United States Senate

COMMITTEE ON ARMED SERVICES
WASHINGTON, D.C. 20510

September 9, 1983

General Brent Scowcroft
Chairman, President's Commission
on Strategic Forces
1875 I Street, N.W.
Suite 440
Washington, D.C. 20006

Dear Brent:

In the aftermath of the deplorable Soviet conduct during the past week, it is even more essential that President Reagan and the Congress establish a strong united front on our nation's strategic nuclear programs and arms control proposals.

Early in October, the START talks will resume, and during the same time frame key votes will occur in the House and in the Senate on the future of the MX missile. The way we handle these important and closely related matters will say much about us as a nation. If we dissolve into fractious bickering and politically motivated attempts to claim credit and lay blame, we will move down a path toward nuclear uncertainty and national weakness.

If, on the other hand, the Reagan Administration and the Congress can agree on a sensible strategic program and on a coordinated, reasonable approach towards arms control, we will demonstrate that we have the political cohesion and the long-term bipartisan commitment needed to maintain our strength and reduce the risk of nuclear war. Recognizing the dangers of wishful thinking, we nevertheless believe that there is a rare window of opportunity in the next few weeks to form this consensus on strategic programs and arms control. The ingredients of such a consensus are now emerging.

Congressman Albert Gore, even before the formation of the Scowcroft Commission, stressed the need to shift to small single-warhead missiles. Valuable contributions toward this notion were made by Congressman Norm Dicks, Congressman Tom Foley, and others. The Scowcroft Commission incorporated this approach as the centerpiece of its recommendations, and this concept was recently adopted by the House-Senate Conference on the Defense Authorization Bill.

Enclosures filed in Oversize Attachments #8077.

We proposed in early 1983 a build-down concept which included the notion of utilizing the pace of modernization as the engine to fuel arms control reductions and as a way to give incentives for more stabilizing systems. President Reagan has endorsed this concept and has instructed his Administration to frame such a proposal. Forty-three Senators have cosponsored this proposal which also enjoys support on the House side under the leadership of Congressman Elliott Levitas, Congressman John Porter, Congressman Ike Skelton, and Congressman John McCain. President Reagan deserves credit for making significant changes in the original START proposal and has given considerable new flexibility to our START negotiators.

Much of the progress towards consensus on these subjects is due to the spirit of consultation, coordination and compromise between the Congress and the Administration fostered by the Scowcroft Commission Report and recommendations.

The Scowcroft Commission has recently been asked by Congressman Les Aspin to outline an approach to arms control which could be helpful to the Congress and the Administration. Congressman Aspin has urged the Commission to incorporate three elements in this approach:

A. A reduction in missile warheads in a manner that creates incentives for both sides to move away from large, MIRVed ICBMs.

B. A reduction in both sides' overall destructive capacity in a manner that recognizes the different nature of bombers and missiles.

C. A gradual evolution toward rough equality in each side's missile throw-weight.

In an effort to further the evolution of this consensus, we offer the following principles of an arms control approach for your consideration:

1. There should be an immediate ceiling on the number of ballistic missile warheads.

2. There should be an immediate ceiling on the overall destructive capacity of the strategic forces of both sides at existing levels.

3. There should be a guaranteed annual build-down in the number of ballistic missile warheads.

4. The build-down rules should create incentives favoring stabilizing systems -- in particular small, single-warhead ICBMs -- and should penalize destabilizing systems such as MIRVed ICBMs (e.g. by requiring the destruction of three warheads for each new warhead on a MIRVed ICBM).

5. There should also be a second guaranteed annual build-down in the overall destructive capacity of the strategic forces, missiles and bombers, of both sides.

6. The agreement should not prohibit or discourage measures which enhance survivability.

7. The U.S. should seek an immediate agreement with the USSR on a build-down as a framework and precursor for a detailed START treaty.

Such an approach based on these principles would avoid the insurmountable obstacles posed by proposals which attempt to dictate the force structure of either side (e.g. by complex sublimits on different types of weapons). These principles would allow each side considerable freedom to choose its own strategic forces, but would incorporate incentives for each to move away from destabilizing weapons as it modernizes its forces.

These principles might be termed a "double build-down" in missile warheads and in overall destructive capacity. The first build-down would involve a reduction in total ballistic missile warheads from the 8,000 to 9,000 range each side has today under the SALT II counting rules -- to the 5,000 range. This build-down would be paced by each side's missile modernization program or by an annual percentage reduction, whichever produced the lower number.

The second build-down would place a steadily declining limit on the overall destructive capacity, as measured by an agreed method, of each side's whole strategic nuclear force -- missiles and bombers -- and force a reduction to approximately one-half of today's level.

One way to calculate such destructive capacity would be to devise a counting rule that takes into account the number of ballistic missile warheads, the throw-weight of the missiles and the carrying capacity of bombers. As you know, retired Air Force General Glenn Kent has developed a straightforward procedure to quantify and produce a single aggregate measure of each side's

total destructive capacity. Under this concept, each side would start from a position today of rough equality in its total destructive capacity, measured by totaling ICBM warheads and SLBM warheads and by factoring in both the Soviet advantage in throw-weight and the U.S. advantage in bombers. His method would build upon the counting rules already negotiated between us and the Soviets in SALT II. Each side would be increasingly constrained in the ability of its forces to conduct a first strike and each would have to reduce the overall level of destructive capacity in its arsenal.

Finally, if both sides were willing, the elements of a build-down of the above sort could be set forth in a brief agreement prior to the negotiation of a detailed treaty. In addition, a relatively simple agreement on principles of the sort negotiated by President Ford at Vladivostok in 1974 might be desirable. In this sense, a build-down agreement should be a precursor to a detailed START treaty and would establish a framework that the treaty's detailed provisions would later implement.

These principles would give powerful incentives to both nations to promote stabilizing trends. Of course no arms control framework is stronger than the willingness of the parties to maintain it. The negotiators of an arms control agreement cannot, like some celestial engineer, design precise and ideal strategic forces for both sides. In other words, the United States and the Soviets are doomed to failure in arms control as long as each tries to dictate the other side's force structure. These principles, however, provide a framework which encourages both sides to reduce its threat to the other side, reduces the incentives for either side to strike first, and relaxes the fingers that today are moving inexorably towards a nuclear hair trigger.

We offer these suggestions in the hope that they will assist your Commission in building a bridge across some of the current political and intellectual gaps and help move us further toward a bipartisan consensus on arms control.

Sincerely,

Sam Nunn Bill Cohen Chuck Percy

United States of America

Sam Nunn

UNITED STATES SENATE
WASHINGTON, D. C.
(202) 224-3521

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September 12, 1983, A.M.

For Further Information
Contact Ed Nagy

SENATORS OFFER NEW ARMS CONTROL PRINCIPLES

Senators Sam Nunn (D-GA), Bill Cohen (R-ME) and Charles Percy (R-IL) in a letter today told the President's Commission on Strategic Forces chaired by Brent Scowcroft that "in the aftermath of the deplorable Soviet conduct during the past week" it was "even more essential that President Reagan and the Congress establish a strong united front on strategic nuclear programs and on arms control." The Senators urged that the Commission consider a new "double build-down" proposal as the central approach in the ongoing Strategic Arms Reduction Talks with the Soviet Union.

"The first build-down would involve a reduction in total ballistic missile warheads from the 8,000-9,000 range each side has today to the 5,000 range. This build-down would be paced by each side's missile modernization program or by an annual percentage reduction, whichever produced the larger cuts," Nunn said.

"The second build-down would place a steadily declining limit on the overall destructive capacity of each side's whole strategic nuclear force including missiles and bombers," Nunn added.

