

## More cuts, but less drastic

The President's budget request for the National Aeronautics and Space Administration, \$3.27 billion, is seasoned with a little hope this year: The figure is only \$27 million less than the budget authority for 1971. Thus for the first time in seven years NASA has not suffered a large cut. The request represents a clear halt in the trend toward further budget decreases, according to Acting Administrator George M. Low. Proposed actual expenditures in 1972, \$3.15 billion, will be some \$216 million less than last year, however.

There are several other significant trends. For the first time in its 14-year history the allocation for the Office of Space Science and Application is more than half that of the Office of Manned Space Flight—a jump from one-fourth in 1970 to three-fifths in 1972. This reflects the phasing out in spending for the Apollo program. If Apollo 14 has a successful flight, Apollo 15 will still fly this July. Apollo 16, however, will be delayed until March 1972 and Apollo 17 to December 1972. The delays will give NASA engineers time to accommodate experiments formerly scheduled for the canceled Apollo 18 and 19 flights and relieve the fiscal 1972 budget of the cost of Apollo 17.

The NERVA nuclear rocket program (SN: 1/9/71, p. 32) also represents an expected trend—a reduction from \$38 million last year to \$15 million. This limits work on the rocket, says Dr. Low, to "essential long leadtime items." Unless Congress increases this level of spending the nuclear rocket could not be ready for its original flights in 1974.

Although the Office of Advanced Technology took a beating along with NERVA, a sizable increase from \$1.9 million to \$15 million was earmarked for the development of the experimental Short Take-Off and Landing craft which should be ready for test flights in 1974.

The NASA science budget request of \$750 million includes a little bit for everyone—planetary physicists, space physicists, astronomers and exobiologists. A major chunk, \$180.5 million, is for the two planned unmanned Mars landers (Viking) in 1976. As expected, \$30 million will fund a new start for outer planetary flight. NASA will concentrate the early spending on optimizing an advanced spacecraft (perhaps TOPS—Thermoelectric Outer Planet Spacecraft), which could be flexible enough to both swing by planets in the Grand Tour missions as well as orbit planets of high scientific interest such as Jupiter (SN: 1/30/71, p. 77).

Another new start is the High Energy Astronomy Observatory (HEAO) to fly in 1975 and 1976 (SN: 4/11/70, p. 369). Some \$500,000 is also earmarked for the proposed large space telescope.

NASA's request for \$190 million for the space shuttle was reduced by President Nixon to \$100 million. This figure would include \$58 million for engine development and \$42 million for vehicle design. NASA has recently decided to accommodate Air Force shuttle requirements by choosing a two-stage reusable rocket plane with the delta wing and cross-range capacity of 1,100 miles instead of the less sophisticated straight-wing design (SN: 11/14/70, p. 381).

To be able to go ahead with such a diverse program, NASA will have to cut, for the third straight year, its civil service work force by 1,500 positions by the end of fiscal year 1972. This is a decrease to 28,000 civilians from the 1967 level of 34,000. □

## HEALTH AND MEDICINE

### Significant changes

In his statement accompanying the Government's proposed budget for fiscal 1972, President Nixon announced that he would soon present Congress with a national health strategy for the 1970's and propose significant changes in the Federal role in the nation's system of health care.

Emphasis, he says, will be on expansion of preventive care, training of additional health personnel and greater equity and efficiency in the delivery of health services. Though the promised Federal health insurance program does not appear in the new budget, some aspects of the new policy do.

The total Government expenditures for biomedical research will rise from \$1.287 billion for fiscal 1971 to \$1.325 billion for 1972. This increase includes \$100 million for the National Institutes of Health for a concentrated attack on cancer (SN: 12/19/70, p. 459); \$30 million of this sum will be spent in the coming fiscal year.

Though details of the new cancer program will not be made public until later this month, the Department of Health, Education and Welfare says that research will be targeted on virology, basic cell biology, and cancers that may be caused by chemicals in foods and the environment. These expenditures are in addition to the regular activities of the National Cancer Institute, for which \$232 million is requested.

The Heart and Lung Institute budget devotes additional funds to studies on arteriosclerosis, a major cause of heart attacks, and contains a \$5 million increase for research on sickle cell

anemia, a hereditary blood disease that afflicts the black population. Encouraging progress has recently been made in treating it (SN: 12/19/70, p. 456).

The National Institute of Mental Health budget provides for an increase of \$34.6 million, \$15 million of which is for expanding the community mental health centers program. The budget also contains a significant increase in funds for dealing with narcotics addiction, drug abuse and alcoholism. During fiscal 1972, \$40.2 million will be made available to community centers for treatment and rehabilitation of narcotics addicts and alcoholics. This is an increase of \$18.6 million over 1971.

The major new item in the Food and Drug Administration budget is \$4 million for the National Center for Toxicological Research to be established at the Pine Bluff Arsenal in Arkansas. The facility will be equipped to study the cumulative effects of chemical additives on man and to establish levels that can be safely tolerated. The \$11 million increase in the FDA budget also includes \$2.3 million for comprehensive food inspection to detect toxins and poisonous metals, such as mercury. The FDA will also strengthen the review of new drugs and drugs already on the market.

Another high-priority item in the health budget is training of health personnel. Recognition of the rapidly increasing need for physicians, dentists, nurses and other health professionals is reflected in a special allotment of \$95 million for support of health professions schools. About half this sum will be spent during 1972. The HEW's budget provides an additional \$124 million for institutional support of medical and dental schools. "Our objective," says HEW Secretary Elliot L. Richardson, "is to significantly increase the number of graduates from medical and dental schools and to create meaningful incentives to introduce innovations into their curricula."

**Not all facets** of the Federal health program are flourishing, however. The HEW budget shows a decrease in funds for research on arthritis, allergies and neurological and infectious diseases. HEW allotments for regional medical programs and for construction of outpatient facilities were also cut.

Though Medicare and Medicaid budget totals were set at \$12.417 billion, an increase of \$939 million, HEW is proposing amendments to the Social Security Act which it says would save \$444 million in Medicaid outlays and \$400 million in Medicare outlays for fiscal 1972. These proposals, says Secretary Richardson, will encourage more efficient use of health resources and shift a greater portion of costs to the beneficiary. □