

Study shows only 1% real growth in basic research spending

THE combined effects of increasing inflation and Congressional budget-paring have meant that a strong push by the Carter administration for continued real growth in funding for basic research was successful "to only a limited degree" over the past year, according to a survey of actions taken on the 1980 budget prepared by the AAAS secretariat and published last week.

The survey points out that, as in previous years, Congress substantially increased the basic research budget of the National Institutes of Health but pared back the increases proposed for most other agencies.

"Excluding NIH, the total income increase in basic research over the fiscal year 1979 comes out at about 11%, compared to 13% proposed in the budget. With inflation approaching 10%, compared to less than 7% anticipated in the budget, not much real growth is left."

The survey points out that although the

administration failed to convince Congress to hold R & D funding for the NIH to the level appropriated for 1979, the rate of increase was substantially slowed from that enjoyed by NIH in recent years.

In contrast, although Congress had initially moved to reduce the proposed levels of expenditure for military research and development, as attention focused on SALT II and on Iran, legislators changed course and approved virtually the full amount recommended by the President.

"In general, Congress seems to be fully committed to providing full support to a large and expanding military R & D programme" says the survey. It points out that no major defence policy issues were fought out between Congress and the administration in the discussion of the military R & D budget.

The net effect of congressional actions, it concludes, was to raise support for basic research by one per cent. □

Carter plans 13% research boost

PRESIDENT Carter is to ask Congress for an increase of about 13% in financial support for basic science in the fiscal year 1981 — just enough to keep slightly ahead of expected inflation and to allow for real growth.

In his budget request, due to be presented to Congress on 28 January, the President is also expected to place particular emphasis on funding for engineering and the physical sciences, which have recently received less attention than the biomedical sciences.

The President gave a preview of his budget request on Monday at the presentation of 20 national medals of science, the highest honour awarded to US scientists and engineers by the federal government. He said that the net effect of his request will be to increase support for

basic science by 40% during the first three years of his administration — officials said later that the increase for the first two years was 24%.

The budget for the National Aeronautics and Space Administration is expected to reflect the impact of the additional costs of the space shuttle on space programmes. In particular, NASA officials have been unable to reverse an earlier decision by the Office of Management and Budget not to support research on an ion drive system which is essential if a joint mission is to be mounted to the comet Tempel 2 with a 'fly-by' of Halley's comet in 1985.

However, this year at least two projects are expected to be approved: the gamma ray observatory, and a national oceanographic satellite.

David Dickson

United Kingdom

Locust research cut

RESEARCH on locusts at the UK Centre for Overseas Pest Research is one of the casualties of recent cuts in government spending. For the past 50 years, the centre has combined research and field control and has been a major centre for visiting scientists from developing countries to do research and for the training young scientists.

With the cuts, all field work, research and training will stop and the locust experts employed by COPR will be available only as consultants. Within six to eight years, according to Dr Haskell, director of the centre, most of them will have left. The United Nation's Food and Agriculture

Organisation in Rome has taken over the monitoring of potential areas of plague evolution and of organising international control measures but Dr Haskell fears that much of the centre's basic research on locusts will not be taken up elsewhere.

The centre's first director was Sir Boris Uvarov who determined that what had been thought of as two distinct species of locust were different forms of one species: the less innocuous 'grasshopper' and the plague-causing destroyer of crops. More recently, the centre has been renowned for its work on the relation of swarming to meteorological conditions and in establishing the importance of pheromones to swarm evolution.

Peter Collins

United Kingdom



Time running out for technology

FAR from making a smooth transition into the post-industrial world, Britain is heading for much greater competition, says a government report* published last week.

Britain must be prepared particularly for developments in "information technology and biotechnology, and of industries of high growth potential arising from the increasing need to conserve energy and materials" it says.

The booklet is the result of a working party, headed by Sir James Menter, of the UK's Advisory Council for Research and Development. ACARD called for the report principally to project the impact of potential technological change on employment, but the authors found it impossible to reach quantitative conclusions. But they argue "more unemployment results from loss of market share following a failure to innovate than from the introduction of new technology. Conversely, if new technology leads to an increase in market share there is generally an increase in employment opportunities".

The least predictable recommendations in the report are that the UK should consider setting up an agency to facilitate the import of new technologies from countries which have already taken a lead; and that large companies with R & D results that they do not intend to use should be encouraged to set up or seek out small firms better able to utilise such results.

The report suggests that "attempts by firms or industries in the UK to avoid competition from technologically more adept foreign competitors by specialising in certain (usually high-priced) sectors of the market (for example the motor cycle industry), by continuing to accept lower real wage rates and higher manning levels (car industry) are ultimately doomed to fail."

Robert Walgate

**Technological Change: threats and opportunities for the UK*, Cabinet Office, HMSO, £1.75