

art in magnet technology; such work is no longer "relevant" under Section 203. He observed that the French, Dutch and Germans are now building similar magnet laboratories, and the Russians are proposing a larger one. "Unless the National Science Foundation takes on the responsibility for the [Magnet Lab] facility and supports our version of such an advanced project, we will relinquish the leadership we have worked so hard to attain."

To illustrate that "pure" science in an interdisciplinary setting leads to re-

sults of practical, social importance, Lax took his Magnet Lab as one example. At MIT, research in magnet technology and in plasma physics is contributing to an AEC-supported controlled-thermonuclear experiment. The search for a magnetic monopole has resulted in techniques for removing pollutants from air and water. The Magnet Lab is working with medical researchers on neurosurgical procedures, magnetoencephalography and magnetocardiography, and cardiac defibrillation.

Lax also noted the impending shutdown of the Haystack facility and

the curtailed funding of MIT's Space Science Center. The latter is an interdisciplinary laboratory with participation from sixteen MIT departments. Its general research funds are expected to drop from \$1 million to zero in 1972; this will sharply reduce the Center's scientific space projects.

Affected laboratories. Lax told PHYSICS TODAY that, with some small cuts that had been expected, but largely because of Section 203, the Magnet Lab's annual funding from AFOSR dropped at the beginning of this year from \$2.4 to \$1.8 million.

THE PHYSICS COMMUNITY

Astronomy Survey to Assess Ground and Space Priorities

A new Astronomy Survey Committee has been named by the National Academy of Sciences and the National Research Council to study and to assess the priorities of optical, radio, ground and space astronomy. The committee, headed by Jesse Greenstein, professor at Cal Tech, was requested, and later funded, by the National Science Foundation and the

National Aeronautics and Space Administration because, as Greenstein says, "federal expenditures in astronomy have reached the point where the federal government felt it was necessary to consider the balance within the total astronomy program, which is now, including the space-astronomy program, at a 'big science' level." In addition, he said that "... the study is necessary, especially at a time when prospects for support of basic research seem poor; it may be necessary to work very hard merely to stand still."

Initiated in September 1969, the committee has already met four times this winter. Most of its seven panels have each met at least twice, and the optical and radio panels have had their interim reports approved by the committee. In addition to these panels, there is a panel on relativity and astrophysics that is working for both the astronomy committee and the Physics Survey Committee, headed by D. Allan Bromley (PHYSICS TODAY, February, page 65).

The study plans to enlarge upon the 1964 Whitford Committee Study on ground-based astronomy, which omitted certain areas that the new study will explore, such as space astronomy and solar physics. To make the report comprehensive and well balanced, the committee is cooperating with the American Astronomical Society and is studying the earlier reports of the NSF Ad Hoc Advisory Panel for Large Radio Astronomy Facilities, headed by Robert Dicke (see PHYSICS TODAY, December 1969, page 56) and of NASA's Astronomy Mission Board.

Although the present panels are technique oriented, after their reports in Oc-

tober 1970, they will be formed into new panels that will concentrate on subject matter. These new panels will incorporate the work of the current panels and present their results by spring 1971. In June of 1971 the committee will meet to write the final report, which should be available by fall 1971. Greenstein stated that the committee "is not sponsoring or recommending project support. The procedures for funding by federal agencies is the same, except insofar as our report provides a planning guide to facilities' requirements for various subdisciplines."

AIP To Publish Conference Proceedings; Wolfe Is Editor

The American Institute of Physics has initiated a new program for publication of proceedings of selected, high-quality physics conferences. These proceedings will be published in a book-form, serially numbered sequence titled *The AIP Conference Proceedings Series*.

Hugh C. Wolfe, director of AIP publications, is editor of the new series and will work with an advisory committee in selecting the conferences to be included. AIP will handle the book manufacture, promotion, warehousing and distribution. The officials for each conference will probably handle the refereeing and editing of the papers; if camera-ready copy is prepared by either the author or the conference, there will be no page charges.

Although prices have not yet been set, conference participants will be given a reduced rate. Wolfe told

ASTRONOMY SURVEY COMMITTEE

Jesse L. Greenstein, *Cal Tech*; Helmut Abt, *Kitt Peak*; Jacques Beckers, *High Altitude Observatory, Boulder, Colo.*; Geoffrey Burbidge, *University of California, San Diego*; Bernard F. Burke, *MIT*; A. G. W. Cameron, *Yeshiva University*; Frank D. Drake, *Cornell University*; George B. Field, *University of California, Berkeley*; Herbert Friedman, *Naval Research Laboratory*; Leo Goldberg, *Harvard College Observatory*; Robert Hardie, *Dyer Observatory, Vanderbilt University*; Geoffrey Keller, *Ohio State University*; Robert P. Kraft, *Lick Observatory*; Robert Leighton, *Cal Tech*; Donald Morton, *Princeton*; Robert W. Noyes, *Harvard College Observatory*; Charles R. O'Dell, *Yerkes Observatory*; Donald E. Osterbrock, *Washburn Observatory, University of Wisconsin*; Jeremiah P. Ostriker, *Princeton*; Bruno B. Rossi, *MIT*; Harlan J. Smith, *McDonald Observatory, University of Texas*; Lyman Spitzer Jr., *Princeton*.

