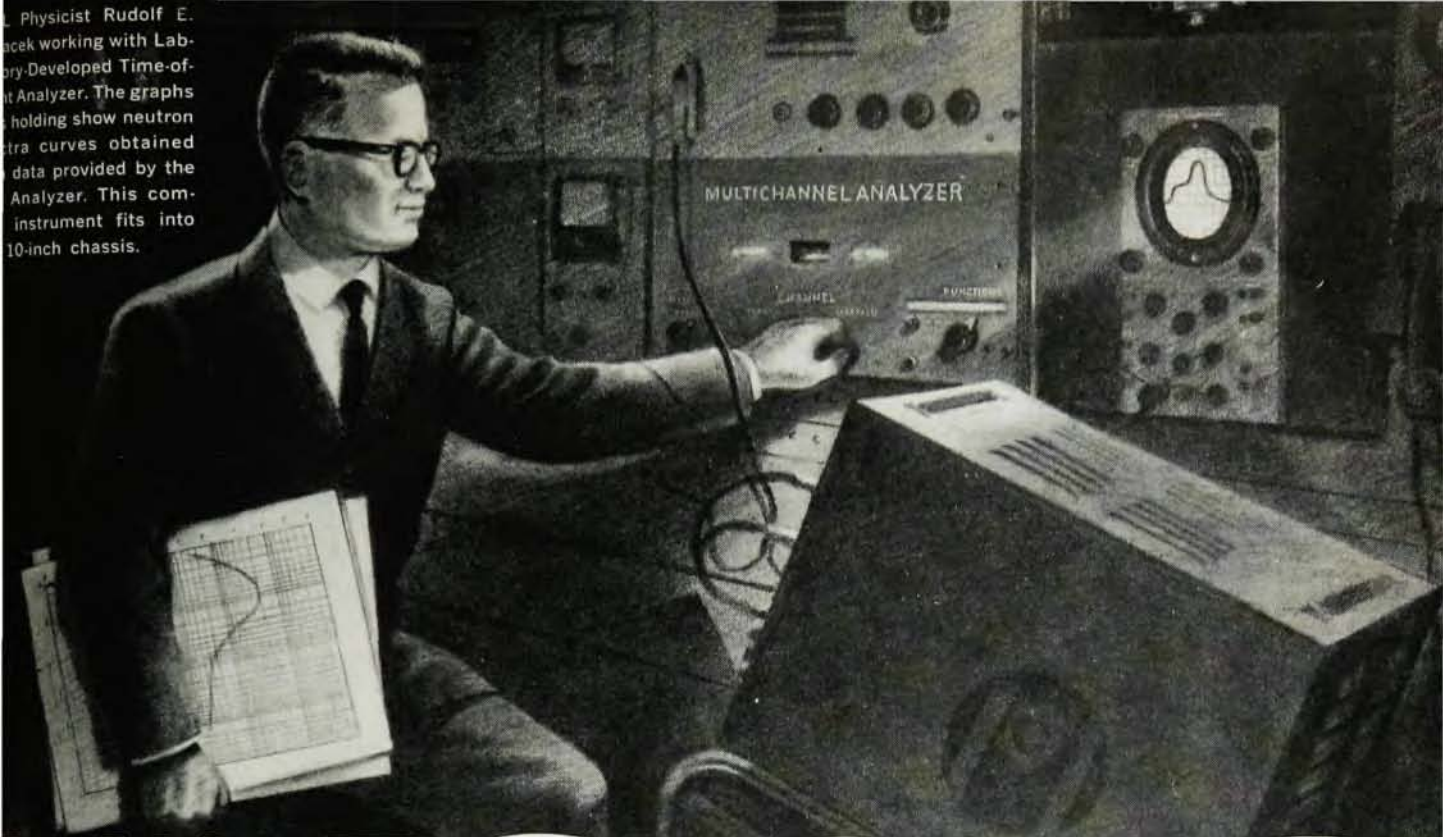
The AAPT also awarded a special scroll to Mrs. Lloyd W. Taylor, widow of one of the founders and past presidents of the Association. The presentation was made in connection with the forthcoming publication by the AAPT of the *Taylor Laboratory Manual*, which will be issued this summer as a memorial to the late chairman of the Physics Department at Oberlin College who suffered fatal injuries in a mountain climbing accident in 1948.