Nunn credited retired Air Force General Glenn Kent with having developed a way in which this overall destructive capacity could be measured by totaling ICBM warheads and SLBM warheads and by factoring in both the Soviet advantage in throw weight and the U. S. advantage in bombers. He suggested that the ingredients for a bipartisan consensus are now emerging.

Nunn praised Congressman Albert Gore for developing the concept of shifting to small single warhead missiles. He also applauded Congressmen Norm Dicks and Tom Foley for their leadership on these issues. In addition, he commended Congressman Les Aspin for his recent initiatives in setting forth key elements of an arms control approach and for his request that the Scowcroft Commission frame an arms control proposal that could be backed by both the Administration and the conservatives and liberals in Congress.

The Senators suggested that seven principles of arms control be considered by the Scowcroft Commission:

1. There should be an immediate ceiling on the number of ballistic missile warheads.

2. There should be an immediate ceiling on the overall destructive capacity of the strategic forces of both sides at existing levels.

3. There should be a guaranteed annual build-down in the number of ballistic missile warheads.

4. The build-down rules should create incentives favoring stabilizing systems -- in particular, small, single warhead ICBMs -- and should penalize destabilizing systems such as MIRVed ICBMs (e.g., by requiring the destruction of three warheads for each new warhead on a MIRVed ICBM).

5. There should be a second guaranteed annual build-down in the overall destructive capacity of the strategic forces, missiles and bombers, of both sides.

6. The agreement should not prohibit or discourage measures which enhance survivability.

7. The U. S. should seek an immediate agreement with the USSR on a build-down as a framework and precursor for a detailed START treaty.

Nunn added that these principles would allow each side considerable freedom to choose its own strategic forces but would incorporate initiatives that would encourage both the U. S. and Soviet Union to move away from destabilizing weapons. Nunn emphasized that this arms control approach would:

a. Achieve the virtues of a nuclear freeze - the cap or ceiling on warheads and on destructive power.

b. Go far beyond the freeze - by assuring reductions in warheads and destructive capacity.

c. Avoid the grave danger of the freeze (which prohibits even stabilizing changes in nuclear forces) by permitting and encouraging changes on both sides which reduce the incentive for a first strike.

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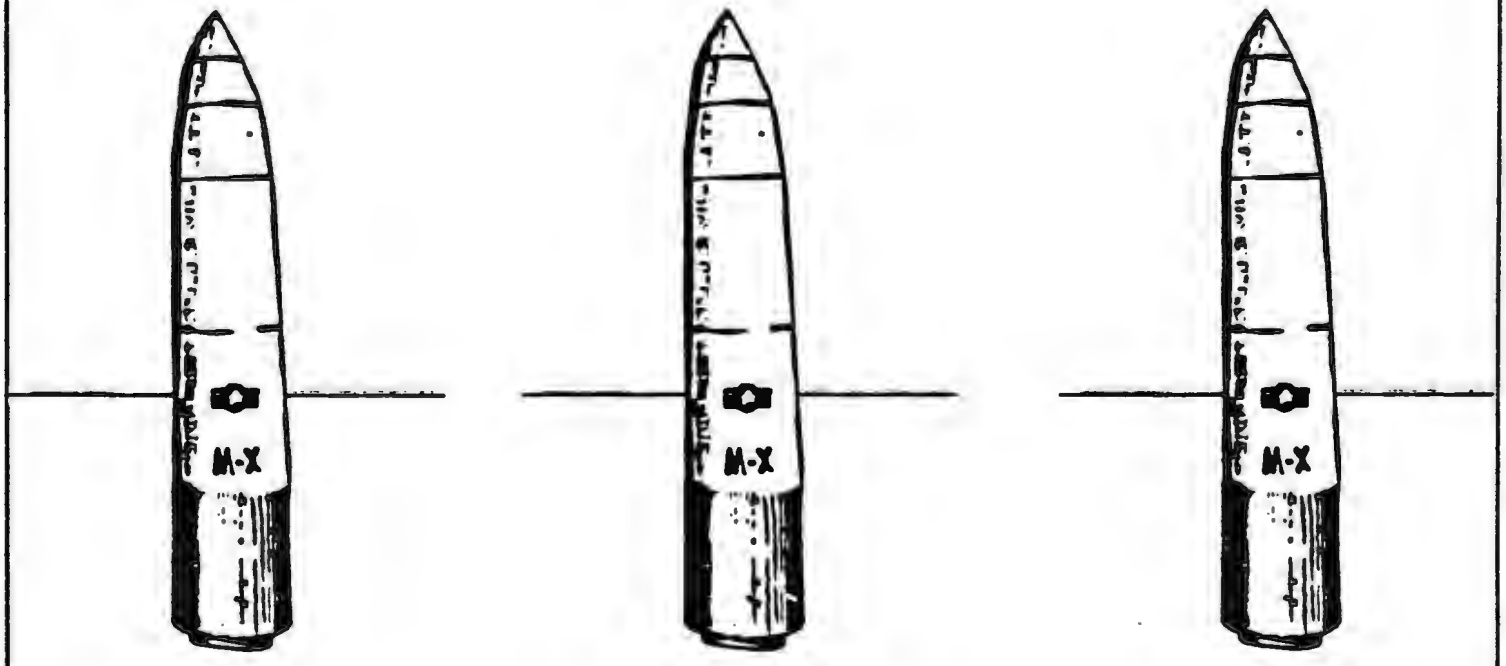
MX MISSILES



HARRY ZUBKOFF, CHIEF, NEWS CLIPPING & ANALYSIS SERVICE, 695-2884

DEFENSE SYSTEMS REVIEW August 1983 Pgs. 20-23

The Peacekeeper Missile: centerpiece for America's new deterrent posture

By Brigadier General Gordon Fornell, USAF

The chief objective of the United States is enhancing deterrence. The Peacekeeper Missile's deployment can markedly improve the opportunities for a United States-Soviet arms control agreement.

Eight months ago, the future looked uncertain for the nation's aging land-based ICBM force. Congress had refused to vote funds for production of the new Peacekeeper intercontinental ballistic missile, and continued progress on the new weapon system seemed in imminent danger. Meanwhile, the Soviet Union was hurriedly testing new ICBMs as fast as scientifically possible, and their existing SS-18s and SS-19s posed a significant threat to our ICBM force while our MINUTEMAN missiles were unable to threaten credible retaliation against even a portion of that Soviet force.

Suddenly, it appeared the nation's strategic deterrent was at real risk. Without a new ICBM, there was little chance that Soviet negotiators at the Strategic Arms Reduction Talks (START) in Geneva, Switzerland, would take seriously President Reagan's arms reduction proposals. Without a new American ICBM, the Russians would stall, buy time, and attempt to obtain a giant lead in strategic arms. And, without a new land-based ICBM, too much military stress would be placed on the aircraft and submarines making up the other two legs of the nation's strategic "Triad".

But on January 3, 1982, a concerned President Reagan took a bold and meaningful step. Realizing that America needed an entirely new approach to get the nation's ICBM modernization on track, he ordered the formation of "The President's Commission of Strategic Forces," commonly known as the Scowcroft Commission.

Scowcroft Commission

This Commission, consisting of 11 well-known national leaders and eight advisors, convened on January 3. Politically bipartisan, the new commission included such well-known national leaders as former CIA Director Richard Helms, former Secretaries of State Alexander Haig and Henry Kissinger, and former Deputy Secretary of Defense William Clements, along with former Carter Administration defense officials Harold Brown and William J. Perry. Retired Air Force General Brent Scowcroft, a former Ford Administration national security advisor, chaired the blue-ribbon panel.

Brigadier General Gordon Fornell, USAF, is Special Assistant for Peacekeeper, Headquarters, United States Air Force. He is responsible for the programmatic, technical, environmental and budget requirements of the MX program.

