## Pentagon Moves Toward First-Strike Capability

The Soviets might respond with a launch-on-warning policy, bringing the world closer to the brink of nuclear war

The Reagan Administration, in justifying its request for a tremendous buildup of nuclear weapons, has put forth the idea that the Soviets cannot be brought to the bargaining table unless they feel threatened. The idea is embodied in plans to build weapons with a "first-strike' capability, which could eliminate the ability of the Soviet Union to retaliate effectively after an attack by the United States.

This move toward a first-strike capa-

tially approved by President Reagan; the others were authorized by his predecessors. The, existing (but comparatively small) force of Minuteman missiles also has the capability to destroy Soviet military targets. In this sense, the United States has been moving toward the acquisition of a threatening first-strike capability for some time. Reagan's contribution has been to approve of this acquisition, and to accelerate it.

Administration officials give several

Early this year, the U.S. land-based force of nuclear missiles became vulnerable—on paper—to destruction in a preemptive attack by the Soviet Union, which deployed highly accurate SS-18 and SS-19 missiles. A three-part response to this threat has been crafted by the United States. A new missile, the MX, is to be constructed and tested next year. The new missile is to be hidden in order to protect it from attack. And the missile will have a capability that matches the Soviet's new missiles: the capability to destroy missiles on the other side.

Previous articles in this series explored why U.S. officials became alarmed about missile vulnerability and where the MX missile might be hidden. This article explores the impact of the MX's counter-military capabilities on prospects for arms control.

bility, which hits at the heart of the traditional concept of deterrence, is intended to force the Soviets into reducing their arsenal of weapons. But it might instead cause the Soviets to engage in their own military buildup. It could also result in the adoption of a so-called damage-limiting strategy by the Soviets, an attempt to reduce the effects of a U.S. attack by striking first during a tense international crisis.

The risk was created by the Administration's decision to construct a series of weapons accurate enough to destroy virtually any Soviet weapons. At the forefront is the MX, a new intercontinental ballistic missile. Each of the 1000 or so warheads to be deployed atop the MX is capable of destroying Soviet missiles, weapons depots, and military command posts. Another highly lethal missile is the Trident II, to be based on submarines. A third such weapon is the Pershing II, which under present plans is to be deployed in Europe next year. This weapon can destroy in a matter of minutes any military targets in Eastern Europe or western regions of the Soviet Union.

Of these, only the Trident II was ini-

reasons for this acceleration. One is that only by severely threatening the Soviet Union can a reasonable accommodation on nuclear arms be reached at the negotiating table. As Secretary of State Alexander Haig said recently, it is "unrealistic to believe that the Soviet Union will agree to reduce the most threatening element of its force structure, its heavy, multi-warheaded intercontinental missiles, unless it is persuaded that otherwise the United States will respond by deploying comparable systems itself."

A second purpose is to deter a limited nuclear attack by the Soviets. A credible deterrent, Haig says, "depends on having forces which are flexible enough to respond to a broad spectrum of threats so that whatever the circumstances and whatever the level of conflict, the Soviets never have an incentive to launch." He says that "if we are to deter the Soviet Union, we must put at risk those things, including their military capabilities, which they value most." In short, were the Soviets to begin a "limited" nuclear exchange, the United States would be able to wipe out anything remaining in the Russian arsenal.

The problem with such a plan is that it looks suspiciously like preparation for a U.S. first strike. And this is exactly what the Soviets have concluded. In a recent book, Whence the Threat to Peace, the Soviet Ministry of Defense surveyed U.S. plans for highly accurate weapons and concluded, "the politico-military leadership of the United States considers [these weapons] to be the means of delivering a preemptive nuclear strike." The MX, it says, "is intended for hardened targets, that is, delivering a 'nuclear knockout." "The Trident II "will have the same combat capability as the MX ICBM, that is, it will be a first-strike weapon." The ministry claims that "in Pentagon thinking, surprise attacks with high-accuracy Pershing II missiles on the Soviet Union's strategic weapons would reduce the impact of a retaliatory blow against the U.S.A. in the event of aggression against the U.S.S.R."

Although this viewpoint could be dismissed as mere propaganda, a broad range of American sources hold a view identical to the Soviets'. Foremost among them may be General Lewis Allen, the Air Force Chief of Staff, who has testified that "it is not one of our objectives that it [the MX] have a counterforce first-strike capability. However, due to the rather small number of very large ICBM's which the Soviets have, it has proven difficult for us to eliminate a first-strike capability from MX. So, although it is not one of our goals, it is a fact that the MX program will have some first-strike capability."

