

Star wars

Strategic weaknesses made plain

Washington

PRESIDENT Reagan's proposed "Star Wars" defence is technically unfeasible and strategically unsound, according to a new study headed by Sidney Drell, a physicist at Stanford University. The study* released last week, recommends that support for the so-called Strategic Defence Initiative be limited to the present level — roughly \$1,500 million per year — and that the programme be restricted to basic research that would serve primarily as a "hedge" against possible Soviet advances.

The study warns that the very act of intensifying a research and development programme in this area could be strategically destabilizing: "Even if a deployed system never materializes, increased instability can result as both sides build up their forces to preserve their deterrent capabilities . . . to match each other's anticipated ABM capability."

The administration has requested \$1,777 million for fiscal year 1985, and wants to spend a total of \$26,000 million over the next five years. The House of Representatives cut the 1985 request by \$400 million, the Senate by \$150 million but the entire defence authorization bill is now deadlocked in a conference between the two in which the most contentious issue is the procurement of MX missiles.

The Drell study treads the increasingly familiar ground of technical objections to an effective space-based defence, but also levels a series of criticisms based on the effects of such a defence on nuclear deterrence and on stability in times of crisis. The administration, in the face of technical criticisms of the notion of an air-tight defence — one that could render nuclear weapons "impotent and obsolete" in President Reagan's words — has recently begun to suggest that even a leaky defence would enhance stability. In a recent briefing for foreign correspondents, Under Secretary of Defense Fred Ikle said that a "partial" defence against Inter-Continental Ballistic Missiles (ICBMs) could "protect retaliatory capabilities . . . and thus really introduce additional stability". The reasoning is that even a rudimentary defence would introduce so much uncertainty into Soviet strategic calculations that they would not risk a first strike — success would be too uncertain. But the Drell study claims that an effective but imperfect defence would diminish not only the incentive for a first strike but also the reliability of the Soviets' retaliatory capability. If both sides have such a defence, during a crisis "each could fear that the other would calculate his situation to be better (however bad) if he struck first" — knowing that his defence would have to deal only with a crippled retaliatory force.

The study argues that there are "surer

and less risky ways to enhance our deterrent" than deployment of a massive Anti-Ballistic Missile (ABM) system; among these are the recommendations last year of the Scowcroft Commission to replace multiple warhead land-based ICBMs with single-warhead, possibly mobile, "Midgetmen" missiles — a less easy target for a Soviet strike. Drell notes that the ABM Treaty itself has enhanced the US deterrent: an ABM would protect only ICBMs, but the treaty, by assuring successful penetration of a retaliatory attack, enhances the deterrent value and of ICBMs and submarine-launched missiles.

Drell's most telling objection is perhaps that the Soviets are unlikely to stand still in the face of a US deployment of a space-based defence. The development by the United States of multiple warhead missiles in the late 1960s was in fact a direct response to observed Soviet ABM activities. Steps that the Soviets might take in response to a US space-based ABM include countermeasures (hardening of missiles against lasers and particle beams); an expanded ICBM force (Soviet SS-18 missiles can carry up to 30 reentry vehicles, although they are now limited to 10 by SALT II, so it would not be difficult for the Soviets quickly to boost the number of warheads or decoys it could send up); a shift to long-range cruise missiles, which can evade a space-based ABM; and antisatellite weapons to destroy a US space

defence. (As the report by the Office of Technology Assessment earlier this year noted, the "pop-up" defence advocated by Edward Teller as a solution to the inherent vulnerability of a space-based system would require an instantaneous launch in response to detection of a Soviet attack, and would have to be propelled by a booster thousands of times larger than the Saturn V in order to get into position quickly enough. Even then, small changes in Soviet ICBM characteristics — a few seconds' shorter burn time for its boosters, for example — would mean that the defence could not get up in time.)

The Drell study and the administration agree that US deployment of a space-based defence would entail abrogation of the ABM Treaty. Even testing might. Article V forbids the parties to the treaty to "develop, test or deploy ABM systems or components which are sea-based, air-based, space-based or mobile land-based". And "Agreed Statement D" of the treaty seems to suggest that exotic ABM systems (not involving missile interceptors) not foreseen when the treaty was written could be developed, tested or deployed only by amendment of the treaty. Drell argues that, besides protecting US retaliatory capability, the ABM Treaty is the "clearest demonstration that escape from total political and strategic confrontation is possible and can have practical effect".

Stephen Budiansky

**The Reagan Strategic Defense Initiative: A Technical, Political, and Arms Control Assessment, Sidney D. Drell, Philip J. Farley and David Holloway, Center for International Security and Arms Control, Stanford University.*

Academic tenure

British rights to go

BRITISH universities have washed their hands of the government's plan to legislate to extinguish academic tenure. The chairman of the Committee of Vice-Chancellors and Principals, Lord Flowers, has now told the government (in a letter published two weeks ago) that he cannot deliver the agreement of the universities voluntarily to change the rules on tenure and that, in the circumstances, "it now remains for you to decide what you want to do". Sir Keith Joseph, Secretary of State for Education and Science, told the House of Commons on 1 August that the government will therefore go ahead with plans to extinguish tenure.

The prospects for speedy change are only slim. The government takes the view that because the complicated legislation that will be required to set up parliamentary commissioners with powers to alter university statutes could not be ready for the parliamentary session beginning in November, powers to appoint commissioners would not be granted until mid-1986 at the earliest. That could mean that the first enforced changes of university statutes, which will not affect the rights of

academics now in post, can be expected only at the end of the decade.

Views among academics on the latest development in this long-standing dispute are sharply different. Some think it a pity that Lord Flowers' letter to Sir Keith Joseph did not take the opportunity to reiterate ingredients of academic tenure in whose defence vice-chancellors would be prepared to go to the stake. Ms Diana Warwick, general secretary of the Association of University Teachers, says that the letter shows that the universities have handed the problem back to the government "with ill-concealed relief".

Vice-chancellors, on the other hand, set great store by the understanding that has apparently been reached with Sir Keith that there will be continuing consultation about the drafting of the impending legislation, and some even claim to have detected signs that Sir Keith is no longer convinced that changing the pattern of academic tenure is more than a symbolic gesture. They also guess that many universities will, under the threat of legislation, change tenure rules off their own bats without waiting for government intervention. **John Maddox**