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PEACEKEEPER MISSILE...CONTINUED

The Commission's charge: review the strategic forces modernization needs of the United States, with special attention to the development and deployment of a new generation of ICBMs.

For the next 90 days, the President's Commission worked virtually around the clock. It held 28 full meetings, dozens of smaller conferences, and interviewed more than 200 national defense and technical experts. Members of the Commission consulted Congress weekly and asked for technical contributions from all avenues of America. The amount of data collected was staggering.

Slowly, as discussions with others and within the group took place over the three-month period, an outline began to form of the type of strategic deterrent which would best suit the interests of the United States. As more and more information became available, it was soon apparent that the Peacekeeper (MX) missile would have to be at the center of any new national initiative.

The Commission's Recommendations for ICBMs

On April 11, the Commission concluded its work and announced its findings. It strongly recommended deploying 100 Peacekeeper missiles in existing Minuteman missile silos, while simultaneously pursuing development of a new, small, single-warhead ICBM. It also recommended new studies on silo hardening and it recommended emphasis on strategic arms control. The commission presented its findings, and made it clear that no one element of the package would stand alone.. The Commission indeed had bitten the bullet of national defense by carefully providing a pragmatic and sensible solution to the problem of modernizing United States strategic ICBM forces. Most important, the bipartisan nature of the decisions is evident through the remarks of Harold Brown, Secretary of Defense in the Carter Administration, and William J. Perry, his scientific deputy, who both endorsed the Commission's report. Brown found its recommendations "a reasonable program, and on balance, the best available for the modernization of U.S. ICBM forces."

"The United States needs to promote deterrence by demonstrating to the Soviet Union and our allies that we will maintain a modernized strategic nuclear force essentially equivalent to that of the Soviet Union," Brown said.

The President's Commission acknowledged the vulnerability of the Peacekeeper in Minuteman silos, but minimized the importance of this on grounds that the Russians could not effectively attack U.S. missiles, submarines, and bombers at the same time.

In fully supporting research, development, production and deployment of the Peacekeeper missile, the Commission also laid the research and development cornerstone for keeping America's strategic deterrent firm for

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PEACEKEEPER MISSILE...CONTINUED

generations to come. The Commission also told the President that engineering design should begin on a new, small single-warhead ICBM, along with related hardness studies. The Commission's Report stated that initiation of full scale development for the small missile could begin as early as 1987 with an initial operating capability in the early 1990s. It further stated "deploying such a missile in more than one mode would serve stability. Hardened silos or shelters and hardened mobile launchers should be investigated now."

The Commission's proposals, in effect, bridged the gap from the near future to the year 2000 and beyond, according to one Administration official.

The need for the Peacekeeper

A number of questions and related technical issues were discussed in detail by the Commission:

- How did the Peacekeeper get to the stage of development where it could become the centerpiece for America's new deterrent posture?
- How long will it take to actually put the missiles in place?
- What role might the missile obtain in arms reduction talks with the Russians?
- Can the system's useful life really be "stretched" to give the United States a truly solid deterrent for years to come?

The Commission probed all the way back to the Ford and Carter Administrations, both of which had recognized the need for ICBM modernization and had provided preliminary research funding.

The Commission discovered that modest research and development funding had occurred between 1974 and 1978, but that little real work had been accomplished until quite recently. The impetus to this recent work was a growing awareness of increasing Soviet successes in the test launching — and modernization — of a whole series of old and new intercontinental ballistic missiles. In fact, experts strongly believed that between 1973 and 1982, the Soviet Union had spent about 150 billion in constant FY '84 dollars more than the United States on procurement for strategic forces.

Even more alarming was the fact that another study concluded that with its current and projected weapons, Russia could destroy the entire ICBM leg of our strategic Triad using less than one quarter of their ICBM force. At the same time, it appeared the United States could not even effectively threaten the Soviet Union's hardened ballistic missile silos, command bunkers, and underground communication systems.

The Carter Administration had studied that problem very carefully and decided that a new intercontinental ballistic missile — the MX — was needed, and development was begun. Building the missile would be one thing; finding an effective and acceptable basing mode quite another. Since the Carter Administration felt that any new ICBM would have to incorporate "deceptive" elements in its basing, such as an underground trench or multiple shelter system, a search was undertaken to determine the most effective system, as well as a location where the deployment would be acceptable.

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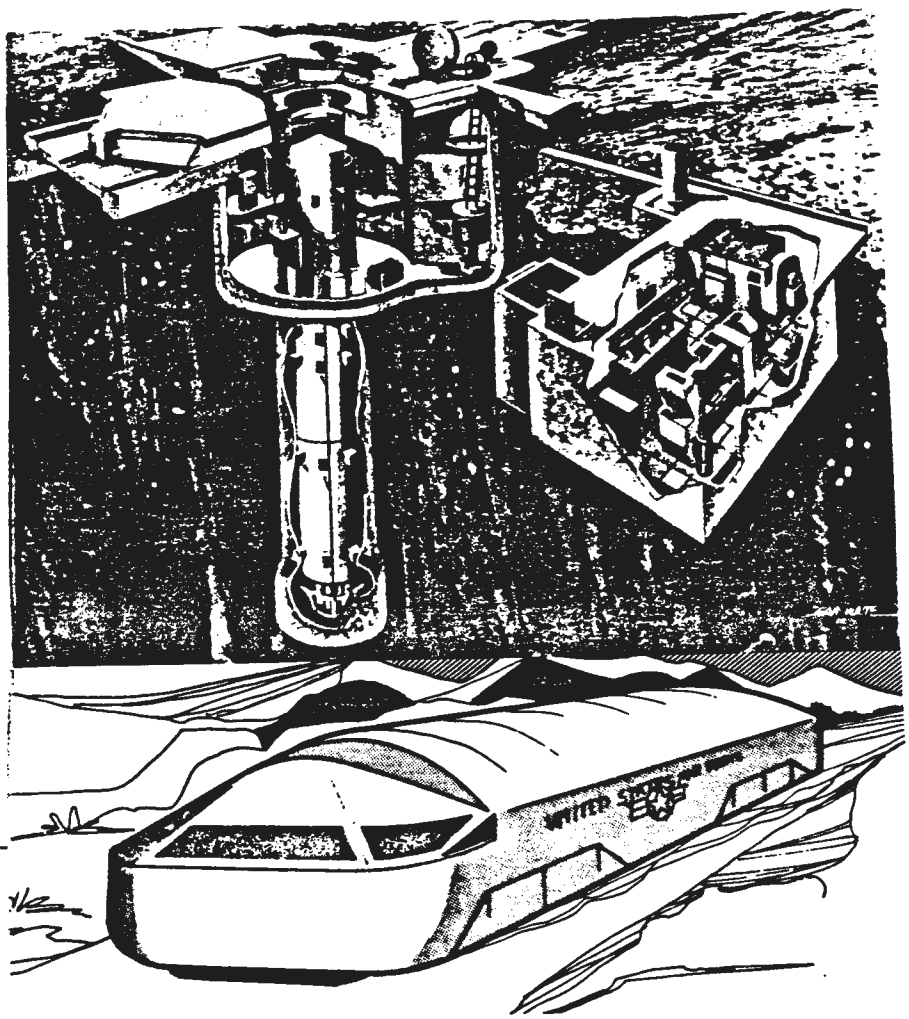
PEACEKEEPER MISSILE...CONTINUED

The basic idea of the Carter program was to move MX missiles from one point to another to avoid being targeted and destroyed during a surprise enemy attack. The idea that was finally adopted was the "Multiple Protective Shelter" (MPS) concept, in which the enemy would have to guess which of the 4600 shelters contained the 200 missiles.

