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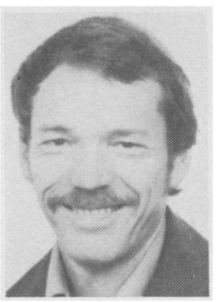


America's MX missile muddle

> If billions of dollars were not on the line, if crossbows or catapults were involved instead of H-bombs, then perhaps we could all enjoy a good laugh at the notion of sending rockets around a racetrack faster than the Russians can place their bet.
>
> Wayne Biddle 1979

In October 1981 President Reagan announced a $US180.3 billion nuclear weapons program that includes the B-1 bomber, the Stealth advanced technology bomber, the D-5 sea-launched missile, space-based 'killer' satellites, and at least 100 controversial MX missiles.[1] The American nuclear weapons offensive constitutes only part of the largest military build-up in human history. Over the next five years the United States will spend more than $US1.5 million million on defence.[2]

Is such a massive expenditure on weapons necessary? What do the Americans—and the rest of us—get for that sort of money? President Reagan, who is fond of saying that there *are* simple answers but just not easy ones, claims that the new weapons will redress the strategic balance and buy security by deterring Soviet aggression. His critics argue that these weapons will more likely buy two things—economic decline and nuclear war.[3]

The American people apparently agree with the latter view. A recent Gallup poll revealed that less than one-fourth of those surveyed thought that the Administration's defence policies were reducing the chances of nuclear war and 68% believed that there was a significant chance of an all-out nuclear war between the United States and the Soviet Union within the next ten years.[4]

Why the MX?

This article is concerned with only one aspect of the current US nuclear weapons buildup—the MX, or 'missile experimental', priced at about $US18

million each. To understand why something like the MX has come into existence, it is necessary to review some basic aspects of American strategic doctrine.

For more than twenty years the United States has maintained a 'triad'—a triple set of nuclear weapons designed to deter the enemy from striking first, or to utterly destroy him if deterrence fails. The three legs of the triad are air (bombers), sea (primarily submarines), and land (silo-based intercontinental ballistic missiles or ICBMs).

The first two legs of the triad are mobile, hence more difficult for the enemy to target and hit. Only the land-based leg is fixed. These ICBMs constitute only about one-third of America's strategic force, but they occupy a special place in the popular imagination. When most of us think about nuclear war, we envisage missiles blasting out of the ground and speeding across great distances to deliver massive destruction. The very scope of that destruction, coupled with the ability of each of the superpowers to visit it upon the other, is the essence of deterrence or 'mutually assured destruction' (MAD). It is the mutual deterrence of MAD, we are told, that has kept the world free of nuclear war for thirty years. MAD reasoning has the effect of convincing us that the agents of our potential destruction are really the chief assurance of our continued survival.

Deterrence is a complicated subject with many variables. As the idea developed in the United States, it became an accepted premise that each element of the triad must be capable of crippling the enemy on its own in case the other two elements were unfortunate enough to be knocked out. By the mid-1980s, for example, America's sea-based force alone will carry about 6,500 nuclear warheads. To the careful planners in the Pentagon, however, this is not enough. To have a 'credible' deterrent *each* leg of the triad must not only pack a powerful punch, it must also be able to absorb a surprise attack and still retaliate.

That's where the MX comes in. In part, it represents an attempt, either by inducing mobility or improving defences around a powerful new missile, to close the 'window of vulnerability' which the Pentagon claims has been opened by the Soviet build-up in strategic capability during the 1970s.

The triad approach to deterrence arose partly because it gives a nation a complex mix of nuclear-war fighting capabilities. It forces the enemy to worry about a variety of threats rather than just one or two. Interestingly, however, the triad idea developed in the US not so much for that reason but because it gave each of the rival services, especially the Air Force and the Navy, a piece of the nuclear action. In no small measure, the MX has grown out of Air Force jealousy of the fat budget the Navy got years ago when the US decided to go ahead with the massive Trident nuclear submarine program. The Air Force realised then that it hadn't been thinking big enough. It was left with the dismal prospect of playing custodian to a fleet of ageing

B-52 bombers and a thousand land-based ICBMs. Not to be outdone, the Air Force began to press hard for a whole range of new programs from the B-1 to the MX. Under Reagan it hit the jackpot.

