AN ALTERNATIVE PROPOSAL

Ban Missile Flight Testing

S. PLOUS

I
n a recent public opinion poll Americans were asked whether doubling the nuclear arsenals of the superpowers would make the United States safer or less safe, or would make no difference. The overwhelming majority replied that it would make no difference. They were then asked whether cutting U.S. and Soviet arsenals in half would make the United States safer or less safe, or would make no difference. Again, most answered that it would make no difference.

Those results reveal a surprising degree of public skepticism toward dovish and hawkish agendas alike, and they pose a significant challenge to the arms control community. Short of a proposal so drastic as to be purely rhetorical, what measures might help to slow the arms race? For more than twenty years the idea of a comprehensive ban on nuclear testing by the superpowers as the best way to block the development of a new generation of nuclear weapons has enjoyed considerable support from specialists as well as the general public. Unfortunately, the Reagan Administration, citing problems in verification, formally withdrew from test ban negotiations in July 1982. It also refused several times to reciprocate the Soviet moratorium on nuclear testing which began in 1985. According to Eugene Rostow, director of the Arms Control and Disarmament Agency in 1982, a comprehensive test ban remains "an ultimate goal, but the time is not propitious for it."

As it has become clear that nuclear tests of one kiloton or less can be monitored reliably (U.S. tests are most frequently in the fifteen-kiloton range), the Administration has changed its explanation. Ironically, one of its new justifications is that a ban on testing might lead to a proliferation of nuclear weapons. In an interagency letter then-Acting Assistant Secretary of State for Legislative and Intergovernmental Affairs James Dyer wrote, "A comprehensive test ban might actually lead to an increase in the number of nuclear weapons in nuclear-weapons states if such states become concerned about stockpile reliability." In a letter to Congress last year Secretary of Defense Caspar Weinberger echoed those sentiments, declaring, "As long as we must depend on nuclear weapons to insure our security, we must continue to test."

Invoking stockpile reliability to justify nuclear testing is disingenuous on three counts. First, in a typical year the United States sets off ten to fifteen nuclear explosions to test new weapon designs, two explosions to examine weapon effects, and at most only one "proof" test to check that existing bombs have not deteriorated. If Administration officials were concerned exclusively with reliability, they would be willing to limit the number of nuclear tests to one per year—which, of course, they are not. Second, there is no need to guarantee stockpile reliability. As former Iowa Representative Berkley Bedell once remarked: "I personally don't know what could be better than for neither side to have confidence in the operational capabilities of their nuclear arsenals. It sure would discourage a first strike."

Third, the Administration's resistance to a test ban stems largely from its desire to test nuclear components of the Strategic Defense Initiative, despite the President's claim that the space-based system would be nonnuclear.

Regardless of why the Administration favors nuclear testing, hopes for a comprehensive test ban seem certain to languish in the face of presidential opposition. Let us return, then, to the original question: What arms control measures might make a difference in slowing the arms race?

One possibility, seldom discussed but of extreme importance, is a ban on ballistic missile flight testing. Although a comprehensive test ban is often trumpeted as the most effective means to stop the deployment of first-strike weapons, improvements in accuracy depend far more on flight testing than on nuclear testing. A ban on flight testing would strangle the nuclear arms race at one of its most vulnerable choke points.

Nuclear deterrence rests solely on each side's having a credible threat to retaliate in the event of an attack. Neither side gains any military advantage from the ability to retaliate with pinpoint accuracy. Theoretically, though, highly accurate weapons can be used to destroy the other side's land-based missiles in a first strike. Thus, when coupled with the North Atlantic Treaty Organization's refusal to forswear the first use of nuclear weapons, unnecessarily accurate missiles appear provocative to the Soviet Union. If they are not to be used for a first strike, the Russians ask, why develop them? From the U.S. perspective, the same question might be asked of the Russians. What are U.S. leaders to infer from Soviet efforts to perfect intercontinental ballistic missile guidance systems?

Neither superpower has yet to deploy a nuclear force that is sufficiently accurate and reliable to present a convincing threat to the other side's land-based missiles. Despite optimal weather conditions, flight paths and degree of readiness during field tests, the annals of missile testing abound with examples of stray missiles and other failures. With continued testing, however, that state of technology will not last long. A ban on flight testing would help halt the development of reliable first-strike weapons.

Now is an ideal time for such a ban. Inertial guidance systems, on which modern ballistic missiles rely for their ac-

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...accuracy, have been refined nearly to their theoretical limits. Further improvements in missile accuracy would have to address hundreds of error sources beyond the guidance system and would involve enormous outlays of money not currently budgeted. In addition, a ban on flight testing would leave the United States ahead of, not behind, the Soviet Union. This country is currently years in advance of the Soviet Union in guidance technology and missile accuracy.

The United States and the Soviet Union are bound by the Non-Proliferation Treaty to negotiate an end to the arms race. If the superpowers have not done so by the time the treaty expires, in 1995, there is a good chance that the present nonproliferation regime will collapse. A ban on flight testing is one of the most politically expedient ways to demonstrate a serious intent to reverse the arms race. And although progress in arms control has been set as a condition for summit meetings, no major agreements have been concluded during the Reagan Administration. The signing of a ban on ballistic missile flight testing would turn any summit into an instant and historic success.

Moreover, with such an agreement between the superpowers, the planned buildup of French and British nuclear forces would be severely restricted. An attractive feature of a ban on flight testing is the ease with which it could be extended to include countries other than the two superpowers.

The most important reason for advocating a ban on flight testing now is that President Reagan’s recent abrogation of SALT II permits the United States and the Soviet Union to develop new missile systems. The United States is already discussing the addition of 500 Midgetman land-based missiles and hundreds of highly accurate D-5 submarine-launched ballistic missiles to its arsenal, and the Soviet Union has begun deploying its SS-25 missiles. In the absence of a ban on flight testing, the superpowers will, in all likelihood, return to the unrestrained arms race that characterized the 1960s and 1970s.

Finally, one of the most appealing aspects of this proposal is the degree to which compliance can be verified. Scientists estimate that, using existing national technical means, the probability of detecting a single flight test is greater than 90 percent. Because a minimum of twenty tests is necessary to develop a new missile system, the chances of failing to detect at least one of twenty tests is less than one in a billion. Those odds should reassure even the most vocal critics of Soviet compliance and should keep public attention from being diverted to arguments concerning verification.

Of course, no major initiative is entirely without risk, but that incurred by a ban on flight testing is negligible compared with the risk of allowing advances in missile accuracy and reliability to continue. The dangers of maintaining the status quo, though cloaked in familiarity, are no less consequential than the dangers of change. Yet if military history contains any universal truth it is that arms races do not go on indefinitely: what is invented is built; what is built is deployed; and what is deployed is eventually used. The risk of continuing to test ballistic missiles is that, in the words of an old Chinese proverb, ‘‘If we do not change our direction, we are likely to end up where we are headed.’’