Locations tentatively selected for the new ICBM were in Utah and Nevada. But a firestorm of protest developed, endlessly retarding deployment. Soon the 1980 elections were history, and the United States had a new Commander in Chief. After the November 1980 election, President Reagan, like three presidents before him, confirmed the need to modernize the nation's ICBM forces. He quickly encouraged Secretary of Defense Caspar Weinberger to move ahead with missile development. As a result, work on the new missile was accelerated.

Almost one year after assuming the Presidency, Ronald Reagan announced the most comprehensive upgrading of United States strategic deterrent since the Kennedy Administration. He decided that 100 new Peacekeeper missiles would be the new backbone of his strategic forces.



Peacekeeper Missile deployed in Minuteman silo. Artist's concept of road mobile transporter for new small ICBM.

President Reagan's Defense Plan

President Reagan's new defense plan had five major points to modernize the strategic missile, bomber and submarine forces of the United States, and rebuild the communications system and the North American Air Defense Network over a six year period. Announcing his $180.3 billion "strategy for deterrence" in a televised address from the White House, the President said his new program would

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PEACEKEEPER MISSILE...CONTINUED

"keep the peace well into the next century." The new Reagan strategic program included:

- Upgrading command, control and communications systems with satellites, ground-based radar, and command post aircraft to ensure the United States would be able to retaliate against a Soviet nuclear strike.
- Building 100 Peacekeeper missiles with initial deployment by the end of 1986.
- Building 100 B-1B bombers by 1986, deploying more than 3,000 cruise missiles aboard modified B-52 bombers, and developing a "stealth-type" bomber designed to elude radar detection for the 1990s.
- Developing the Trident II nuclear missile for deployment on the Trident submarine beginning in 1989, and deploying "several hundred" nuclear-tipped cruise missiles aboard submarines, beginning in 1984.
- Upgrading of the North American Air Defense Network, in coordination with Canada, and replacing aging F-106 fighters with F-15s, plus buying more AWACS radar planes while pursuing vigorous research on ABM defense . . . and expanding civil defense.

This sweeping program was intended to double by 1990 the number of retaliatory weapons that could survive a Soviet nuclear attack on our country.

President Reagan clearly pointed out that his new program would actually spend less than 15 percent of the defense budget on strategic forces in each of the next five years, compared to more than 20 percent in the 1960s when the Minuteman missiles and B-52 bombers were rolling off America's assembly lines.

Why the Peacekeeper?

The main reasons President Reagan chose the Peacekeeper as the centerpiece of his new five-point defense program were the missile's reliability, accuracy, and its deterrent value. Most important, the new ICBM had some very special military characteristics which separated it from any other weapon system, or family of weapons systems, in the U.S. inventory. Among these were its quick-reaction out of the silo, a highly accurate guidance system, and the capability to carry a large complement of independently targeted payloads.

Some of the unique characteristics which make Peacekeeper the perfect centerpiece for a long-lived deterrent posture are:

- The missile was designed to be twice as accurate as Minuteman.
- It can easily deliver 10 reentry vehicles to targets at ranges beyond 5,000 miles.
- The new missile is only about 71 feet long, and about 92 inches in diameter, weighing approximately 195,000 pounds.
- Three of the four stages of the missile use smooth burning solid propellant materials exhausted through large, single nozzles.
- Special hydraulically operated thrust vector actuators move the nozzles to guide the missile along its flight path.

In actual flight, each of the different stages burn out in order, boosting the missile ever higher and faster. The Peacekeeper's fourth stage — called the "post boost" vehicle — uses a liquid propellant to power an axial thrust engine and

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PEACEKEEPER MISSILE...CONTINUED

eight small engines for attitude control. The post boost vehicle also includes a guidance and control system and a deployment module with reentry vehicles.

The guidance function is performed by a completely self-contained inertial guidance and navigation system. During flight, the missile is independent of both ground references and commands. As one Air Force scientist said, "It has a celestial mind of its own."

Following burnout and separation of Stage III, the amazing post-boost vehicle is then expertly moved by its own propulsion system to new positions, where the remaining nine reentry vehicles are deployed, each in turn.

The reentry vehicles which contain the weapons are conically shaped and covered with materials to protect them during the flight through the atmosphere to their targets. The high speed reentry causes extreme heating which requires a surface material to abate, or erode, in a controlled manner. This material protects the weapon through its flight.

Though the Peacekeeper sounds complicated, it is a modern marvel of engineering simplicity. Reliability and quality control have been built in to minimize maintenance, so-called "black boxes" (electronics packages) within the missile can be snapped in and snapped out in minimum time.

The Peacekeeper's First Flight

The Peacekeeper has demonstrated that it is the right missile — at the right time — for America. On June 17, 1983, our first test Peacekeeper missile was launched successfully from Vandenburg Air Force Base, California — the initial test of the United States' newest generation of strategic missiles.

The Peacekeeper thundered aloft over the Pacific Ocean at 7:10 p.m. Pacific daylight time, trailing a brilliant orange flame and a long streamer of gray smoke. It traveled about 4,100 miles and accurately dropped six dummy reentry vehicles near the Kwajalein Atoll in the Pacific. "Everything worked exactly as we expected it," said Brigadier General Aloysius Casey, the Peacekeeper program manager at Norton Air Force Base, California. "We feel like we had a magnificent first launch." The General indicated this was the first of 20 planned research and development test firings of the Peacekeeper missile system.

The Air Force agrees that the Peacekeeper met its test flight objectives and, equally important to the welfare of the nation, its role as part of the negotiation process in the arms reductions talks now underway with the Soviet Union in Geneva, Switzerland.

The Mission: Deterrence

The chief military objective of the United States is enhancing deterrence and securing a stable U.S.-Soviet Union strategic balance at reduced levels of nuclear weapons. The Peacekeeper missile is closely tied with this proposal and its deployment can markedly improve the opportunities for a United States-Russian arms control agreement.

For example, the United States has proposed significantly reduced ceilings in the numbers of deployed missiles and missile warheads. These ceilings were based on the assumed deployment by the United States of a modernized ICBM force.

History has clearly shown that arms negotiations on both sides are heavily influenced by ongoing programs. As many arms negotiators have previously pointed out, the U.S. ABM program and decision for limited deployment were crucial to bringing about the ABM treaty of 1972.

Moving rapidly ahead with the Peacekeeper program means that the Soviets must now contend with an active U.S. ICBM modernization program. The cost to the Soviets? Very high! Although deployment as now planned is limited to some 100 Peacekeepers in Minuteman silos near Cheyenne, Wyoming, should the Soviets refuse to engage in stabilizing arms control measures, the U.S. could reconsider its deployment options. On the other hand, Soviet agreement to deep and meaningful arms reductions could result in the production and deployment of fewer Peacekeeper missiles. It is from this great pool of potential that the Soviet negotiating incentive springs.

The deployment of the Peacekeeper also serves as an incentive for the Soviets to restructure their own ICBM forces, which today mostly consist of highly MIRVed ICBMs in silos. It is precisely the Peacekeeper's powerful counterforce capability which can lessen the utility of those Soviet ICBM forces. The result is that the Russians must expend major amounts of research and development money, while at the same time being denied a substantive economic advantage from our own inaction.

Most significantly, the Peacekeeper also has wider arms control implications beyond its impact on START. Deterrence is a matter of perception of capability and resolve. Proceeding with deployment is a tangible indication of our nation's will and resolve to defend its freedoms.

With the Peacekeeper, the U.S. hopes for successful Strategic Arms Reduction Talks that enhance strategic stability are likely to be realized. In this way Peacekeeper can truly live up to its name as the centerpiece for America's new deterrent posture.

LONG ISLAND NEWS 14 August 1983 Pgs. 1&10 I

The MX and the Destabilization of Terror

The extraordinary accuracy of new missiles leaves both sides with 'win-the-war' scenarios in which a slip leads to nuclear catastrophe.