By this, Allen means that the MX, in combination with the existing accurate Minuteman missiles, could destroy the bulk of the Soviet land-based missile force, all of its submarines in port, all of its hardened communication posts, and the bulk of its bomber force, trapped on the ground. What would be left, according to the calculations of Senator Mark Hatfield (R-Ore.) and others, is roughly 3 to 5 percent of the Soviet arsenal, on submarines at sea. And some of these submarines could be vulnerable to destruction by U.S. hunter-killer submarines and other weapons in the U.S. arsenal.

Henry Trofimenko, an official with the

Soviet Institute of U.S.A. and Canadian Studies, recently wrote that "one may ask, in these circumstances, what are the guarantees for the opponent that the U.S. will show restraint, that the American strike will be only retaliatory rather than preventive? Upon what can the opposite side count?"

There are several potential Soviet reactions to this threat. One, advanced by officials in both the Carter and Reagan Administrations, is that the Soviets will attempt to deploy their land-based missiles in such a way that they would not be vulnerable to a first strike. Although this would undoubtedly result in a more stable international climate, it seems an unprofitable path to tread, given that the United States has been struggling with the same goal for its own missiles for several decades, and has yet to achieve any success.

A second possibility, according to officials from both Administrations, is that the Soviets could become interested in some form of ballistic missile defense. This, too, seems unlikely, as neither side is close to the development of a system that would actually defeat the other's threat.

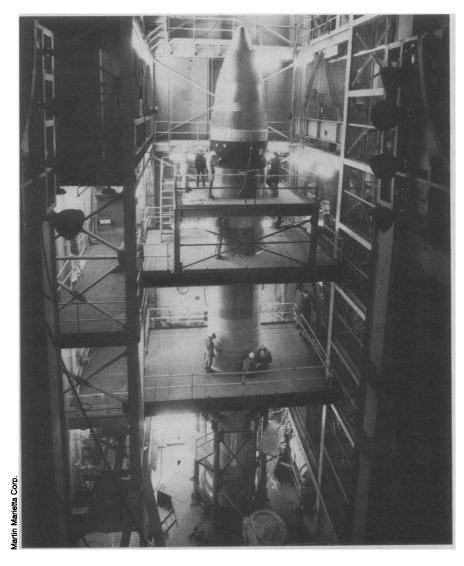
A third possibility is that the Soviets will indeed be led to the bargaining table, possibly because of the cost involved in achievement of the first two options. Richard DeLauer, the Pentagon's top scientist, says that "what we're trying to do is dictate their investment strategy. That's the whole idea. Then maybe they'll sit down and take the President seriously and talk about reducing the numbers, which is the whole damn purpose of the exercise, to create a deterrent that will lead to some kind of arms reduction. Right now, there's no incentive for the Soviets to have an arms reduction.'

What DeLauer and other Administration officials do not mention is a further potential Soviet response, which would be the least expensive from their point of view and clearly the most worrisome to the United States. The Soviets might, in response to U.S. acquisition of a firststrike capability, simply decide to launch their own missiles on warning of an attack from the United States. This possibility was described in the 1982 annual report of the Arms Control and Disarmament Agency, which was prepared under the Carter Administration but was omitted from the 1983 document prepared by Reagan appointees. "This could pose the most risk to crisis stability," the Carter document said, "because it could increase the chances of an accidental nuclear exchange and higher levels of destruction." Herbert Scoville, the president of the Arms Control Association, believes that this is one of the major risks of the weapons buildup proposed by President Reagan. R. James Woolsey, a former undersecretary of the Navy, says that the Trident II missile alone "incrementally tends to foster Soviet consideration of a launch-on-warning strategy."

Others say that the Soviets are inclined even now to launch first during a crisis. Dimitri Simes, a Soviet scholar at Johns Hopkins University, recently wrote that "the abundant Soviet military literature proves beyond doubt that, should nuclear war look imminent, Moscow may be prepared to launch-on-warning and to make every effort to reduce its own losses and to inflict the greatest possible damage on the enemy." The acquisition of a realistic first-strike capability by the United States might only exaggerate this tendency, as the Soviets themselves have pointed out.

Roger Wilkins, a senior fellow with the Joint Center for Political Studies in Washington, recently visited the Soviet Union, where he spoke with a former member of their negotiating team in the SALT talks. Wilkins, reading from his notes, said that the official delivered roughly the following warning: "The U.S.S.R. can't match the United States missile for missile. We can't do it economically. But we don't have to be a mirror. We will have to respond. The more you have in counterforce capability, the more there is a danger that the other side will build up and go to a launch-on-warning, with the computer element stepped up and the human element reduced. And of course, that's more dangerous.'