ASTRONOMY SURVEY Panels and Chairmen

Infrared, Robert B. Leighton; *Optical Telescope*, Helmut Abt; *Radio Astronomy*, David S. Heeschen, *National Radio Observatory*; *Solar*, Jacques Beckers; *Space*, A. G. W. Cameron; *Statistical*, Geoffrey Keller; *X-ray, Gamma-ray*, Herbert Friedman.

At the latter figure the Lab is operating at about one-half shift, almost no money is available for graduate and postdoctoral research support or for visiting researchers, and further staff cuts impend. Lax declared that over the years AFOSR has done a "superb job" in helping the Magnet Lab to become a unique national facility. Now, because of Section 203, AFOSR cannot support the Lab as such a facility. In a letter to NSF Director William McElroy, Air Force Assistant Secretary (for Research and Development) Hansen has asked NSF to assume this responsibility.

The MIT Lincoln Laboratory's Haystack radar and radio astronomy facility will have to shut down on 1 July unless new funding sources can be found, reports Lincoln Director Milton Clauser. Haystack, built in the early 1960's for \$20 million, has had an operating budget of about \$1.5 million, very largely from the Air Force, for the last two years. Primarily as a result of Section 203, this funding must now be cut to zero; whether or to what extent NSF or NASA can keep Haystack operating is so far unclear. Haystack's 250-300 kilowatts at X-band complement Arecibo and

Goldstone. Recently, under an NSF grant obtained with the cooperation of the 13-university Northeast Radio Observatory Corporation (NEROC), Haystack has increased its operating schedule from 40 to 120 hours a week. As a national facility, it now serves NEROC and is available to the US astronomy community.

The AEC-supported Princeton-Pennsylvania Accelerator has had its operating budget cut from \$4.0 million in fiscal year 1970 to \$2.0 million in fiscal 1971 and zero in fiscal 1972 (see page 55). AEC has cut the Cambridge Electron Accelerator bud-

PHYSICS TODAY, "As part of AIP's promotional effort, libraries and booksellers will be encouraged to enter standing orders for the series." For further information contact Wolfe at AIP.

Shoemaker Elected as ACA President; Succeeds Hamilton

David P. Shoemaker, chemistry professor at MIT, is the new president of the American Crystallographic Association, succeeding Walter C. Hamilton of the chemistry department, Brookhaven National Laboratory. Shoemaker, with MIT since 1951, will become physics chairman at Oregon State University, as of 1 July.

He will serve with William R. Busing as vice-president and Walter

L. Roth as secretary. Busing is with the chemistry division, Oak Ridge National Laboratory and Roth with General Electric Research and Development Center. Robert A. Young, physics professor at Georgia Institute of Technology, is continuing the second year of his three-year term as treasurer.

IEE Physics Abstracts Is Now Available on Microfiche

Physics Abstracts, published by the Institution of Electrical Engineers, London, and distributed in the US by the American Institute of Physics, is now available in microfiche. The subscription rate is \$192 per year, which is the same as for the journal, but a joint microfiche and journal subscription is set at the reduced rate of \$288. IEE is handling the microfiche distribution, with AIP supplying the mailing list; AIP will continue US journal distribution.

NSF Gives Over \$1 Million To AIP Information Division

In March, the American Institute of Physics received \$1 003 800 from the National Science Foundation for continued planning and initial implementation of its national information system for physics. The grants, requested by the AIP Information Division, cover the remainder of 1970 and are the first part of a \$4.2-million request for a three-year period.

The grants consist of \$265 300 for current operations and service;



FREDERICK SEITZ, president of Rockefeller University and former president of the National Academy of Sciences, has become chairman of the AIP Committee on Physics and Society (COMPAS). Appointed by the governing board at its 21 March meeting, Seitz succeeds H. R. Crane, physics chairman at the University of Michigan.



SHOEMAKER

\$640 200 for development of stage two, which will include file searches based on requests, and microform copies of the primary articles, and \$98 300 for advanced planning (PHYSICS TODAY, December 1969, page 29).