By Roger Hilsman

President Reagan has won the first round in his battle on the MX missile: Congress has voted money to build 27 of the controversial missiles. But this fight over the MX really marks the beginning of a new debate on strategy in the nuclear age.

A number of Democrats who actually opposed the MX voted to fund it in the hopes that it would be a bargaining chip in persuading the Soviets to reduce the numbers of their land-based ICBMs. President Reagan's arms control chief, Kenneth Adelman, quickly got into the act with a statement that the MX should be deployed unless the Soviets would "forgo" — not just reduce — their land-based missiles. Later, the Reagan administration showed flexibility in the arms talks — it dropped two key demands — in an attempt, it was said, to hold support in the Congress for the MX.

Roger Hilsman, a former assistant secretary of state and author of "To Govern America," among other books, is professor of government at Columbia University.

And then Andrei D. Sakharov, father of the Soviet hydrogen bomb and more recently the foremost Soviet dissenter, has made a statement that seems to be an endorsement of the idea of going ahead with the MX. The difference is that Sakharov suggests going ahead not only as a bargaining chip in arms control negotiations, but also because it is "necessary to have strategic parity in relation to those variants of limited or regional nuclear warfare that a potential enemy could impose" — just as some strategists believe it is necessary to have parity in conventional arms to make a stable peace.

There is no question that the Soviet Union has made a great effort on defense these past 15 years. In strategic weapons — those capable of reaching the other side's homeland — the United States and the Soviets are equal in total number of warheads, and the United States is ahead if bombs are counted.

Since a 10-megaton warhead is not 10 times as destructive as a one-megaton warhead, using the crude numbers of warheads as a measure is highly misleading. Because of this, strategists convert crude megatons to what they call "equivalent megatonnage." If this measure is used, the Soviets are ahead — 5,800 warheads to about 2,200 for the United States. If bombs delivered by aircraft are added, the Soviets are still ahead, but not by so much — 6,100 for the Soviets and 3,750 for the United States.

This is Reagan's "window of vulnerability."

Behind the argument on numbers of weapons lies a much more fundamental debate — on strategy in a nuclear age. It began with Winston Churchill's notion of a "balance of terror." In a nuclear age, the argument went, the United States and the Soviet Union are like two scorpions in a bottle. If either strikes, the other would still have enough strength to strike back — and both will die.

Thus peace comes through mutual terror. And paradoxically it is a rather stable peace, simply because both sides know the consequences and act with the utmost caution. The point was made succinctly by a graffito scrawled on the blackboard in a briefing room during the 1962 Cuban missile crisis: "In a nuclear age," it read, "nation's make war as porcupines make love — *carefully*."

This strategic situation came to be known as "Mutual Assured Destruction" and with gallows humor was quickly dubbed "MAD" — suggesting that we live in a mad, mad world.

The point of MAD is that defense is simply impossible. So the only way to avoid war is to choose either deterrence or arms control. Ronald Reagan has recently proposed an effort to build a defense based on satellites — his so-called "Star Wars" speech. One trouble is that the technology still does not exist. But even if it could be developed some day,

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MX & DESTABILIZATION OF TERROR...CONTINUED

the strategic problems are formidable. If an enemy decided to attack, the first target would be the satellites — and satellites are very, very vulnerable.

Strategists quickly came to understand that a MAD world poses a most peculiar problem, which has been most succinctly stated in a fable concocted by Prof. Warner Schilling, professor of international politics at Columbia. Visualize a sort of fortress-like squash court with a ceiling 14 feet high and divided down the middle by a heavy concrete wall 10 feet high. On one side of the wall is a totally evil person armed with a single hand grenade. With him are 10 innocent babies. On the other side of the wall is a man who is totally good. He, too, has a grenade, and on his side of the wall are 10 innocent babes as well. If either one throws his grenade, the other will have just enough strength before dying to pull the pin and throw his grenade, too.

Both the good guy and the bad guy will soon realize that their strategic situation is highly unstable. If the bad guy throws his grenade, the good guy and his 10 babies will die. The only thing that will be accomplished by the good guy's retaliating is the death of the bad guy at the cost of the lives of 10 more innocents. Deterrence having failed, the only motive for retaliating is revenge, which is not a moral motive. So the good person would *not* retaliate — and the bad person would not only escape with his life but would dominate the world despite his deed. In strategic parlance, this is known as the problem of credibility. How do you make the other side believe that you will launch a second strike no matter what happens?

What can the good guy do? The only effective strategy is for him to build a "doomsday machine." In this case it would be a catapult, held down by a string. If the bad guy tosses his grenade, the good guy's grenade will automatically be launched. So the good guy can say to the bad guy, "I no longer have any control." Credible deterrence is once again established because retaliation is inevitable and the situation is thereby stabilized.

For the second half of the problem — that if deterrence failed a second strike was pointless — the analysts at Rand Corp., the think-tank for strategy in Santa Monica, Calif., suggested a lifetime job. An example: A person would have secret orders that if deterrence failed he was to shoot the holder of the grenade on his side of the wall.

So far, such Byzantine measures have not been necessary. Even if one or the other side wanted to attack, the risk of retaliation has been very high.

However, the stability of a MAD world is rapidly being eroded. The reason is twofold. First is the development of MIRVs — multiple independently targeted re-entry vehicles. A large American or Soviet missile can launch as many as 10 warheads. The second reason is the awesome accuracy of the new MX missile and its Soviet counterparts. So we are coming into a period when each missile launched in a surprise first strike can aim two warheads at each of five missiles of the victim's retaliatory second-strike force so accurately that no hope remains of protecting the missile by "hardening" the silo.

So strategists on both sides have been trying to figure out ways of fighting and winning a nuclear war. There is evidence that the Soviets have been considering the following scenario:

Suppose the Soviets launch a surprise first strike against our land-based missiles, the B-52 bomber bases, and as many of our subs as they can find — but hold back one-third to one-half of their forces. If the attack were well-executed, the United States will be at least partially disarmed.

Suppose, also, that the Soviets leave our command and control system intact.

Immediately following the attack, they activate the hot line and present the following ultimatum: Use the intact command and control system to halt all preparations for a retaliatory strike — or we, the Soviets, will immediately launch all our remaining weapons against your cities.

The theory is that, even if the United States refused, the worst the United States could do to the Soviets would be to inflict about 20 to 50 million casualties, while the United States would suffer 100 to 150 million. The Soviets suffered 20 million casualties in World War II and were able to continue functioning as a society, but it is doubtful that the United States could continue to function after 100 million casualties.

On the U.S. side, some strategists have suggested the following scenario:

The bulk of the Soviet forces are fixed, land-based ICBMs, with relatively few bombers and submarine-launched missiles. Our new spy satellites, using not film but computer-enhanced electronic images, are extraordinarily precise. They can distinguish the lines on the parking lot of a supermarket from an altitude of 60 to 120 miles. In fact, photo interpreters were able to identify an Iranian mullah addressing a crowd in a picture taken from an altitude of 100 miles by the bushiness of his beard! The idea is that if these satellites see the Soviets beginning to count down for a first strike, it might be feasible for the United States to launch a pre-emptive attack.

This, of course, is "launch on warning" — and the problem is: What if the warning is false?

The trouble with both the Soviet and the American "win-the-war" strategies is that any slip in either planning or executing the strategy means utter disaster. It may be that the Soviets can suffer 20 to 50 million casualties and survive as a society. But even the smallest slip would bring the casualties to 100 to 150 million. And not only is there the risk of false warning in the American version but, again, the slightest slip makes the consequences catastrophic.

