

get from \$3.5 million to \$2.4 million; the present staff of 180 will be cut to 112 in July (see page 55).

At Florida State, after about 10 years of steady support, the Air Force is cutting by about 2/3 its funding of the Tandem Van de Graaff Accelerator Program. Robert H. Davis, the program's Principal Scientist, told *PHYSICS TODAY* that, under a planned phasing down begun two years ago, AFOSR support has declined from about \$440 000 in fiscal 1968 to \$320 000 this year, with \$150 000 expected for fiscal 1972. NSF supports nuclear-theory work related to the Accelerator Program, but NSF and AEC have not been able to take up the much larger experimental funding slack as had been expected. The impact of Section 203 remains to be seen. The cuts in research support come at a particularly inopportune time: With an NSF Science Development grant awarded two years ago, Florida State is just now replacing its 10-year-old 6-MeV-terminal Van de Graaff with a new 9-MeV machine, and the Air Force has recently made available to the Program an XDS-9300 computer.

Funds for Cornell University's Arecibo Observatory, in Puerto Rico, are now about 20% below what is needed for full utilization of the world's largest radio-radar telescope. But because of the high fixed operating and maintenance costs, Frank Drake, head of Arecibo's Ithaca group and Associate Director of Cornell's Center for Radiophysics and Space Research, estimates that this funding gap means in fact a 50% loss in scientific output. The Observatory expects about \$2 million for 1970, largely from NSF. But the termination, as a result of Section 203, of relatively small AFOSR and ONR contracts will seriously curtail pulsar and quasar research. Present money limits also prevent the introduction of needed low-noise and maser equipment, and other steps to upgrade the overall facility. The Observatory has been in operation since 1964 for work in ionospheric physics, planetary radar and radio astronomy. Most of the money for a recommended resurfacing of the main "dish," firmly estimated at \$4.2 million, is included in the fiscal 1971 NSF budget. But Congress specifically rejected this item for fiscal 1970; so far Arecibo's scientists are "hopeful" for 1971.

These several examples are probably representative of the current money problems of many physics research projects. Particularly serious is the fact that cuts in the 10-40% range may very disproportionately hurt "good science," even though there is enough money to keep the project going at some minimal level. This is especially likely for research that depends on expensive equipment, where operating costs—"just keeping the tubes warm"—consume most of the budget. —JBP

Daddario Introduces Bill for Technology Assessment Office

Congress would have its own Office of Technology Assessment if the bill to be introduced early in April by Congressman Emilio Q. Daddario were approved (*PHYSICS TODAY*, April, page 61). The new office would be the first new Congressional arm since the General Accounting office was formed in 1921.

Functions of the proposed Office include: identifying existing impacts, or providing "early warning" of future impacts, of technological developments; trying to establish cause and effect relationships; reviewing alternative technological or other routes to desirable goals; identifying areas needing new research or facts; and presenting findings to Congress.

The Office of Technology Assessment would be guided by a 13-member Technology Assessment Board, consisting of two Senators, two Representatives, the US Comptroller General, the head of the Legislative Reference Service of the Library of Congress, and seven public members from various backgrounds appointed by the President. The Board would elect one of the public members as chairman. It would appoint for a six-year term a full-time Director of the Office, who would rank in the government just below a Cabinet officer (roughly equivalent to the NSF Director and the AEC Chairman). The new Office would work closely with the Legislative Reference Service and with NSF's technology-assessment activities. Congress would appropriate funds for its work, and it would be administratively attached to the General Accounting Office.

The new Office would not have nor operate any laboratories or test facilities of its own. But it would have money to pay for technology assess-

ments deemed necessary, it would know how and where to get them done, and it could organize *ad hoc* task forces. Assessment findings would be only additional information inputs to Congress, and they would not supplant hearings or any other legislative procedures.

The new bill is the culmination of five years of work by Daddario and his Subcommittee. If the Office of Technology Assessment is created, it will be a governmental innovation with major impacts on American science and technology in the future. Informed guesses in Washington put the chance that the Daddario bill will be enacted this year at about 50%. Because Daddario is running this year for Governor of Connecticut, and not for Congress, the bill's prospects will not be helped. Even if the bill should not pass this year, there will almost certainly be continuing efforts to institutionalize technology assessment in the government—in the Executive as well as the Legislative branch. But, without Daddario, it is not clear who will take the lead in Congress. —JBP

IN BRIEF

Revised vapor-pressure tables have been published by Richard E. Honig at RCA Laboratories, Princeton, N. J., and can be obtained in either $8\frac{1}{2} \times 11$ inch or 20×25 inch size, from the Technical Publications Office. Also available are copies of the revised fundamental physical constants, which were determined by Barry Taylor, W. H. Parker and Douglas Langenberg.

The National Science Foundation is seeking grant proposals for institution-wide, interdisciplinary programs of research and education in science planning and policy. Details are available from the Office of Planning and Policy Studies.

A "minispectrometer," a microwave ESR spectrometer that uses Gunn diodes instead of klystrons, has been developed by Bell Labs; the devices are being furnished to qualified colleges as teaching aids.

Directors of Bolt Beranek and Newman Inc of Cambridge, Mass., and Graphic Controls Corp of Buffalo have agreed to merge, subject to stockholder approval. In their last complete fiscal years, sales of the two firms totaled \$36 million. □