

new spending authority, again in line with the cost of doing business.

Construction of new plant faces a cold year generally. One of the few increases for new plant construction is for medical schools, up \$2 million from the 1968 request of \$55 million. Other construction money requests have done well to stay at the 1968 level.

A breakdown of planned federal research activities across the board shows basic science getting \$346 million, up six percent from 1968, and what is called "targeted research and development" getting \$1.09 billion, up five percent. Cancer still tops the list of targets though the 1969, \$155 million proposal is identical with the 1968 expenditure. Research into the heart and circulatory system with emphasis on the development of mechanized aids is close behind. In 1967 \$126 million was spent in this area. The 1968 estimate is \$136 million, and an expenditure of \$139 million is sought for fiscal year 1969.

EDUCATION/MENTAL HEALTH

A priority package

Educational research would receive a substantial boost this year, reflecting a widespread determination among social scientists in and out of government to understand the learning process.

Despite decades of public education and the new pre-school Head Start programs, insight into how and why children learn remains practically nil. Particularly shocking to educators was the 1966 Coleman report on American schools. In that survey, wide gaps in student achievement could not be explained by either the quality of the schools or their curricula. Results of the Head Start program are equivocal at best. Most of the research on Head Start shows little or no impact on achievement.

In fiscal 1969 the Office of Education hopes to double its spending on research with an increase from \$90 million to \$176 million. The money will go into developing new tools, such as computer-assisted education, and also into basic research on the learning process. OE will extend work at its 20 regional laboratories and provide new money for university-based research centers.

A lump sum of \$10 million has been set aside for a major demonstration school in the District of Columbia. In addition to this project, stress will be placed on building prototype programs for educating children from low income, migrant or non-English speaking families and children of American Indian families.

Reflecting this same trend, the Na-

tional Institute of Mental Health will move into the pre-school area with \$14.5 million, a significant percentage of the Institute's \$66 million increase—from \$360 million—for 1969. With the Office of Economic Opportunity, NIMH will compare and evaluate new concepts in day-care centers for children and pre-school education. It means a joint affair among Federal agencies, including the Children's Bureau (with \$1 million) and OE to attack the disadvantages faced by children from deprived backgrounds.

A good part of the remaining NIMH increase goes to construction and staffing of community mental health facilities. The Institute is one of the few agencies in the Government to escape a cutback in construction grants, indicating the priority placed on community mental health assistance.

In 1969, NIMH has \$13.1 million for new construction and \$15 million for staffing the facilities. Similarly, drug addict rehabilitation has high priority with \$8 million for new facilities—double the 1968 level.

Throughout the Department of Health, Education and Welfare, a tight budget has been carefully shaped, peeled, pared and parceled to give whatever priority is possible to such programs as maternal-child care, mental health, help for the handicapped and retarded, family planning and educational research. In many cases, the amount of money involved is small—family planning for instance will have approximately \$36.8 million in 1969 compared to \$14.8 million for 1968; on the other hand, the programs have increased and sometimes doubled while other programs have had to hold steady or fall back.

In all, HEW will ask for increased appropriations amounting to less than a billion dollars, but has managed to find \$1.7 billion in new money to spend. Almost all the extra funds come from cutbacks in construction in such areas as higher education.

MISCELLANEOUS

Oceans, weather, ecology

The number of dollars the President is requesting for exploring and exploiting ocean resources during fiscal 1969—a Government-wide program totaling \$516 million—does not tell the whole story. Small investments provide clues to the directions the Government is beginning to consider seriously for future heavy expenditures. But they show up, if at all, only upon close analysis of the specific figures for individual agencies, such as Defense, Interior, Commerce, Transportation and the National Science Foundation.

Details concerning these investments are being reserved for a special message on marine resources President Johnson is expected to deliver no earlier than mid-February. Nevertheless, there are indications to at least some of the directions:

- Methods of gathering food from the sea, with emphasis on fish protein concentrates will be demonstrated (SN: 2/3, p. 111), and small contracts will be awarded for research into developing edible fish concentrates from oily species, which will require a change from present techniques.

- Research into the problem of handling polluting materials in the ocean. Preliminary investigations by the Department of Interior and the Coast Guard will include the mechanics of handling hazardous cargoes, the control of pollution resulting from oil or other wastes.

- The development of buoy technology to collect oceanographic and environmental data.

- The processing and dissemination of the unprecedented amounts of oceanographic data that will be recorded and transmitted to central stations when the ocean buoy system begins operation. This study, under the National Science Foundation's Sea Grant program, could lead to improved data processing methods.

Atmospheric sciences are slated for increased funding in fiscal 1969, exclusive of NASA's space flight programs, with the overall total for nine departments and agencies of \$210 million. Largest increase, except for the Department of Defense, is slated for Commerce's Environment Science Services Administration, which climbs some \$3 million.

Most of this will go for increased research on severe storms, weather modification, ocean-atmosphere interactions, computerized weather forecasting, and improved weather observations from satellites and balloons.

The total for the Department of Interior's research and development programs drops by one million to \$254 million. However, the funding requested for the conduct of research and development is increased by \$16 million; that for facilities will decrease by the same amount.

The proposed 1969 budget calls for emphasis on pollution control and discovering new mineral resources, especially heavy metals in short supply. Continuing research will emphasize efficient tapping of the energy of coal and development of low-cost water desalination.

An increase of some \$4 million in the Smithsonian Institution's archaeological and biological research will be financed under its foreign currency program.