In addition, citations for distinguished service to the teaching of physics were presented by the Association



Oersted Medallist Paul H. Kirkpatrick, professor of physics at Stanford University, who was chosen by the American Association of Physics Teachers to receive this year's award for outstanding physics teaching.

Physicist Rudolf E. Slovac working with Laboratory-Developed Time-of-Flight Analyzer. The graphs holding show neutron spectra curves obtained from data provided by the Analyzer. This compact instrument fits into 10-inch chassis.



MILESTONES IN REACTOR TECHNOLOGY

at The Knolls Atomic Power Laboratory...in Spectra Physics

THE FIRST ALL-TRANSISTORIZED Time-of-Flight Analyzer has been developed at KAPL to aid scientists in determining neutron energy distributions in a reactor core.

Accomplishing in an hour what required more than a month with previous equipment, the new Analyzer measures steady-state energy distributions in the range from 0.01 to 5.0 electron volts. Each of the Analyzer's 256 channels can store 65,536 counts; each is adjustable in width from 10 to 80 microseconds. The data that are stored in the memory can be printed on cards which are used in a digital computer in calculating the neutron spectra.

Advances such as the Time-of-Flight Analyzer are consistently being made at KAPL, in every technology related to pioneering

work in nuclear propulsion for marine applications. Hundreds of KAPL scientists and engineers like Rudy Slovac are contributing new research findings and techniques in Reactor Physics, Metallurgy, Ceramics, Mechanical Design, and other fields. Projects benefiting from such milestones include KAPL's twin Pressurized-Water Reactors for the Submarine *Triton* and a power plant for the world's first atomic powered destroyer.

PROFESSIONAL OPPORTUNITIES

...exist today for talented physicists, engineers and metallurgists who are interested in contributing to this development. U.S. citizenship required; advanced degree or related experience preferred. Send complete resume and salary requirement to: Mr. A. J. Scipione, Dept. 46-MC.



Rudolf E. Slovac is one of a number of KAPL scientists concerned with reactor physics. He earned a BSEE at Union College in 1945, joined KAPL in 1951 after taking his MS in Physics at Indiana University. Since then he has contributed to several KAPL projects.



Knolls Atomic Power Laboratory

OPERATED FOR A.E.C. BY

GENERAL



ELECTRIC

Schenectady, New York



George E. Uhlenbeck (Michigan), president of the American Physical Society.



Francis W. Sears (Dartmouth), president of the American Association of Physics Teachers.



Victor F. Weisskopf (MIT), vice president of the APS.



Leonard O. Olsen (Case), president-elect of the AAPT.

to James G. Potter, professor of physics at the Agricultural and Mechanical College of Texas, and to William C. Kelly, director of education for the American Institute of Physics.

Officers

During the joint meeting in January of the American Physical Society and the American Association of Physics Teachers, officers were elected by both organizations. George E. Uhlenbeck, professor of theoretical physics at the University of Michigan and vice president of the Physical Society during the past year, succeeded Jesse W. Beams as APS president. Victor F. Weisskopf, professor of physics at the Massachusetts Institute of Technology, was elected vice president of the Society and Karl K. Darrow and S. L. Quimby were re-elected as secretary and as treasurer, respectively. Harvey Brooks, professor of applied physics at Harvard University, and Charles H. Townes, professor of physics at Columbia University, were elected members of the APS Council.

For the physics teachers, Francis W. Sears, professor of physics at Dartmouth College, succeeded

Clarence J. Overbeck of Northwestern University as president of the Association. Leonard O. Olsen, professor of physics at Case Institute of Technology, was named president-elect and is to assume the presidency of the AAPT next year. Frank Verbrugge and Sarnborn C. Brown will continue as AAPT secretary and treasurer, respectively. Joseph R. Dillinger of the University of Wisconsin was named to the Association's Executive Committee.

Officers to serve during the present year have been elected by the following organizations:

American Physical Society Division of Fluid Dynamics: chairman, Walter M. Elsasser (University of California at La Jolla); vice chairman, Arnold M. Kueth (University of Michigan); secretary-treasurer, Raymond J. Emrich (Department of Physics, Lehigh University, Bethlehem, Pa.); other members of the executive committee are François N. Frenkiel (Johns Hopkins University Applied Physics Laboratory), Lester Lees (California Institute of Technology), Galen B. Schubauer (National Bureau of Standards), and Peter Wegener (California Institute of Technology).

American Crystallographic Association: president, Robert E. Rundle (Iowa State College); vice president,