The MX also played an important role in international diplomacy. While still in the planning stage, it was used as a reserve bargaining chip in the strategic arms limitation talks (SALT) with the Soviet Union. These negotiations, which went on throughout the 1970s, resulted in two Soviet-American treaties—SALT I, signed in 1972, and SALT II, which required another seven years of bargaining only to be shelved when the Carter Administration realised that the treaty would not be approved by the US Senate.[5]

SALT and the MX were closely linked. The idea was to use SALT to restrain the number of Soviet warheads in the hope that the MX would not be obsolete before it was ever built. The SALT I treaty was concerned primarily with launchers rather than actual warheads on the theory that a hydrogen bomb isn't much good unless you can get it to a target. First the US, then the Soviet Union, evaded the spirit, but not the letter, of the treaty by attaching clusters of warheads to each missile. These 'multiple independently targetable re-entry vehicles' (MIRVs) seriously complicated the arms control negotiations and opened that 'window of vulnerability' that gives the

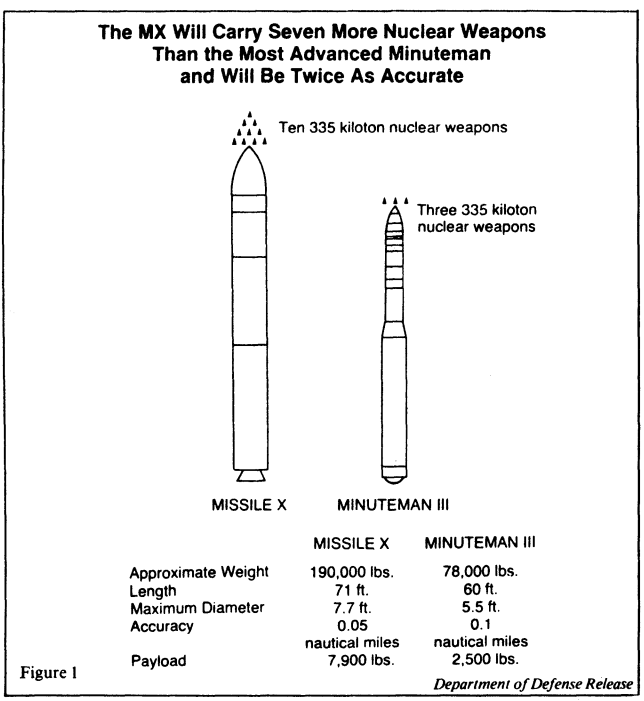


Figure 1

Pentagon such a chill. As had happened so often in the past, an American technological initiative aimed at increasing US security had, when copied by the enemy, served to decrease it.

The idea behind SALT II was to restrain the MIRVing of Soviet missiles while at the same time leaving the way open for eventual deployment of the MX. The Americans made certain that the SALT II treaty was sufficiently 'flexible' to permit either side to introduce one entirely new missile system. On the US side that would be the MX, but its usefulness depended very much on the MIRV limits agreed upon in SALT II. Otherwise, the Soviets could theoretically continue MIRVing their missiles until they were able to saturate the MX sites with so many hydrogen bombs that no amount of mobility would save the MX. Finally, the Carter Administration knew that promising an entirely new missile would be the price necessary to buy the support of Senate hawks who would otherwise vote down SALT II simply because they believed that *any* negotiations with the Soviets constituted appeasement. Carter, therefore, signed the SALT II treaty in Vienna in June 1979, then approved full deployment of the MX in September.[6]

Unfortunately the Senate wasn't convinced. Events in Iran and Afghanistan intervened and Carter was forced to shelve the treaty when it became clear that he could not muster the two-thirds vote required for approval. Ironically, then, the US retained the MX but threw out the SALT II treaty that constituted the main justification for the new missile. The bizarre result was that the Pentagon began talking about a 'window of vulnerability' opening on the MX long before it got off the drawing board.

