

An upper hand in space

U.S. President Reagan's call for a major program to develop a space-based anti-missile defence system has been met at home by skeptical reaction, and by cries of "blackmail" and "provocative escalation" in Moscow. Yet in his speech, Reagan omitted any mention of why the U.S. is greatly accelerating this program, which has been under development for the past decade.

Last February, during an open session of the House Armed Services Committee, a top secret U.S. intelligence report was inadvertently revealed. The Russians, this report asserted, would be in a position to deploy a space-based, high energy laser weapon from late 1983 to 1988. Such a weapon system could destroy America's network of vital, early warning surveillance and communications satellites, the keystone of its national defence.

By 1990, the report continued, the Russians could orbit a large space complex capable of attacking, with lasers or particle beams, a wide variety of targets on earth or in the air. Some analysts believe that the Russians, who are outspending the U.S. by \$3-5 billion annually in space technology, will have their first permanent manned space station by the end of this year, the prelude to a complex of space battle stations.

Rather than "escalating" the space race, as claimed by the Russians, the U.S. is lagging behind. Last year the Soviet Union orbited 10 times more tonnage into space than the U.S. It is now estimated to be spending five times more than America on laser and particle beam programs. The deployment this year of Russia's ASAT anti-satellite missile has already placed some of America's vital satellites in danger.

The Russians have also achieved important advances in the propagation of high-intensity particle beams, including the mysterious program at the top-secret centre at Semipalatinsk, which some U.S. Air Force officials claim to be a nearly operational long-range "death ray." Tactical lasers are already being deployed on Russia's new battle cruisers and are being tested on armored vehicles.

The United States government has clearly recognized the threat posed by these Russian advances. In April, 1982, the General Accounting Office urged virtually the same program as announced this month by Reagan, supported by a greatly increased level of funding.

While the United States lags behind the Russians in heavy boosters, anti-satellite systems and in

**ERIC
MARGOLIS**



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particle beams and lasers, it still enjoys significant advantages in its space shuttle and in the important fields of optical tracking, miniaturized computers and electronic technology. If sufficient funding is provided, there is no reason why the United States should not catch up to the Russians, and even surpass them by the time these systems become fully operational in the 2000.

This new space race presents two distinct dangers. Should one side be close to deployment of a system that will neutralize the others ballistic missiles, there will be a natural temptation to launch a pre-emptive strike. Equally dangerous, this space race will parallel the missile race of the '60s and '70s, but this time at an enormously increased magnitude of expense. As we are seeing today in the field of electronic warfare, technology is increasing so rapidly that systems are obsolete before they are even fielded, and each new advance provokes an immediate response from the other side.

The minimum estimated cost, for example, of the American Talon Gold space-based anti-missile targeting system is estimated at \$5 billion. Some analysts believe that a constellation of space anti-missile laser stations could cost anywhere from \$400 billion to one trillion dollars, the latter sum representing more than the entire current defence budgets of Russia and America combined.

It is clear that the space race will be ruinously expensive. Both the USSR and the U.S. have recently formed new space commands: These organizations will institutionalize the space race to a point where it will gain its own self-perpetuating momentum. Civilian leaders, who cannot possibly understand the enormous complexity of space weapons technology, will be hard pressed to deny funding, as quantum leaps in science spawn ever more costly programs.

Neither side can afford to allow the other to gain ascendancy in space. Yet both could face national bankruptcy from a vicious cycle of new weapons and countermeasures that would make the missile race inexpensive by comparison. The only alternative is some form of agreement between Moscow and Washington that allows only passive reconnaissance systems in space and excludes all other forms of offensive weapons. Reaching such an agreement — one that can be safely verified — will be extremely difficult now that both nations are so deeply committed to the militarization of space.

Perhaps the greatest proponents of such a demilitarization of space may be the Russian and American military leaders who will, if this race continues, see themselves shortly deprived of tanks, planes and ships in order to pay for the almost incalculably expensive cost of these new, 21st Century weapons.

(Eric Margolis, a member of the Canadian Institute of Strategic Studies writes frequently on international affairs)