

**Table 3. AEC Physical Research and CTR Operating Budget**

| Program                           | (Millions of dollars)  |                        |
|-----------------------------------|------------------------|------------------------|
|                                   | FY 1973<br>(estimated) | FY 1974<br>(requested) |
| High Energy Physics               |                        |                        |
| Cambridge Electron Accelerator    | 2.0                    | 0.6                    |
| Alternating Gradient Synchrotron  | 24.6                   | 24.2                   |
| Zero Gradient Synchrotron         | 15.6                   | 14.4                   |
| Bevatron                          | 15.2                   | 13.4                   |
| SLAC                              | 24.95                  | 24.2                   |
| 200 GeV Accelerator               | 19.2                   | 29.0                   |
| General Research and Development  | 22.850                 | 22.7                   |
| <b>Total High Energy Physics</b>  | <b>124.4</b>           | <b>128.5</b>           |
| Medium Energy Physics             | 15.9                   | 18.0                   |
| Low Energy Physics                | 25.3                   | 26.5                   |
| Mathematics and Computer Research | 4.6                    | 4.0                    |
| Chemistry                         | 46.4                   | 46.5                   |
| Metallurgy and Materials Research | 24.2                   | 26.5                   |
| <b>Total Physical Research</b>    | <b>240.8</b>           | <b>250.0</b>           |
| Controlled Thermonuclear Research |                        |                        |
| Research and Development          | 13.555                 | 16.28                  |
| Confinement Systems               | 23.445                 | 28.22                  |
| <b>Total CTR</b>                  | <b>37.0</b>            | <b>44.5</b>            |

get (see PHYSICS TODAY, March, page 97), the Venus-Pioneer program is not in the FY 1974 funds and Orbiting Solar Observatories J and K are gone too. Applications Technology Satellite G has been cancelled. There is, however, still a strong program at NASA with Skylab, the US-Soviet docking venture in 1975, Viking landers, the 1977 Jupiter-Saturn missions, and another Mariner flight. The shuttle is being continued although it has taken a cut in funds that will delay its development somewhat. The NASA physics and astronomy program is down to \$95.0 million in the new budget, compared with \$126.2 million in 1973. —SMH

## Four new members for AEC advisory committee

The President has appointed four new members to serve on the General Advisory Committee of the US Atomic Energy Commission. They are Evans Hayward, a physicist at the National Bureau of Standards center for radiation research; Hubert Heffner, chairman of the department of applied physics and professor of applied physics and electrical engineering at Stanford University; Michael M. May, associate director-at-large of the Lawrence Livermore Laboratory, and Walter H. Zinn, a retired vice-president of Combustion Engineering, Inc and former director of Argonne National Laboratory.

## Nuclear Data Committee is now operating

A US Nuclear Data Committee has been formed to deal with problems in measurement, compilation, evaluation and distribution of nuclear data. It operates under the auspices of the Director of Physical Research of the US Atomic Energy Commission and in cooperation with the National Standard Reference Data System of the National Bureau of Standards.

The Committee directs requests for nuclear-data measurements to appropriate parties and, in turn, prepares and makes available periodic lists of the most sought-after nuclear-data measurements. It also distributes reports on progress made in supplying the information for which it has received requests.

Inquiries concerning nuclear-structure and reaction data should be made to the Nuclear Data Project, Oak Ridge National Laboratory, Oak Ridge Tennessee 37830. For neutron data the National Neutron Cross-Section Center at Brookhaven National Laboratory, Upton, New York 11973 should be contacted. Requests for other types

the scientific feasibility of controlled fusion in the early 1980's.

In confinement-systems funding, the open-systems operations are requesting funds of \$5.530 million in FY 1974 as opposed to \$5.625 million in FY 1973. Closed-systems operations, which include the Princeton Large Torus, the 2XII machine at Lawrence Livermore Labs, Scyllac at Los Alamos and the Ormak at Oak Ridge as well as other programs have received an increase of \$2.795 million to \$17.740 million. A total of \$4.950 million is allotted to major device fabrication, and much of this money will be used on the PLT, now in the beginning state of construction.

**At the Department of Defense,** R&D funding of \$8.99 billion is requested, \$482 million more than the estimate of spending for 1973. Most of this amount is for development with about \$1.9 billion for research. Basic research will get around \$0.5 billion of this, going up by \$29.6 million, but there is little information as to how much of this will go to basic physics. One source said that he saw significant shifts away from supporting basic physics at DOD, although he admitted that the picture was not all that clear.

**NASA's budget** shows an increase from \$3.062 billion to \$3.136 billion, although this is the result of money withheld from the FY 1973 budget. \$3.423 billion was spent in FY 1972 and the budget request for 1973 was \$3.302 billion. Apart from the casualties of recent cuts in the current bud-

Ridge, 500; Sandia, 700, and SLAC, 80.