So it seems clear that it will continue to be a MAD world. But it is also clear that the frightening increase in accuracy combined with MIRVed missiles means that, unlike the past 40 years, it will be a highly *unstable* MAD world. The United States and the USSR will be like two old-time Western gunfighters in a saloon — each eying the other suspiciously and ready to draw the instant the other shows any sign of making a move.

Jimmy Carter's administration tried to restore stability by basing the MX on a railroad, shuttling 200 MX missiles among 4,800 launching pads. The idea was to force an attacker to use 4,800 warheads in any first strike,

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MX & DESTABILIZATION OF TERROR...CONTINUED

and so make such a strike prohibitively expensive. The trouble was, first, that locating just where the missiles were at any given time was not as difficult as proponents had indicated it seemed; and, second, that building several thousand additional warheads was not a very large problem.

The Reagan administration then proposed the "dense pack" basing mode, in which 200 MX missiles would be set very close together in hardened silos. The idea was that some incoming missiles would destroy other incoming missiles — "fratricide" — and enough MX missiles would therefore survive to constitute an effective retaliatory, second-strike force. But this idea, too, was badly flawed. Incoming missiles, for example, could be equipped with delay fuses so they would all explode at once.

To try to find an acceptable basing mode for the MX, President Reagan appointed a blue-ribbon commission headed by retired Lt. Gen. Brent Scowcroft. Its report cast doubt on President Reagan's "window of vulnerability," arguing that a substantial percentage of land-based missiles would survive after attack, continue to be survivable for some time to come. It also recognized that large, accurate, MIRVed missiles like the MX were destabilizing.

So it recommended a two-pronged policy for the long term. The first part would be to scrap the MX and build a smaller, single-warhead missile — "Midgetman." The second part would be to switch our goals in arms control negotiations from limiting the number of missiles to limiting the number of warheads — that is, to eliminate missiles that were MIRVed. In the short run, however, the commission also recommended that 100 of the MX missiles be deployed in the existing Minuteman silos.

The only one of these recommendations that is objectionable is the proposal to deploy the MX in the existing Minuteman silos — and this is the worst of all possible worlds. The very accurate MX, with its multiple warheads, poses a frightening threat to the Soviet deterrent, to Soviet ability to launch a second strike. In consequence, any indication that the United States has begun to count down — even a false indication — would force the Soviets to consider a launch on warning.

In fact, Scowcroft concedes the grave dangers of going ahead with the MX and admits that the commission's recommendation was really based on political considerations. By proposing a limited number of MX missiles, the commission hoped to gain the support of a number of Senate hard-liners for its other proposals. At the same time, it hoped to provide a bargaining chip with the Soviets. It is one of the two considerations that seem to have motivated Sakharov to support going ahead with the MX.

It may be that a few American hard-liners might be bought by such a concession, but the price is frighteningly high. As for the bargaining chip, the potential for building and then deploying the MX should be as effective as actually doing so. As for Sakharov's other consideration — the need for parity in both conventional and nuclear weapons to establish a stable peace — what he overlooks is that a minimum strategic nuclear force and a minimum conventional force is really all that is needed for an effective deterrent.

If for whatever reason the Soviets and the Americans found themselves in a large-scale conventional war in, say, Europe, both sides would quickly come to understand that, if either side began to win, the other would be driven inexorably to consider using its nuclear forces. In a very short time, the two would find themselves either at the negotiating table or in an all-out nuclear war. The same is true of the limited or regional nuclear engagement that worries Sakharov.

A more rational policy would be to scrap the MX immediately.

The rest of the recommendations make good sense. For the time being, at least, the "window of vulnerability" is no more than a crack. We have both the B-52 / cruise missile leg of the nuclear triad and the missiles launched by submarine, the second leg. In the latter part of this decade, the Trident submarine missile system will begin to come on line. A Midgetman missile could begin to be deployed about the same time. Being small, the Midgetman could be mounted on trucks and roam, say, military reservations — providing all the advantages of the Carter racetrack without the disadvantages.

In addition, if an arms control agreement could be reached with the Soviets that counted warheads rather than missiles, both sides would have a strong incentive to scrap their large, MIRVed missiles. If so, the present situation in which one large missile armed with 10 warheads can theoretically take out five enemy missiles (two warheads per missile), it would take two missiles to take out one enemy missile. The combination of mobility and single-warhead would thus restore the stability to our MAD world that MIRVing and accuracy have eroded. We would then have the time to work out a more general agreement on arms control. □

BALTIMORE SUN 21 August 1983 Pg. K7

A Plan to Save the MX

Washington

By Joseph Kraft

BEFORE leaving town for vacation in California, the president's national security adviser, William Clark, set the machinery rolling toward the next step in arms control policy. The problem is to integrate congressional support for defense appropriations with progress in U.S.-Soviet negotiations. The answer, almost certainly, will be a new call on the bipartisan presidential commission headed by General Brent Scowcroft.

At present, the decisive forum for discussion is the Senior Arms Control Policy Group, an interagency panel created last month and headed by Mr. Clark. Besides Mr. Clark himself, those participating include Deputy Secretary of State Kenneth Dam; Undersecretary of Defense Fred Ikle; the arms control administrator, Kenneth Adelman; and Ron Lehman, from the National Security Council staff. Assistant Secretary of State Richard Burt and Assistant Secretary of Defense Richard Perle, though on vacation last month, also are members.

In a break with the conventional norm, the group has held sessions with leading Democratic defense experts from the Congress. Among others, Senator Sam Nunn of Georgia and Congressman Les Aspin of Wisconsin have been consulted. Out of the conversations there has emerged a clear sense of the link between defense appropriations and arms control.

Defense appropriations are critical because unless the president can win congressional authority for his projected military buildup, the Russians are under no pressure to come to terms on arms control. The rhetoric of Defense Secretary Caspar Weinberger, however, has not impressed Democratic experts. They find many flaws in his basic approach, and they have fixed on one difficulty in particular — the scheme for basing the new, multi-warhead MX missile.

After two projected basing schemes failed to win congressional support, the president appointed the Scowcroft Commission. In its report in April, the commission recommended installing 100 MX missiles in existing silos, and then moving toward a small, mobile weapon with a single warhead, the Midgetman. The theory was that the 100 larger weapons could be used as a bargaining chip in an arms control deal. The Midgetman could be deployed in ways that fostered a ratio between the number of U.S. weapons and the number of Soviet targets, entirely consistent with arms control.

The defense Democrats in the Congress bought the Scowcroft Commission concept. But, being uncertain of the president's commitment to arms control, they moved to keep MX appropriations on a short string, doling out money bit by bit in return for manifest progress in the negotiations with Russia.

In the last legislative test, the House supported the authorization of funds for the MX by less than a score of votes. Since then there has been an erosion of Democratic backing for the MX, with all leading presidential candidates coming out against. The vote on appropriations for the missile is set for the fall. Congressman Aspin, and other Democratic supporters of the MX, concede that unless they have some new step forward in arms control to show for their troubles, they will not be able to hold a majority for appropriations.

The negotiating situation dovetails exactly with the legislative requirement. Under pressure from the Congress and the European allies, President Reagan has already moved from his original bargaining position. But progress in the talks on Intermediate Range Forces, or Euromissiles, clearly awaits the test of political strength that will come when NATO moves to deploy some 572 Pershing II and cruise missiles in Germany, Britain and Italy this year. The so-called START talks on intercontinental missiles are hung up on American proposals for major cutbacks in Soviet blockbuster missiles — the SS-18s and 19s.

The Scowcroft Commission, being both bipartisan and expert, is ideally suited to redefine the U.S. position for the START talks. Congressman Aspin suggested such an assignment informally when he met with Mr. Clark's group. Having consulted colleagues in the Congress, he is now putting the idea in writing.

