Strategic Defense Initiative

## **Congress questions UK pact**

Washington

DESPITE high hopes in Europe that President Reagan's Strategic Defense Initiative (SDI) might lead to thousands of millions of dollars of SDI contracts for European scientists and engineers, the Europeans are unlikely to see much more than about \$300 million in total, according to congressional testimony last week by John Pike of the Federation of American Scientists, an unofficial pressure group. Pike's analysis, based on an examination of existing SDI contracts, identifies six major barriers to European cooperation and warns that the political repercussions due to failed expectations will reduce the already hesitant and patchy support for SDI in Europe.

SDI is expected to let contracts worth in total about \$30,000 million in the five years to 1990. But almost half of this will be off-limits to European countries because of articles and "agreed statements" in the Anti-Ballistic Missile (ABM) treaty of 1972, which prohibit transfer to other states of not only ABM systems and their components but also technical descriptions and blueprints specific to such systems. The US administration has repeatedly said that it is conducting SDI research in full compliance with the ABM treaty, and British support for SDI is conditional on continuing compliance.

Pike believes the treaty will prevent European participation in major SDI projects such as sensors, rocket interceptors and directed-energy weapons. Instead, participation would be restricted to basic research and development only of very small devices and subsystems, for which the dollar value would be "trivial".

Pike's second major impediment to cooperation is the limited capabilities of European companies, which in his view puts a further one-third of SDI beyond their reach. Pike pointed out that, in contrast to the very limited experience of European companies, the United States has spent \$50,000 million on ABM research over the past 30 years.

A twelve-year-old US defence procurement regulation prohibits contracting with foreign sources if a US source is equally competent and willing to do the work; exceptions appear to be allowed only if the foreign government concerned reimburses the US government for the work. The record so far is not encouraging: none of the 1,000 SDI contracts so far let have been to non-US companies (there is one small subcontract in Britain) and there were similarly no contracts for non-US companies among the \$3,000 million spent by the US Army on ballistic missile defence between 1975 and 1985.

Having disqualified non-US companies from \$24,000 million of SDI work on treaty and technical grounds, Pike went on to tell a subcommittee of the House of Re-

presentatives' Committee on Banking, Finance and Urban affairs that a further \$5,000 million was excluded because its commercial potential would mean keeping it in the United States or because of inherent geographical restrictions. Of the \$1,000 million left over that would be available for foreign competition, Pike estimated that a maximum of 30 per cent is likely actually to go overseas.

The hearing was held shortly after the announcement of the signing of a memorandum of understanding between Britain and the United States on SDI. As the terms have not been made public, the likely effect of the agreement is hard to gauge. But Representative John LaFalce (Democrat, New York) told Dr Gerold Yonas, chief scientist of SDI Organization, that he believed the purpose of the US administration in obtaining the agree-

ment with the British was political in that it was expected to foster European political goodwill. LaFalce warned that the United States might "build itself up for a fall" if the agreement created false hopes.

Concern about the effect of the agreement on US employment and the economy was evident in aggressive questioning of Yonas by Representative Bruce Vento (Democrat, Minnesota). Vento repeatedly asked how there could be open competition for research contracts if even a non-specific commitment had been made to support research in Britain. LaFalce questioned whether the United States should be entering agreements that might mean US taxpayers' money generating commercial spin-offs to benefit Europe. Questions were also asked about the confidence the administration had that classified material would be kept secret in Britain. Yonas replied that one of the purposes of the intergovernmental agreement was to control classified information centrally. Tim Beardsley

European military technology

## France veers towards integration

THE US Strategic Defense Initiative (SDI) is an imperfect shield in response to which the Soviet Union need only "sharpen its foil", French scientists claimed this month at the second open "science and defence" meeting organized by the French government.



But the canny French do not ignore the implications of the US programme. Did they not launch the Eureka programme of European collaboration in high-technology products in response to SDI? Last week, M. Roland Dumas, the French foreign minister, said that Europe should now also pay attention to the development of a military counterpart to Eureka. Dumas thus mildly echoed the somewhat stronger proposal a week before of the previous President of France, Valery Giscard d'Estaing, that Europe needs not only a military Eureka, but its very own "star wars" shield.

Dumas did not go so far. Nor did the other participants in the meeting, held at the Ministry of Defence's own grande école, the École Polytechnique. The technical aspects of SDI were thoroughly rehearsed — a defensive satellite system

would need twenty times as many satellites as could be used to repel an attack, 95 per cent of the system being likely to be out of range, while the Soviet Union could launch missiles in convoys to saturate this usable 5 per cent. The hardening of launchers, a reduction in the boost period, rotation of the vehicles and other measures could increase the power requirements of directed-energy weapons twentyfold, people argued. And cruise missiles deep in the atmosphere could avoid the system altogether.

Dumas said that SDI has nevertheless already achieved one thing - the "scattering" of Europeans, with each nation reacting differently to the challenge both technologically and politically, despite the counterbalancing effects of Eureka. There must in particular be an effort at cooperation in military technology within Europe, Dumas said, overlooking the recent commercial and diplomatic conflict between France and Britain over the supply of advanced battlefield communications technology to the US Army. Dumas went on to say that it is time "to provoke a political effort among governments . . . very soon in the coordination of military and industrial policy". Dumas was arguing, indeed, for a truly European "military/industrial complex" of the kind that has stimulated much basic and applied research in the United States and which, so far, is lacking in Europe. Strange again, perhaps, for the foreign minister of a Socialist government which in rosier days was arguing for the banning of nuclear tests and a curbing of the world arms trade, of which France is now the leader behind only the United States and the Soviet Union. Robert Walgate