

Lt.-Gen. Dan Graham is a man with a mission. Last week this retired director of the U.S. defence intelligence agency, and former deputy CIA director, was in Toronto urging adoption of High Frontier, a space-based system of anti-missile satel-

Two days without sleep didn't seem to lessen the general's ebullience. Addressing seminars of the Institute for Strategic Studies and the Anti-Bolshevik Nations, Gen. Graham showed why he is considered one of America's leading defence intellectuals.

"America's refusal to defend its people against potential Russian nuclear attack is one of the oddest decisions in history. said Gen. Graham. Instead, he explained, the U.S. was still relying on MAD - mutual assured destruction - whereby each side places the other under the daily threat of nuclear annihilation. "MAD," said the general, "is like two cowboys facing off at high noon. Each is armed with nuclear six-guns. The slightest move by either will trigger a response — this is the most unstable situation possible.'

Gen. Graham has an answer to what he terms, "this morally and militarily bankrupt policy." It's called High Frontier, a constellation of 432 orbiting satellites backed by a ground-based terminal defence system. Each satellite will carry optical and infrared sensors that can target Russian ICBMs in their early

'post-boost" phase.

Each of these proposed \$36 million "killer satellites" will then fire small missiles at the rising enemy ICBMs, shattering them with a cloud of ceramic pellets — much like a conventional shotgun blast. Ground-based terminal defences, rapid-fire guns and "Swarmjets" of more pellets, will destroy most of the surviving warheads that leak through the space barrier.

'Off-the-shelf technology'

"High Frontier," insists Gen. Graham, "uses only available, off-the-shelf technology." He estimates that the system could be operational by 1990 if the U.S. Congress gave the go-ahead this year. Its costs would be \$15-30 billion, depending on the desired efficiency of the system.

The space defence system will, according to the general, stop 96% of all incoming Soviet warheads. A second space defence layer would raise the kill rate over 98%. But is this enough to protect the U.S.? What about the remaining 2-4% "leakage?

Here we must delve into the abstractions of nuclear strategy. In any Soviet attack, the prime targets would not be cities but 'hard" targets as underground U.S. missile silos and command facilities. The Soviets will not attack unless they feel assured of destroying almost all U.S. missiles in the first surprise attack; otherwise, American retaliation would inflict unacceptable damage on the USSR.

All ICBMs, which must travel some 6,000 miles across polar magnetic fields, are subject to inherent inaccuracies, malfunctions and system failures. The Soviets, and the U.S., must consequently target a large excess of missiles on each enemy target in order to insure an acceptable probability of success.

According to Gen. Graham, even if High Frontier could stop only 50% of Soviet missiles, Moscow would not dare attack, knowing that a large number of U.S. missiles would survive and launch. At 96% kill rate, the Soviets could not hope to destroy more than a small fraction of U.S. missiles. Gen. Graham calls this "instant arms control."

Critics of High Frontier fall into two broad categories. Some leftish academics and orthodox scientists claim the system will not work. Others, like the nasal Carl Sagan, have made a minor pop religion of the nuclear threat. Then there are what Gen. Graham calls the "big bang" advocates of the Pentagon and their curious allies, the disarmament crowd; neither want to see High Frontier work, otherwise, they would both be out of jobs. New missiles and the need to get rid of them would disappear.

End to costly ICBMs

Gen. Graham is, of course, correct: An effective anti-missile system would mean an end to building ever more costly and dangerous ICBMs. I am reasonably certain that the U.S. does today have the technology to intercept a large number of Soviet missiles: If not 96%, then at least 60%. It only lacks the will

And the general makes another important point. Space today, he says, is like the high seas of the 16th century. Britain became the world's leading power thanks to its domination of the seas. Similarly, whoever controls space will quickly come to rule the

"We cannot allow Russia to command space" warns Gen. Graham, citing the present 2-1 Soviet lead in developing military space systems. "If the Soviets do get control of space, they will treat it like their own airspace - and we all remember what happened to Korean Flight 007.

High Frontier would not end military competition and might even generate a trend towards more tactical nuclear weapons that operate within the atmosphere. But these more easily countered threats are far preferable to the menace of the instant nuclear destruction that we now face every day. Doing nothing to defend ourselves, and moaning incessantly about the nuclear peril, is producing what Gen. Graham calls a generation of dispirited, defeatist youth who, seeing only nuclear ruin in the future, are driven to drugs and nihilism. I think he is right.

So Gen. Graham continues his crusade to wake up North America and make us realize that our superb technology can remove from our lives the debilitating threat of mutual nuclear terror. To me, High Frontier makes a great deal more sense than high noon.

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