

NASA budget falls foul of contracts

Washington

The National Aeronautics and Space Administration (NASA) has been caught in crossfire between the US Congress and the Office of Management and Budget (OMB) over whether the federal bureaucracy is spending too much money in employing private consultants to carry out its work. This has resulted in a demand from the Senate that NASA cut \$14 million from a budget for consultant services which NASA claims totals only \$4.3 million, but which the Senate Appropriations Committee, using a broader definition disputed by both the agency and the OMB, claims to be more than \$90 million.

Unless it is reversed during negotiations with the House, the extra cut in NASA's budget, coming on top of a proposed two per cent reduction (approximately \$100 million) in its budget request, will mean further pressure on space research projects as efforts are made to protect the space shuttle programme.

The pressures are already beginning to bite. For example, NASA is planning a reduction in the scope of experiments to be carried out by the spacecraft which will take part in the international solar polar mission, due for launch in 1982. Scientists from the European Space Agency, which is providing the second spacecraft in a dual mission, argue that the omission of instrumentation from the US craft could reduce the value of their own findings.

The proposed cuts in NASA's consultancy contracts reflect a general unease in Congress about the way in which federal agencies have come to rely increasingly on outside contractors to meet their responsibilities.

However, the agencies face a dilemma. On the one hand, Congress is continually increasing their work-load while, on the other, the Administration is keen to keep down the cost and size of government. The inevitable result is that the agencies contract work out. This, in turn, provides ample scope for disputes over rigged bidding for contracts, favouritism towards contractors, duplication of work and conflicts of interest.

Several instances of such practices have come to light in the past year. Last week, for example, officials from the Department of Energy admitted before a congressional oversight hearing that they had failed to check up on a consultancy firm employed to help draw up clean air regulations and were therefore unaware that the firm had also been working for companies engaged in a campaign to oppose the Clean Air Act of 1977.

In debating the 1981 budgets for a number of independent federal agencies, the Senate agreed to a proposal from Senator Warren Magnuson, chairman of the Appropriations Committee, to make a

15 per cent cut in the consultancy budgets of three agencies — NASA, the Environmental Protection Agency and the Department of Housing and Urban Development.

In opposing the proposed cuts, NASA complained that the analysis on which they had been calculated did not reflect the difference between narrowly defined contracts for advisory services and service contracts essential to a range of space programmes, including the shuttle.

Strong support for NASA's activities came from Senator Adlai Stevenson and ex-astronaut Senator Jack Schmitt, chairman and ranking minority member of the Senate Science and Space Subcommittee. Mr Schmitt proposed as an alternative that the 15 per cent reduction be according to NASA's own definition of what constitutes a consultant — this would reduce its budget by only \$640,000.

However, Mr Magnuson and fellow Appropriations Committee member Senator William Proxmire remained firm. Mr Magnuson quoted a recent report from the General Accounting Office citing OMB's apparent failure significantly to reduce excessive waste, and its abuse of consultants' contracts over a 20-year period, as well as a statement from Admiral Hyman Rickover that "the use of consultants often impedes, rather than facilitates, action by government agencies". Mr Schmitt's amendment was

lost by 27 votes to 66.

NASA is not the only agency in trouble about consultants. The Environmental Protection Agency (EPA) announced last Friday the cancellation of a \$285,000 contract offered to a research worker at the California Institute of Technology to study the health effects of radon gas because of charges that the contract had improperly been awarded to the university without competitive bidding.

Dr David M. Rosenbaum, head of EPA's Office of Radiation Programs, had offered the contract to the university without seeking other bids on the basis that Caltech was the only contractor qualified to carry out the work involved. However, a university research worker told a Senate committee last Thursday that there were other contractors who could have carried out the same work.

Dr Rosenbaum also justified his actions on the grounds that it would have taken nine months to secure the services of a consultant through competitive bidding, and that because radon was a "serious health problem", fast action was needed.

However, his superior at EPA said that Dr Rosenbaum may have violated the agency's procurement regulations in making the award. And the agency's inspector general said that she had found "serious and troublesome" problems in the contracts procedures used by the radiation office.

David Dickson

Einstein Observatory in trouble

Washington

Equipment problems on board the National Aeronautics and Space Administration (NASA)'s second High-Energy Astronomical Observatory (HEAO 2) — also known as the Einstein Observatory — are causing concern that the mission may have to be brought to a premature end.

Initially the satellite, which was launched in 1978 and has provided the first X-ray telescope as sensitive as ground-based optical telescopes, was planned to operate only for one year. But after its initial success in generating new scientific data, the mission was extended, and until the recent setback NASA scientists hope the satellite would continue to send back data well into next year, when atmospheric drag would take it out of orbit.

How long the satellite goes on operating, however, will now depend on the behaviour of the gyroscopes used to position it. Three weeks ago, the transmission of scientific data had to be temporarily shut down after the failure of two of the six gyroscopes to switch on after a temporary black-out.

The satellite needs three functioning gyroscopes to position itself. One is already

dead, and another has been working erratically for some time. The latter, however, has now had to be brought back into service in the hope that its performance will be adequate. If not, NASA officials said last week that they are developing software instructions for a back-up control system which would use the two gyroscopes that are still functioning, as well as either a sun sensor or a star tracker on the satellite.

At Harvard University, whose Center for Astrophysics is responsible for collecting the data transmitted from the Einstein Observatory, scientists also fear that even if the observatory continues to operate satisfactorily — as they are now hoping — the extra fuel consumed during recent manoeuvring to keep solar power cells facing the sun will shorten its lifetime by a couple of months.

The trouble on HEAO 2 started when one of the thrusters on the satellite started to burn for longer than it should during a repositioning manoeuvre. The gyroscopes were subsequently turned off with other equipment, but two failed to start when power was switched back on.

The gyroscopes have given trouble once before at the start of the mission in 1978,