The MX 'debate'

There was, of course, much more to the MX than a debate over putting wheels under American land-based ICBMs. When deployed in 1986, the missile will be far more accurate and destructive than the most advanced Minuteman III currently in the US ICBM fleet. Indeed, the only rationale for so huge a weapon is to give the US the ability to do to the Russians what the Americans fear the Russians are trying to do to them—destroy all land-based ICBMs in their silos. The MX is, in short, a formidable 'counterforce' weapon. Since ICBMs comprise 70% of the entire Soviet strategic force, the potentially destabilising impact of the MX is obvious. The decision to deploy the MX raises disturbing questions about America's intentions and the goals of those who maintain command and control over these weapons of mass destruction.[7]

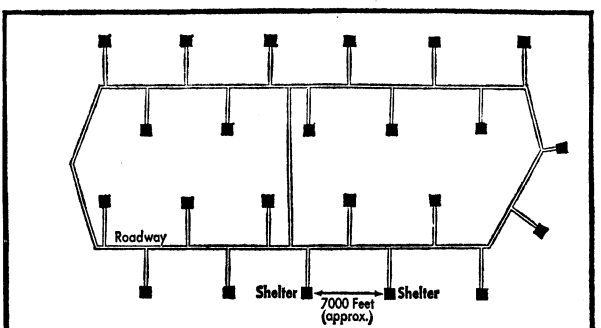
Rather than focus on ultimate goals, the MX debate tended to couple two separate and individually controversial issues—whether the missile was really necessary in the first place and the scheme that would be used to provide

bases for it.[8] By focusing the debate on the second of these two issues, proponents of the MX went a long way toward achieving success with the first. The question soon became not so much whether the US would build the MX as which 'deployment mode' would be adopted when it was built.[9] This helped neutralise authoritative and dispassionate scientific opinion that saw assertions of the imminent vulnerability of the US land-based ICBMs as both premature and exaggerated.[10]

Millions of dollars have been spent researching the MX basing problem. The new missiles could be dropped from airplanes or hidden beneath the sea on submarines. They could be placed on special railroad cars or interstate highway transporters and moved from one underground shelter to another. You could stick them in ponds, lakes, canals, deep holes, tunnels, or trenches. Or, you could attack the vulnerability problem by building defensive radar units and interceptor missiles around each MX site. The latter option was particularly attractive because it gave the Army's Ballistic Missile Defense Command something to get excited about.[11]

The 'race track deployment mode'

In 1979 President Carter approved the so-called 'race track deployment mode' for the MX. Two hundred missiles would be built, each weighing 190,000 pounds and each carrying ten large and very accurate warheads. Every one of the 200 missiles would be assigned its own 'closed loop' (or 'race track') road containing spur roads leading to twenty-three heavily reinforced concrete shelters spaced about 7,000 feet apart. The missile would be placed horizontally on a 'transporter-erector-launcher vehicle' (TEL) 180 feet long and weighing almost 700,000 pounds. This vehicle would then carry the missile around the closed loop road from one shelter to the next.



Racetrack Basing Scheme for the MX Missile

Figure 2

The Washington Post

To avoid violating the SALT treaties and to keep the Russians happy, each shelter would have portholes so that on peaceful days they could be opened to allow Soviet spy satellites to verify that the US wasn't being naughty by sneaking more than one missile onto each site.

Notified that a Soviet attack had been launched, the TEL would proceed at top speed (about 30 miles per hour) to any one of the twenty-three silos where the MX would be erected and launched. Since the Russians would not know which shelter the missile would be in when their missiles actually arrived, they would presumably need to destroy all twenty-three hardened shelters to be certain of disabling a single MX with its ten MIRVed warheads.[12] As the Air Force Chief of Staff put it, the empty shelters would act as a huge 'sponge', absorbing thousands of Soviet warheads. Not surprisingly, the idea of using more than 5,000 miles of the American west to absorb Soviet hydrogen bombs didn't enthuse many people outside the Pentagon.[13]

Under President Carter's plan, the MX would have been built in the sparsely populated and politically weak states of Utah and Nevada. Residents of those states were assured that this multi-billion dollar shell game with death would bring new jobs and great prosperity to their area. The construction requirements alone were stupendous. Twelve thousand miles of heavy duty rail and roads would be required, along with 172 billion gallons of water to mix two million tons of concrete and quench the thirst of more than 50,000 workers directly or indirectly associated with the project.[14]