So far no decision has been made, and some elements in the Clark group oppose the suggestion. The Pentagon has never liked ceding strategic planning to the Scowcroft Commission. Mr. Clark's own staff has said that giving another assignment to the commission would be a confession of incompetence by the Reagan administration. But the State Department sees in the commission an ally against the Defense Department hawks. If Secretary of State George Shultz agrees, the need to push the MX appropriation past the Congress would prove decisive. The Scowcroft Commission would be back in business, and arms control would still have a future.

WASHINGTON POST 19 August 1983 Pg. 1

Soviets Seen Switching to Mobile Missiles to Counter U.S. Weapons

By Michael Getler
Washington Post Staff Writer

The Soviet Union intends to turn to mobile long-range missiles as a way of keeping its forces safe from increasingly accurate U.S. weapons under development, a senior American official said yesterday.

The official, who is familiar with the U.S.-Soviet strategic arms reduction talks (START) in Geneva, said the Soviets "have told us privately" that they know their huge force of land-based missiles in fixed silos will become "increasingly vulnerable" to the new U.S. land-based MX and submarine-based Trident II missiles.

He quoted a senior Soviet negotiator as having said "they are going to have a solution for this. They are going to go mobile" with at least a portion of the Soviet force so they can move their missiles around to make them harder to find and hit.

The U.S. official said that on balance he would view such a Soviet move as a "positive sign" rather than an escalation of the arms race because mobile missiles tend to carry fewer warheads and be smaller, less powerful and less accurate than missiles in fixed underground silos. They are also less tempting targets.

The United States is also at work on such missiles; many arms control experts say a shift to mobile weapons by both sides would make for a more stable and less threatening nuclear balance than now.

The U.S. official quoted the Soviet as saying that deployment of mobile missiles "is easy to do in our country," meaning that the Soviets have a vast land mass and no opposition from a Congress or a public fearful of nuclear missiles on the roads. The Soviet said that "they don't have the difficulties we do and it is their plan" to develop such forces, the American reported.

The U.S. official, speaking under the ground rule that he not be identified, said he "had no doubt" the Soviets would move toward a mobile missile force.

He said that a new solid-fueled missile known as the PL5, which is now being flight-tested and so far carries only one warhead rather than the multiple warheads used on some larger land-based missiles, is the likely new mobile weapon.

It would not be surprising if the Soviets turned to a mobile intercontinental missile. The increasing accuracy of U.S. missiles has been known for years and the Soviets, in recent years, have built hundreds of mobile shorter-range SS20 missiles aimed at western Europe and Asia.

But conversion of part of the land-based long-range missile force, now numbering 1,400, to mobile weapons represents a huge, costly and technically risky decision for Moscow, which has had problems developing solid-fueled missiles in the past.

The United States now has 1,050 silo-based missiles. They too are becoming vulnerable to attack or are already so.

The presidentially appointed Scowcroft Commission studying U.S. strategic arms programs and arms control efforts thus recently recommended that this country ultimately move away from large, stationary, multiple-warhead missiles such as the MX and toward smaller, single-warhead missiles that probably would be mobile.

The smaller weapons, it was reasoned, would be less vulnerable and less threatening at the same time. President Reagan accepted this recommendation and the program is moving ahead. The commission expressed the hope that the Soviets would also move in this direction.

But many questions remain.

For example, if the Soviets are determined to build mobile missiles to reduce the threat from the MX and Trident II, the official was asked yesterday, would the United States be able to pressure Moscow to reach agreement at START by continuing to build MX and Trident?

At one point, the official said: "I don't know how to answer that question." But under further questioning he said that the new U.S. weapons were needed to push the Soviets toward the smaller and less-threatening mobile missiles.

Ultimately both sides would have such weapons and fewer missiles of all types than they have today. The official said indications that the Soviets were moving toward mobile missiles were proof that Reagan administration plans were working. And Moscow undoubtedly would always keep some bigger silo-based missiles, so a countering force would also be needed by the United States, he said.

The official said, however, that whether mobile weapons ever represent less of a threat than today's weapons depends upon the total number of warheads allowed on each side. Thus far, the Soviets at Geneva have not indicated how many warheads they would be willing to agree on. The United States has proposed that each side limit itself to 5,000 warheads, roughly one-third below current levels.

The official also acknowledged that even a START agreement on U.S. terms would not necessarily remove the ability of either side to launch a successful first strike against the other.

Five thousand warheads might still be enough to allow either side in a first strike to wipe out a large part of the other side's forces.

The official said the existing vulnerability of U.S. land-based missiles would therefore not be solved entirely by an arms agreement. It would also require this country either to build mobile missiles or to find better ways to protect fixed-based missiles.

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SOVIETS SWITCHING MISSILES...CONTINUED

The official "reserved" opinion on whether the Soviets have violated past arms agreements, but said the Soviets were "short-sighted" if they were violating pacts because they would achieve only "small possible gains and risk big possible losses."

The White House recently asked for a special meeting with the Soviets to explore three alleged breaches of previous agreements.

The official revealed that the Soviets have begun testing a new version of their existing SS19 missile with 10 warheads, the same number as the MX will carry. The Soviets have 330 SS19s, most of which now carry six warheads, and 308 SS18 missiles with 10 warheads each. The advanced U.S. Minuteman III missile has three warheads.

The official said he remains hopeful that a START agreement can be reached because "in the long run, they [the Soviets] want one."

The official confirmed many recent shifts in the positions of the two countries at the talks.

Aside from the 5,000-missile-warhead limit, the United States is proposing a limit of 400 bombers each with no more than 20 air-launched cruise missiles aboard each bomber.

In an important recent shift, the United States would drop demands that Moscow reduce its big edge in throw-weight, or the lifting power of its rockets, to levels below the current U.S. level. Now, the administration would accept a reduction to a level higher than the U.S. level. This still means a substantial Soviet cut, but U.S. officials have not said how much they would settle for.

The Soviets, rather than dealing with warheads, have proposed limiting each side to 1,080 multiple-warhead missiles, 680 of these based on land, and 120 bombers.

NEW YORK TIMES 22 August 1983

Required Reading

The Waddling MX

Excerpts from remarks by Senator William Proxmire, Democrat of Wisconsin, in Senate debate over the MX missile, July 20, 1983:

Let us let the words of the chairman of our Armed Services Committee, Senator Tower, speak for themselves: "By stuffing the MX's into fixed silos, we're creating just so many more sitting ducks for the Russians to shoot at."

Now Senator John Tower is not always right. But he knows a weapons system when he sees it. He also knows a lot about ducks, too, whether the duck is flying, waddling, swimming, diving or sitting. He is especially expert on sitting ducks, stationary, immobile $20 billion sitting ducks.

A flying duck is hard to hit, so is a flying missile; a swimming duck that could dive into the lake makes a tough target, too, so does a swimming or diving missile; and the wonderful thing is that we have these alternatives. We have missiles that can fly or swim or dive, but not the MX that is in this bill. That will just sit. It will not even waddle. You know, we would do a lot better if we lifted the MX out of its sitting mode and put it into a waddling mode. Just as you might miss a waddling duck, you cannot always hit a waddling missile.

After all, an MX that could waddle would be in a different position by several miles every day. When night fell, the MX could amble along, or should I say waddle along, at, let us say, one mile per hour. So why not start an MX duck waddling mode? O.K., it is not as good as flying or swimming or diving or running, but it is a lot better than sitting.

After all, the Russians will be talking fixed stationary land-based missiles. Ah, but ours could have the old "dipsy-doo" waddle.

WASHINGTON POST 21 August 1983 Pg. C-7

Joseph Kraft

The Next Job for the Scowcroft Panel?

Before leaving town for vacation in California, the president's national security adviser, William Clark, set the machinery rolling toward the next step in arms control policy. The problem is to integrate congressional support for defense appropriations with progress in U.S.-Soviet negotiations. The answer, almost certainly, will be a new call on the bipartisan presidential commission headed by Gen. Brent Scowcroft.

