The Myth of the Soviet ‘Killer’ Laser

By Frank von Hippel and Thomas B. Cochran

WASHINGTON The Defense Department has, for years argued that the Soviet Union is way ahead in the development of ground-based lasers that can knock out satellites.

The department has pointed in particular to a facility at Sary Shagan in Kazakhstan, which was alleged to contain a laser weapon that “could be used in an antisatellite role today and possibly a ballistic-missile defense role in the future.”

We visited this facility in early July and found some very ordinary lasers. Their beams were 1,000 times less powerful than those of the Mid-infrared Chemical Laser (MIRACL) at the Strategic Defense Initiative’s White Sands, N.M., proving ground.

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Thus the department’s representation of the “laser gap” — like the bomber gap and the missile gap before it — seems to have been the reverse of the truth. What can we learn from the explosion of this myth?

The first lesson is for the Soviets, whose pathological secrecy allowed

Lessons for the U.S. and Moscow.

the myth of the Soviet “killer” laser to flourish as a Defense Department fund-raising device for more than five years. To deflate the campaign, they needed only to open up the Sary Shagan facility and reveal the paltriness of its lasers.

Their long delay has provided the rationale for a major U.S. investment in anti-satellite and anti-ballistic missile programs that the Soviets may feel compelled to match.

This week’s Soviet demonstration to American experts of a high-power gas laser is another encouraging sign that Moscow is bringing glasnost to the new Soviet national security strategy. The laser was fired at a laboratory that, like Sary Shagan, previously had been off limits to foreigners.

The second lesson — for the U.S. — concerns the importance of having unbiased sources of information as a basis for national security policy.

As we learned after our return, the capabilities of the Soviet laser facility had been hotly disputed within the intelligence community for a number of years. The assessment of the Central Intelligence Agency was apparently consistent with what we found.

The uncertainties about what kind of laser was actually at Sary Shagan was apparently acknowledged by the intelligence experts in secret briefings. Defense Department officials, however, decided to present only a worst-case assessment in the agency’s unclassified publications.

These misleading publications became part of the conventional wisdom — even to some extent in the minds of many who had received C.I.A. briefings — and had an important influence on Congressional budgetary decisions.

Any Congressman with more than a year’s experience should know better than to rely on the Pentagon’s representatives of the “Soviet threat,” since military funding depends upon maximizing the dangers.

However, publications such as “Soviet Military Power,” which have so distorted the national policy making process, are underwritten by Congressionally approved funds. While it’s important that such information be available to the public, Congress should insist upon publication by a less self-interested agency.

Congress will decide the future of anti-satellite weapons research when it takes up the defense authorization bill after Labor Day. The House bill includes a ban on testing the MIRACL laser and urges the Administration to negotiate a ban on all anti-satellite weapons. Since neither measure was included in the Senate version, the final decision will rest with a conference committee.

Clearly, Congress should not reward the Pentagon for inflating threats. To launch a new arms race in anti-satellite weapons would undermine our national security as much as the Soviet Union’s.