

berate release possible, and (2) in 1982 or 1983, when it became clear that NIH would be receiving proposals for deliberate release. The district court thus enjoined NIH from approving all other deliberate release experiments. The emphasis on the 1978 revision is misguided for two reasons. First, the policy revision did not irrevocably commit NIH to any decision. Second, significant changes have occurred since 1978, including the maturation of genetic engineering to a point where deliberate release is feasible and imminent. It makes little sense to rest a judgment on prospective relief on decisions made several years ago in different circumstances.

The Supreme Court has emphasized that the question of preparing a programmatic EIS [which plaintiffs argued NIH should have prepared in 1982 or 1983] is initially committed to the agency. We are not prepared to agree that plaintiffs are likely to succeed in showing that the absence of a programmatic EIS unreasonably constricts adequate environmental evaluation.

### Judge MacKinnon, concurring

I am of the opinion that the foundation should have made its original application to NIH. This is not a case of just failure to exhaust [administrative remedies], but a case of a complete failure of the foundation to present any claim whatsoever to the agency — NIH.

I can understand how the RAC scientists who are knowledgeable in this field of genetic engineering would approve the experiment by a vote of 19-0 with no abstentions. It would seem that an experiment that releases into the environment organisms substantially the same as some already living there, and subject to the same naturally occurring controls, would present no risk. However, the general public and those who have to pass on this action are not knowledgeable in this field and they are easily frightened by new scientific experiments and their possible consequences. It is such lay concerns that must here be satisfied by Environmental Assessments and Impact Statements.

Due notice of the pendency of this matter was given in the *Federal Register* and comment was invited, but none was forthcoming. Had the objections of the foundation been alertly raised before the agency, the district court and this court would undoubtedly have had a better record to consider and might even have been spared the necessity of ruling on the case.

The foundation's conduct has also delayed this vital experiment for a very considerable period of time. The use of delaying tactics by those who fear and oppose scientific progress is nothing new. It would, however, be a national catastrophe if the development of this promising new science of genetic engineering were crippled by the unconscionable delays that have been brought by litigants using the National Environmental Policy Act and other environmental legislation in other areas. □

## Star wars

# Quarrel over congressional study

Washington

THE Congress's Office of Technology Assessment (OTA) has reacted angrily to accusations that its study of President Reagan's "star wars" Strategic Defense Initiative (SDI) is "designed to kill SDI rather than examine it". The accusations were made last week by Lieutenant General Daniel Graham, a former member of the advisory panel overseeing OTA's study and a prominent champion of space-based missile defences. OTA says there is "no basis whatever" for Graham's attacks and accuses him of breaking faith with OTA's study by distributing confidential documents to senators and to a senior official in an (unnamed) executive agency.

Graham is director of the High Frontier organization, which is widely thought to have been influential in persuading President Reagan to instigate research into missile defences. Graham resigned from the OTA panel on 2 February after being told

by OTA's director John Gibbons that he must undertake to keep OTA study documents confidential in order to remain on the panel. Graham admits distributing confidential OTA documents annotated by himself to three senators and the executive official. Graham's explanation for his action is that "this concerns national security and I consider that more important than their damn procedures".

Graham's charges extend both to OTA staff, whose study drafts he describes as "utterly biased", and the advisory panel, which he says is "heavily stacked with highly vocal opponents of SDI". OTA replies that Graham chose to list only those members with whom he personally disagrees; the panel has 21 members in all, chosen to represent all major points of view. Sidney Drell of Stanford University, a critic of SDI who appears on Graham's list, dismisses Graham's charges as "patently false". Another accused panel member, Richard Garwin, praised the work of the OTA staff and the panel chairman. The panel's chairman, Guyford Stever of Universities Research Associates, did not wish to comment on Graham's charges in the interests of maintaining neutrality.

One section of OTA's draft report which particularly incensed Graham lists possible goals of SDI and evaluates them. According to Graham, OTA "stated that a goal is to provide means for the United States to credibly threaten the use of offensive nuclear weapons should it so choose". OTA replies that Graham's quote is taken out of context; the draft did not suggest that this was the actual objective of SDI. Another of Graham's objections is that the report "attempts to make the issue a choice between the Anti-Ballistic Missile (ABM) treaty and SDI".

The issue that brought to a head the row between Graham and OTA was an attempt in the report to separate the issues of anti-satellite weaponry and ballistic missile defence. Graham says this was done to weaken the case for SDI; after unsuccessfully challenging OTA's authority to do so, he took his arguments to senators, and at least one senator has made representations to OTA about the study, says Graham.

OTA is no stranger to star wars controversy; last year, a background paper prepared for the study by Ashton Carter of Harvard University was vilified by Lieutenant General James Abrahamson, director of SDI. Carter's report concluded that the prospect of a near-perfect defence against nuclear missiles was so remote that it should not form the basis of public policy. Graham says he hopes his resignation will serve to discredit the latest OTA report; on the other hand, as one panel member pointed out, it also means there is now one fewer SDI supporter on the panel.

Tim Beardsley

## British cooperation

Washington

**FOLLOWING the recent endorsement of SDI research by British Prime Minister Margaret Thatcher during her visit to Washington, negotiations are now under way here to determine how Britain might best cash in on the effort. The SDI office has made it plain that it welcomes allied research cooperation ("we need all the help we can get") and says "the ball's in their court". One major obstacle, however, is that Article IX of the ABM treaty, signed by the United States and the Soviet Union in 1972, expressly forbids the transfer to third parties of anti-ballistic missile technology covered by the treaty. A statement agreed between the signatories makes it clear that the article covers the transfer of "technical descriptions or blueprints specially worked out for the construction of ABM systems or their components". But Britain, and presumably other allied nations, would seek agreements guaranteeing just such transfers.**

**The British negotiations in Washington are being led by Dr John Green, deputy head of the embassy's defence staff. One option is that a memorandum of understanding might be exchanged between the two governments; an objective of the negotiations is to establish a coherent framework for British research institutions and companies wanting to offer their expertise to the SDI office. As cost does not seem to be a major object in SDI, there should be plenty of opportunity for qualified British scientists to jump on the bandwagon. But first there will have to be a detailed scrutiny of research capabilities in relation to needs; the results are likely to remain classified.** Tim Beardsley