The Air Force hard sell

To convince the locals that all this was for their own good, the Air Force launched a huge public relations offensive. Brig. Gen. Guy Hecker, a southerner, was point man for the hard sell. He toured Utah and Nevada appealing to patriotic citizens in language they could understand:

> I have a good feeling every time I cross the 100th meridian coming west. I've grown to love and admire the people out here. To me this has really become heartland America—independent spirit, patriotic spirit—just the things you all stand for. I wish we could get all of the bureaucrats out of Washington and out here to see what the real America is all about. I really mean that.

Hecker then reminded the independent people out west what the infusion of billions of dollars in federal money would mean to their communities. He reassured them that recreational areas, camping grounds and drag strips had all been incorporated into MX design. Some of the locals got excited. Nevada state senator Richard Blakemore, who also ran a trucking business, declared that he would rather have development in the form of MX missile tracks than see virgin land left to a handful of environmentalists and wilderness hikers.[15]

Unfortunately for the Air Force the public wasn't convinced. As time passed and awareness of the enormity of the project grew resistance increased. The state of California threatened to go to court to keep the MX from spilling over its borders.[16] The governors of both Utah and Nevada, after first supporting the MX, appeared before Congress in March 1980 to oppose it. Among their many other objections, they feared that the MX's water requirements alone would threaten their states' most precious resource. Describing the Utah-Nevada Great Basin as 'one of the most fragile eco-systems to be found anywhere', Governor Scott Matheson of Utah complained that the residents of his state had been 'stampeded' by the Pentagon into accepting the MX.[17] Even the powerful Mormon Church, not noted for its lack of patriotism, came out against the idea of basing the MX in its backyard.

Public opposition did not, of course, stop the project. Where defence and 'national security' are concerned, democratic decision-making folds its tent. The Pentagon knew that if push came to shove it could ram the MX down western throats whether the cowboys out there liked it or not. The Carter Administration, however, bowed slightly to public criticism by abandoning the closed loop road idea in favour of a 'drag strip' linear deployment. This did nothing to reverse the deteriorating image of the MX.

Originally costed at about $US30 billion, the projected price tag for the new missile had more than tripled by 1981. Some leading weapons experts were still arguing that the MX wasn't necessary in any form. Worse still, Congressional sources hinted that bills to fund the two hundred missile scheme approved by Carter would not pass either the House or the Senate.

When Reagan assumed office, a federally appointed panel under University of California physics professor Charles Townes advised Secretary of Defense Casper Weinberger that the shelter basing scheme for the MX should be considered only in conjunction with a treaty limiting the number of Soviet warheads, an option the US had discarded with the SALT II treaty.[18] The whole project was thus back to square one and the nation waited for the new President to sort out the muddle.

The Reagan 'compromise'

Reagan's October decision took the politically expedient way out. Mindful of budget stringencies, public opposition to Carter's plan for the MX, and the new strategic situation resulting from the death of SALT II, Reagan authorised the building of at least 100 MX missiles but delayed for up to three years a final decision on how and where they will be deployed. The Reagan plan calls for the US to begin using the MX to replace older Titan missiles in Arizona, Kansas and Arkansas by 1986. In the meantime, studies

will continue on defending the MX, probably with anti-ballistic missiles or by placement in very deep underground shelters.

An arms control disaster, the MX decision was politically clever from the Reagan Administration's point of view. First, it clears the way for the deployment of a massive new strategic strike force while masquerading as a 'compromise' over the original Carter plan. Second, it leaves the door wide open for expansion of that force in the future. Third, the threat of expansion can be used as a bargaining chip when SALT negotiations resume with the Soviet Union. Fourth, keeping the MX in existing holes underwrites the Air Force and Army investment in anti-ballistic missiles defences. The idea of using a bullet to protect a bullet by stopping a bullet is a militarist's dream.[19] Finally, 'restraint' on the MX frees the US military to pursue the truly revolutionary goal of extending the nuclear arms race into space.[20] The fact that US violation of several treaties is implied in this program doesn't seem to matter much anymore.

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