

## SEISMOLOGY

**DoD keeps Control**

by our Washington Correspondent

THE Department of Defense came close to losing its seismology research programme last week. A little noticed provision of the bill authorizing funds for the Department of State would have transferred the programme from the Pentagon to the Arms Control and Disarmament Agency (ACDA), but the provision was deleted from the bill when it came up in the Senate.

Those who were trying to wrest control of the programme from the Defense Department can, however, claim at least one significant victory. Anxious not to lose the programme, which is designed to provide the theoretical backing for a monitoring system to police a possible treaty banning all testing of nuclear weapons, the Department of Defense has given assurance that it will not be phased out, as many had feared. Instead it is to be broadened in scope and the changes could have a significant impact on seismological research.

Supporters of the bid to transfer the seismology research programme to ACDA, led by Senator Clifford Case, offered an amendment to the authorization bill which was approved by the Senate Foreign Relations Committee. Their argument was essentially that since the Defense Department is concerned chiefly with developing nuclear weapons, it suffers from a conflict of interest in supporting a programme designed to lead to a ban on weapons testing. To illustrate their case, they point out that the Defense Department has allowed funding for the programme to decline steadily since 1963, when it was given \$41.4 million, to less than \$10 million that is being requested for 1973. Underlying this suggestion is the belief that if the programme is transferred out of the obsessive secrecy that surrounds all the Pentagon's programmes, its future will be assured and its results will be more readily available to Congress.

But those arguments fell flat last week when the authorizations bill came up for debate in the Senate, and an amendment designed to preserve the *status quo* was passed by 45 votes to 34. Proposed by Senator Peter Dominick, and co-sponsored by a handful of the more conservative members of the Senate, the amendment carried the day for two chief reasons. First, both the Department of Defense and the ACDA were opposed to the transfer—indeed, Gerard Smith, Director of ACDA and the chief US representative at the SALT talks, said in a letter to Senator Case, "I do not see compelling reasons favouring the transfer you propose and I foresee many problems". And, second, Senator Dominick made great play of the fact

that ACDA has not been responsible past, and lacks the expertise for such for extensive scientific research in the activities.

Another trump card that Dominick and his supporters had to play was a letter from Dr John S. Foster jun, director of Defense Research and Engineering, to the chairman of the Senate Armed Services Committee, John Stennis. Foster said that the Department of Defense will continue to fund the seismological research programme and will reorient it so that "the thrust of our future research will be concerned with verifying a comprehensive test ban treaty".

The programme outlined in Foster's letter will consist of three parts. The first will be concerned with pinpointing geographical areas that may give rise to anomalous seismic events, "with a view to reducing the false alarm problem". The second will be aimed at designing a worldwide network of seismometers to monitor seismic events and, presumably, to police a test ban treaty if one were concluded, and the third part of the programme will be concerned with the problem of evasion; it will include research aimed at finding seismological techniques to detect clandestine tests, and it will also be concerned with considering "the impact of non-seismic means to deter the use of potential evasion techniques".

The announcement that the seismic research programme will be broadened to look at possible anomalous areas may provide something of a shot in the arm for seismology, for the idea is to spread the net wider than in the past. Previous

research has been focused chiefly on the geography of the USSR, but according to one official of the Defense Department concerned with the programme, the research will now be extended to other areas, although no firm decision has yet been taken as to which areas. The commitment to design a worldwide monitoring system is also welcome news for proponents of a comprehensive test ban, for it indicates that the Department of Defense is sufficiently impressed with the results of past research on monitoring techniques to apply them to a policing system.

But perhaps the most far-reaching of the plans outlined in the letter is the suggestion that the US government is willing to reconsider the impact of non-seismic means to deter potential evasion techniques. The United States government has always insisted that a comprehensive test ban treaty should include provision for on-site inspection, while the USSR has always bucked such a suggestion, and consequently negotiations have not gone past this hurdle. Recently, however, there have been signs that the US government may be reconsidering its position—Dr Stephen Lukasic, director of the Defense Department agency which controls the seismic research programme, told the Joint Committee on Atomic Energy last October, for example, that on-site inspection probably would not detect evidence of a small test. Foster's remark about considering the impact of non-seismic detection techniques is therefore being interpreted as further evidence of rethinking in the Defense Department about on-site inspection.

**Short Notes****FDA Takes All**

THE Division of Biologics Standards is to be transferred lock, stock and barrel from the National Institutes of Health to the Food and Drug Administration on July 1. The announcement of the transfer, made last week by Elliot L. Richardson, Secretary of Health, Education and Welfare, came as something of a surprise in view of his earlier announcement that only the DBS's regulatory functions would be transferred (see *Nature*, 237, 66; 1972), and it means that the NIH will lose all the research on new vaccines and vaccine techniques. The proposed total transfer of the division is also surprising in view of the fact that the DBS has been criticized in the past for conflict of interest since it both develops and regulates vaccines; separation of the agency's research and regulatory activities would therefore have circumvented such accusations. But keeping them together should ease the transfer of research results to the regulatory functions.

**ZPG at Last?**

THE birth rate in the United States fell during the first three months of 1972 to its lowest point in history. At 15.8 births per 1,000, the birth rate is considerably lower than it was a year ago, and it comes close to the level required for zero population growth. Liberalized abortion laws and the economic climate may have depressed the birth rate, but even if the effect is not merely a short-lived phenomenon, it will take forty or fifty years before the population actually reaches a stable size.

**NSF Official leaves for Texas**

DR LOUIS LEVIN, former Assistant Director of the National Science Foundation for Institutional Programmes, is leaving the foundation to become a special consultant to the Texas Tech University. Levin, who resigned last month as assistant director of the NSF because his budget had been contracting for the past few years, was connected with the foundation for sixteen years.