NEW WORLD

Belt Tightening in Store for US Science

by our Washington Correspondent

ANOTHER period of financial starvation is in store for science and technology in the United States. That is the prospect held out by President Nixon's austere budget for the 1974 financial year (which starts on July 1 this year), which was sent to Congress earlier this week. The budget proposed an overall increase in expenditure on research and development which is clearly insufficient to keep pace with inflation and, moreover, it is also made clear that cutbacks in some areas—notably space and some biomedical research—will not wait until next year, but will be put into effect immediately.

The overall strategy for science and technology outlined in the budget is to allow increases in areas of research likely to benefit society—energy, transportation, cancer, disease of the heart, lungs and blood vessels, and drug abuse are all set for relatively large increases in research money. But this largesse will be offset by cutbacks elsewhere. And, in spite of the fact that the United States is at last moving towards a peacetime economy, defence-related research and development is again set for a large increase. Basic research comes off particularly badly in the budget.

The reason for such a gloomy outlook for science and technology is that after proposing expansionary budgets to Congress for the past two years, President Nixon has decided to slam the brakes on public expenditure in order to make good his promise not to increase taxation. In effect, he has partially abandoned the teachings of John Maynard Keynes and returned to the era of balanced budgets.

As a first step, he will slash more than \$11,000 million from federal expenditures this fiscal year—which is already more than half way through—to keep total government spending below \$250,000 million. And the budget which he has proposed for 1974 sets an upper limit of \$268,700 million, which is an increase of about 7.5 per cent, most of which will be swallowed up by inflation and by commitments made in previous years. Sharp reductions are planned for many programmes, but social services, agricultural subsidies, unemployment assistance and President Johnson's great society programme figure prominently among the casualties. In relation to these programmes, science and technology fare relatively well.

The total budget for research and development is due to increase from \$16,500 million last year, to \$17,100 million this year, and to reach \$17,430 million next year. Not all of this money will be spent immediately, however, since obligations often extend over several years, and the actual spending

pattern presents a rather more alarming picture. Total expenditures on research and development last year came to \$16,103 million, this year they will drop to \$15,886 million, and pick up again next year to \$16,790 million (see Table 1). The effects of this dislocation in spending will be most severely felt

White House Unveils the Plan

by our Washington Correspondent

PRESIDENT NIXON has finally announced his intention to dismantle the science policy apparatus that was set up in the White House by Presidents Eisenhower and Kennedy during the panic that followed the launching of Sputnik. As expected (see *Nature*, 241, 234; 1973), the Office of Science and Technology is to be abolished and the National Science Foundation will become the focal point in the federal government for the formulation of US science policy.

The post of Science Adviser to the President, which was vacated by Dr Edward E. David earlier this year, will also be scrapped and Dr H. Guyford Stever, director of the National Science Foundation, will assume the role of chief science adviser to the White House. He will advise the President through Dr George Shultz, Secretary of the Treasury and the President's Assistant for Economic Affairs. The changes were formally announced in an executive reorganization plan which was sent to Congress at the end of last week.

Congress has 60 days in which to comment on the plan and if it is not blocked it will be put into effect on July 1 this year. Although the plan does not mention the President's Science Advisory Committee, it is understood that it will be abolished along with the Office of Science and Technology. Dr Stever, in theory, will be called upon to advise on policies involving all types of science and technology, but it is expected that advice on military research and development will usually come from the Department of Defense and the National Security Council will also take on some additional responsibilities in this area. Similarly, the director of the National Institutes of

Health will probably continue to be the chief source of advice to the White House on biomedical research.

The reorganization plan also involves scrapping the National Aeronautics and Space Council—the White House Committee with the vice-president as chairman which has the task of coordinating policies for space and aeronautics. The NASC was originally formed in response to the launching of Sputnik, and its duties have largely been carried out by the National Aeronautics and Space Administration during the past few years.

Although the reorganization plan has at last been published, several questions still remain about the new structure. For one thing, Dr Stever will be faced with at least a potential conflict of interest in being director of a federal agency, and at the same time offering advice to the Office of Management and Budget about how the science budget should be divided. At the same time, the National Science Foundation will not be getting any new staff or an increase in budget to help it carry out its new functions. Dr Stever said last week that the Foundation's budget for 1974 will allow it to increase its staff by about 20 people, but the extra staff is needed for existing NSF programmes such as RANN (Research Applied to National Needs). If new staff members are taken on specifically for the new science policy functions, presumably it will be at the expense of other NSF activities.

Asked last week when he was first brought in on discussions of the plan, Dr Stever replied, "About two weeks ago". The plan was therefore drawn up in the White House and presented to the National Science Foundation more or less as a *fait accompli*.