



10 DOWNING STREET

Michael

Do you put this in? I

think it's from the publication

"Transnational Security".

Steve

24/12/79

revival of IRD, in whatever form may be judged necessary and pending a resurgence of American will, is thus a necessity no less urgent than the acquisition of new weapons of mass destruction.

Soviet pressures

*Please ask Professor Navon about this*

2. Lasers in space

*Mov)*

The alarming run-down of America's defences in recent years has given the Soviet Union a commanding lead in space lasers. Unless the US develops the will and allocates the resources to make up for lost time, America's retaliatory capacity against a Soviet first strike may well be neutralised in the 1980s.

Specifically, the Soviets are in the process of creating a prototype space laser capable of knocking out any land- or sea-launched ballistic missiles (ICBMs and SLBMs, respectively) or similar devices that rise to more than 50,000 feet. American scientists consider the coming breakthrough in laser technology to be as important as were the development of atomic and nuclear weapons and of ballistic missiles in their day.

In simple terms, the space laser is a high energy beam produced by chemical means which, in the vacuum of space, avoids the problems associated with the "closed" atmosphere. A central element in the technology is the use of highly polished mirrors finished by computer. Production of such mirrors is minuscule, and has indeed been described as virtually a "cottage industry". Recently, the Soviets are known to have bought mirrors of this type, some six metres in diameter, from France. The United States is working with much smaller mirrors.

When it is operational, the Soviet space laser is expected to have the capacity to deflect, pierce or explode missiles shortly

after they leave the atmosphere to enter into space; by then, they have reached a temperature of several thousand degrees.

Soviet advances in laser technology lend significance to the wording of Article IX of the SALT II draft treaty, under which the parties undertake not to develop, test or deploy, inter alia, "systems for placing into Earth orbit nuclear weapons or any other kind of weapons of mass destruction, including fractional orbital missiles" (sub-section c). A space laser (the death ray of science fiction) is not a weapon of mass destruction.

The Soviet space laser programme is due to become operational in the mid-1980s; the American programme lags about a decade behind on present indications. A major aspect of the Soviet lead is that it is going to make the American concept of Mutual Assured Destruction (the apt acronym for which is MAD) technologically obsolete in that space lasers will destroy the retaliatory capacity of the United States (or any other nation) to respond to a Soviet first strike. (Philosophically, the validity of MAD was short-lived anyway in that Soviet military theorists do not, as American theorists have done throughout the SALT talks, reject nuclear war on the ground that it is unacceptably destructive to both protagonists.)

Cruise myth soon obsolete

*and this too.*

The myth of the invulnerability of the cruise missile will shortly be shattered, in that the Soviet SA-10 (a SAM ground-to-air missile) and an AWAC system of "look-down see-down" Radar, together with the MiG-25 Foxbat, will give the Soviets a capability of destroying a fair percentage of any American cruise missiles on their way to Soviet targets.