

in the library contains 225 additional reels of tape, including recordings of lectures and symposia and interviews other than those conducted by the center. More is being added all the time.

The work has been supported by the National Science Foundation and the American Academy of Arts and Sciences. The NSF approved a new grant this fall.

The center's "traditional" program continues unabated. An August newsletter reported more than 1000 collections or individual items at 120 repositories are now linked in the Center's "National Catalog of Sources for the History of Physics." Credit is given to the "continuing cooperation of physicists, historians, librarians and archivists." Through personal visits and letters and telephone calls, the center staff has compiled catalog cards listing the name of the repository, name of collection, major subject of collection and the type of materials. Selected portions of the catalog will be published by AIP in a "Guide to Sources."

The center is directed by Charles Weiner. Its quarterly newsletter is available without charge.

Queens College Establishes Low-Temperature Center

A center for experimental and theoretical low-temperature studies has been established in the physics department at Queens College in New York. Arthur Paskin, formerly of Brookhaven National Laboratory, is director. Erna M. J. Herrey, a professor in the department, assists. Construction of experimental facilities began this fall.

World's 2nd Reactor Opened To Visitors At Oak Ridge

The historic Graphite or X-10 Reactor at Oak Ridge is now open to the public six days a week. Visitors may see the loading face and control room of the reactor as well as exhibits tracing the development of reactor technology.

The X-10 was built only 11 months after the success of Enrico Fermi's reactor at the University of Chicago, and served as the prototype for the plutonium reactors at Hanford, Wash. Although technically the world's second reactor, the X-10 was the first

to operate at significant power. Built in 1943 and shut down 20 years later, the reactor was registered as a National Historic Landmark in 1966, the same year the last fuel slugs were removed.

Two Federal Labs Establish University of Maryland Links

The National Bureau of Standards and the Naval Research Laboratory have established cooperative programs with the University of Maryland.

The NBS arrangement has broad implications. Bureau employees will participate in university research and training programs, and university faculty and students will be encouraged to use NBS facilities. Initial emphasis will be given cooperation between the university's Center of Materials Research and the bureau's Institute for Materials Research. The bureau compared the possibilities with the 1962 establishment of the Joint Institute for Laboratory Astrophysics in Boulder, operated by NBS and the University of Colorado.

The Naval Research Laboratory agreement is confined to a cooperative program for materials research. NRL said its purpose was to "increase significantly the scientific breadth of the participants by coupling the strengths of a major government research organization with those of a leading academic institution."

Physical Review Adds Section For Comments and Addenda

The Physical Review has added a "Comments and Addenda" section for short communications that are not urgent enough to justify publication in *Physical Review Letters*. The section is designed for only two types of communications:

Comments on papers previously published in *The Physical Review* or *Physical Review Letters*. Comments by others than the authors of papers under discussion will be sent to the original authors for their comments in turn.

Addenda to papers previously published in either journal, in which the additional information can be presented without writing a complete article.

In the 8 July issue of *Physical Review Letters*, the editors said, "It should be noted that this new section is not intended as a medium for

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polemics, not as a haven for poorly written short communications which would be more understandable and useful if written up in the normal format of a short article."

NAS Panel Asks Construction Of New Planetary Instruments

Ground-based planetary astronomers require new instruments to take advantage of new knowledge and new techniques, according to a special panel of the National Academy of Sciences. In a September report, the panel specifically recommended new radar and radio telescopes, a 120-inch infrared telescope, new Fourier interferometers and development of new radiation detectors for all regions of the spectrum from near ultraviolet to microwave.

The study was conducted by the Panel on Planetary Astronomy of the NAS Space Sciences Board; it was paid for by the National Aeronautics and Space Administration. The report is a sequel to one on space exploration issued a month earlier (*PHYSICS TODAY*, October, page 65) that had urged more frequent planetary probes by relatively inexpensive spacecraft.

The latest report finds "little doubt that the most interesting discoveries in the planetary system will continue to result from space explorations in the form of probes, orbiters and landers." It continues, however: "Ground-based observations are often more effective and are almost always considerably less expensive than measurements made in space."

The report also calls for construction of a 60-inch optical telescope in the southern hemisphere to be used for planetary work; a world-wide photographic patrol of the planets through 1 Jan. 1974; greater efforts in astrometry, particularly of comets and asteroids; recovery of more extraterrestrial matter and more work in laboratory spectroscopy.

The panel suggests establishment of a national society for planetary sciences, possibly as an affiliate of an existing society.

The 17-man panel was headed by John S. Hall, director of Lowell Observatory. Copies of the report are available at \$3.50 each from the NAS Printing and Publishing Office in Washington. □

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