In the AEC's controlled thermonuclear research program, which is now funded separately from the physical research program, the total funding is up \$7.5 million. This includes an increase of \$2.725 million in the research and development part of the program and a jump of \$4.775 million in confinement-systems funding. R&D in FY 1974 will focus on preparations for the development of larger superconducting magnets and more powerful neutral beam sources that will be used in the next generation of fusion devices, the generation that is expected to demonstrate



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of data or for general information on nuclear-data collections may be addressed to the Office of Standard Reference Data, National Bureau of

Standards, Washington, D. C. 20234. If information is desired that is not available or that would require new measurement activity, such requests

should be made known to the USNDC through the office of the Director of Physical Research, US Atomic Energy Commission, Washington, D. C. 20545.

## the physics community

### AAPT elects Guernsey as vice-president

Janet Guernsey has been elected vice president of the American Association of Physics Teachers for this year. She succeeds Sherwood K. Haynes of Michigan State University who is now president-elect. E. Leonard Jossem, Ohio State University, is the new president.

Guernsey is chairman of the physics department at Wellesley College, where she received her BA. She received her PhD from MIT. She has been active in efforts to improve physics teaching at all levels and to improve the rapport between physics teachers in secondary schools, colleges and universities. Her main research interest is in neutron physics. Guernsey will serve as AAPT vice-president for one year and president-elect for one year, after which she will become president.

James B. Gerhart of the University of Washington has been reelected AAPT secretary. He was elected secretary in 1971 and will now serve three more years.

Peggy Dixon, professor of physics at Montgomery College in Takoma Park, Maryland, was elected to the AAPT executive board, and Arnold Arons of the University of Washington was elected to the council on physics in education. Others elected to posts in AAPT are Charles Reser, supervisor of secondary-science education in the Colorado Springs schools, who was

elected to the committee on physics in pre-college education; Alan Portis, professor of physics at the University of California at Berkeley, committee on physics in higher education; Sallie A. Watkins, professor of physics at Southern Colorado State College, committee on science education of the general public; Dudley Towne, physics professor at Amherst College, committee on international education; John H. Miller, professor of physics at the University of Delaware, committee on apparatus; Alfred Bork, professor of information and computer science at the University of California at Irvine, committee on instructional media; and John A. Fynn, instructor of physics at Mesa College, Grand Junction, Colorado, committee on physics in the two-year colleges.

### New dues structure announced for APS

The Council of the American Physical Society has announced a plan for the 1974 APS dues structure to help the members selectively choose new programs of the society. According to the plan, there will be attached to the APS dues bill a request for voluntary contributions to support those APS programs indicated on a checklist. In this way members will be able to vote with dollars for the activities they want the APS to undertake. The new society activities will be described in the APS *Bulletin* or in enclosures with the dues bill so that members can make choices based on adequate information.

In conjunction with the plan, dues for fellows and members will be made the same: \$20.00 per year. Dues for students will remain \$10.00 per year. A normal voluntary contribution of \$5.00 will be indicated on the dues bill and a special request for larger contributions will be made to the more highly paid members and fellows.

### Manpower book soon available from AIP

The American Institute of Physics analysis of physics manpower based on the 1970 National Register will soon be available. The report, entitled *Physics Manpower 1972: Education and Employment Studies* contains information on the numbers and distributions of

people studying physics at the high-school, undergraduate and graduate levels as well as analyses of the numbers of physicists and types of work done at colleges and universities with emphasis on PhD-granting institutions. Also in the report, for the first time, is information on minority groups in physics. Data on employment and funding are also included.

The report costs \$10.00, although the price on orders received before 15 April is \$7.50. *Physics Manpower 1972* may be ordered from the American Institute of Physics, 335 E. 45th St., New York, N.Y. 10017.

### New editors for two AIP-published journals

Two physics journals are now under new editorships. Edwin F. Taylor, a senior research scientist at the Education Research Center of the Massachusetts Institute of Technology, has replaced Forrest I. Boley as editor of the *American Journal of Physics*, which the American Institute of Physics publishes for the American Association of Physics Teachers. David Pines, a theoretical physicist at the University of Illinois in Urbana, has taken over Lewis M. Branscomb's position as editor of *Reviews of Modern Physics*, published by AIP for the American Physical Society.

Taylor, who received his PhD from Harvard University in 1958, has taught at Wesleyan University (1957-64), at Princeton University (1962-63) and at MIT, where he has worked in various capacities since 1964. He has written two books: *Introductory Mechanics* (1963) and *Spacetime Physics*, completed jointly with John Archibald Wheeler in 1966. Taylor's present specialization is educational research.

Also editor of the series *Frontiers in Physics*, Pines has been involved in the theory of plasmas, electrons in metals, superconductivity, superfluidity, liquid helium, nuclear matter, neutron stars and compact x-ray sources. After completing his PhD at Princeton University in 1950, Pines worked at the University of Pennsylvania (1950-52), the University of Illinois (1952-55), Princeton University (1955-58) and the Institute for Advanced Study (1958-59). He was director of the University of Illinois' Center for Advanced Study during 1967-70. □



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