U.S. officials can rightly point out that the Soviets have played hard and well at the counterforce game as well. It is the ability of their highly accurate SS-18 and SS-19 missiles to destroy roughly a third



The MX under construction

This inert model of the MX missile is being constructed by the Martin Marietta Corporation for flight weight ground tests. Vibration tests will evaluate the effects of launch on the missile.

of the United States retaliatory capability that led, in part, to the development of the MX. But, as noted by Gerard Smith, chairman of the U.S. negotiating team for SALT I, this is not a circumstance where two wrong actions produce the right outcome. U.S. and Soviet vulnerabilities to a preemptive attack are not the same. The Soviets have fewer bombers and submarines on alert than the United States does, making them relatively

more susceptible to surprise attack. The Soviets also have more of their missiles situated on land (75 percent as against 22 percent for the United States), where they could be more easily attacked.

The likelihood of an adverse, destabilizing Soviet response will be determined not by how the U.S. weapons buildup is presented to the American public, but by how it is viewed by the Soviet leadership. As acknowledged by the Reagan

Administration's report on arms control, the question is "whether the Soviets interpret our overall strategic program as representing primarily an escalation of the threat to their strategic forces or recognize the new program's clear emphasis on retaliatory capability." It seems clear that the Soviets have chosen the former, and the consequences—as yet unannounced—could be extremely dangerous.—R. Jeffrey Smith

## Another in a Series of Counterforce Weapons

On several occasions, the dimensions and weight of the MX or Missile Experimental have been adjusted to accommodate methods of deployment favored for a time by the Pentagon, the Congress, or the White House. Only one characteristic has never been changed: its ability to destroy Soviet missiles in their silos.



This precisely machined beryllium sphere is the heart of the highly accurate MX guidance system. In the missile, the sphere is floated inside a case, permitting it to measure acceleration in three directions simultaneously.

Military specialists call this capability counter-force targeting. Two things can make it possible: high yield and great accuracy. Both are being used in the MX, making it the most lethal intercontinental ballistic missile ever constructed by the United States.

Accuracy is obtained through use of an advanced inertial reference sphere (AIRS) guidance system, which provides precise corrections of midcourse trajectory. This permits an improvement over the accuracy of existing Minuteman missiles by about one-third. The AIRS mechanism has been under development at the Northrop Corporation Electronics Division and the Charles Stark Draper Laboratory, Inc., for several years.

The yield will be roughly the same as that produced by warheads atop many of the existing Minuteman III warheads—about 350 kilotons. A new warhead will be used, however, which will give the Pentagon the option of substantially increasing the yield if necessary. According to Samuel Eccles, an official at the Lawrence Livermore National Laboratory, where the new warhead is in the final stages of design, "for the intended accuracy of the MX and the projected hardness of Soviet military targets, the existing yield is adequate." In the event that accuracy is

not as good as projected or that the Soviets add more concrete around their silos, the yield of the warhead can be increased "without any trouble," Eccles says.

Targeting of missile silos and other military facilities in the Soviet Union is a long tradition in the United States. It began during the 1950's, when the United States had clear strategic superiority over the Soviets, and when Defense Department officials openly contemplated a first strike in the event of an international crisis. David Rosenberg, a military historian, noted recently in *International Security* that "in the absence of any clear guidance . . . the Joint Chiefs and the Strategic Air Command continued to plan for attacks which could neutralize Soviet nuclear capability. As the decade wore on, the counter-force mission became an increasingly dominant component of the planned atomic air offensive."

During the 1960's, a variety of government officials emphasized a need for retaliatory capability, and said that the United States was planning mainly to attack cities, not silos, in the event of a nuclear war. But the Pentagon continued to target silos. Richard Garwin, a scientist at IBM, served on a White House advisory panel on targeting in 1968. He discovered that "only 7 percent of the warheads were targeted against assured destruction targets [cities]." He also said there was no evidence of previous awareness at the White House or on the National Security Council that the Pentagon had continued to target primarily military facilities.

The reaction, under President Richard Nixon, was not to create a new target list, but instead to develop a better rationale for the existing one. Nixon and Secretary of Defense James Schlesinger claimed that the Soviets were considering a limited attack of U.S. military forces, and so a "flexible" strategy of targeting both cities and silos was needed.

This remains the prevailing view in the U.S. government. General David Jones, chairman of the Joint Chiefs of Staff, recently testified that "I have been involved with strategic forces since the early 1950's. We have always targeted military targets. . . . It is interesting that, when I was out in the field, in Washington you would hear a lot of rhetoric about different strategies. We followed orders, but basically, the strategy stayed the same in implementation of targeting."

If neither side ever targeted military facilities, then it would be clear that only retaliatory strikes were being contemplated. This, alas, has never been the case.—R.J.S.