At present the decisive forum for discussion is the Senior Arms Control Policy Group, an interagency panel created last month and headed by Clark. Those participating include Deputy Secretary of State Kenneth Dam; Undersecretary of Defense Fred Iklé; the arms control administrator, Kenneth Adelman; and Ron Lehman, from the NSC staff. Assistant Secretary of State Richard Burt and Assistant Secretary of Defense Richard Perle, though on vacation last month, are also members.

In a break with the norm, the group has held sessions with leading Democratic defense experts from Congress. Among others, Sen. Sam Nunn of Georgia and Rep. Les Aspin of Wisconsin have been consulted. Out of the conversations there has emerged a clear sense of the link between defense appropriations and arms control.

Defense appropriations are critical: unless the president can win congressional authority for his projected military buildup, the Russians are under no pressure to come to terms on arms control. The rhetoric of Defense Secretary Caspar Weinberger, however, has not impressed Democratic experts. They find many flaws in his basic approach, and they have fixed on one difficulty in particular—the scheme for basing the new, multi-warhead MX missile.

After two projected basing schemes failed to win congressional support, the president appointed the Scowcroft commission. In its report in April, the commission recommended installing a hundred MX missiles in existing silos, and then moving toward a small, mobile weapon with a single warhead, the Midgetman. The theory was that the hundred larger weapons could be used as a bargaining chip in an arms control deal. The Midgetman could be deployed in ways that fostered a ratio between the number of U.S. weapons and the number of Soviet targets, entirely consistent with arms control.

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In the last legislative test, the House supported the authorization of funds for the MX by less than a score of votes. Since then there has been an erosion of Democratic backing for the MX, with all leading presidential candidates coming out against. The vote on appropriations for the missile is set for the fall. Aspin, and other Democratic supporters of the MX, concede that unless they have some new step forward in arms control to show for their troubles, they will not be able to hold a majority for appropriations.

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So far no decision has been made, and some elements in the Clark group oppose the suggestion. The Pentagon has never liked ceding strategic planning to the Scowcroft commission. Clark's own staff has said that giving another assignment to the commission would be a confession of incompetence by the Reagan administration.

But the State Department sees in the commission an ally against the Defense Department hawks. If Secretary of State George Shultz climbs aboard, the need to push the MX appropriation past Congress would prove decisive. The Scowcroft commission would be back in business, and arms control would still have a future.

An SES MX Concept

Michael Stoiko and William White—The MX-surface effect ship (SES) is a gas turbine-powered, propeller-driven SES with a nominal, full-load displacement of 11,000 long tons (LT). The ship has an overall length of 535 feet, a beam of 105 feet, and a main deck height above the keel of 48 feet.

The MX-SES can carry 20 MX missiles on-cushion, with 3,350 LT of fuel at an average speed of 59 knots over a distance of 4,900 nautical miles (nm). Off-cushion, the ship can cruise at an economical speed of 15 knots over a distance of 22,000 nm. In both cases, the performance is obtained in sea state three without refueling. Switching from hullborne to cushionborne and accelerating to cruise speeds can be accomplished in seconds.

Parametric studies indicate that the 11,000 LT MX-SES can carry any number of missiles from two to 20. Economy of scale, however, dictates that on the basis of fleet acquisition and life cycle costs the most cost-effective configurations are those that carry ten or more MX missiles. The number of missiles carried has a direct impact on performance. For example, if a contingency scenario calls for a ten-missile loadout per ship, then the ten MX-SES maximum speed on-cushion will be 78 knots or an equivalent average speed of 65 knots over a distance of 8,200 nm. The off-cushion operation will be 15 knots over a distance of 33,000 nm. In both examples, the performance is stated in sea state three without refueling.

The 20 MX-SES has a two-level superstructure and a single level (main deck/wet deck) containing the habitability and working spaces. These spaces are arranged to group personnel and the payload in a strictly functional manner. The two banks of missile tubes are locked together in a rigid armored A-frame configuration which encloses most of the superstructure.

The ship stores and shops are located on the main deck/wet deck along with the communications, launch tubes, and damage control. All habitability and working spaces are compactly arranged between the missile compartments. Thus, the missile hardening is also used to protect the ship's vital mission controls.

Many MX ship missile storage schemes have been investigated. The configurations ranged from completely vertical stowage of missiles to missiles that were stowed longitudinally or transversely and erected at launch. Sea launching of the MX missiles was also considered. In the selected design, the missiles are stowed at 30° to the vertical. The missile canister extends from the keel in each sidewall to the top of the nuclear blast hardened superstructure. The missile stowage compartment is 154 feet long, rising 33 feet above the main deck. The missiles are cold-launched by a self-contained air compression system to a height of about 200 feet at which time the first stage of the MX missile is ignited. The 30° launch angle protects the ship from missile misfires and increases the blast deflection efficiency.

The MX-SES design features a welded steel hull structure designed to house the MX missiles and their support functions, as well as satisfying the requirements for seakeeping, hydrodynamic performance, and economic ship production.

With the MX-SES cushionborne, propulsion is provided by LM5000 gas turbines which drive four 13-foot semi-submerged supercavitating controllable-pitch propellers. Hullborne propulsion is provided by two of the lift diesels.

Six 7,000 horsepower diesel engines provide the power to the lift system. Two of these diesels are geared to the outboard gas turbine propulsion shafts to provide economical power when operating off-cushion at lower speeds. The lift fans are the rotating diffuser type adapted from industrial sources, and the bow seal is the newly developed transversely stiffened membrane seal which has been designed to reduce both drag and seal wear.

Several unique mission advantages of the MX-SES over other surface ships are as follows:

- The MX-SES is the only surface ship that can outrun high-performance Soviet submarines and torpedoes
- It provides extraordinary speed (50–70 knots) and good range economically
- It can operate without costly escorts and still maintain a highly acceptable survival rate
- It has a much higher probability of avoiding detection/targeting predictions by low orbiting satellites than conventional ships
- It is probably the only surface ship that can survive a nuclear preemptive/surprise or retaliatory nuclear missile attack given adequate warning
- In general, the MX-SES, because of its speed, has a much higher probability of survival and mission success.

NATIONAL DEFENSE July/August 1983 Pgs. 14, 18 & 19

MISSILES AND ASTRONAUTICS

C. F. Surba

MX Basing: In Search of a Simple Answer

The "Report of the President's Commission on Strategic Forces" was ushered in with a fanfare usually reserved for the State of the Union messages, or "perceived" national emergencies requiring the executive's appearance before a joint session of Congress. The so-called Scowcroft Report on the MX and its basing proposal was the product of high-level bi-partisan effort. It was designed to define a blueprint for a strategic nuclear posture which would assure the U.S. of a viable deterrent policy and provide the stimulus for arms control which could diminish the risk of nuclear war with Russia.

In order to secure a consensus on a subject that has plagued both parties for over a decade, President Reagan selected a bi-partisan group of "elder statesmen" for the Commission and senior counselors to the Commission. Some of the members appointed to one or the other of these bodies had served previous administrations in Cabinet-level positions including Defense and State. Others were influential leaders from the private and public sectors. The group was chaired by Lt. Gen. Brent Scowcroft, former Assistant to the President for National Security Affairs during the Ford administration.

The task assigned to this Commission was to "review the purpose, character, size and composition of the Strategic Forces of the United States. More specifically, the Commission was asked to "examine the future of our ICBM forces and to recommend basing alternatives."

With regard to the latter, the Commission recommends both a short and long-term modernization plan for the ICBM force. For the short-term, it recommends the immediate deployment of "something like a hundred MX missiles" based in existing MINUTEMAN silos. For the long-term, the Commission proposes "engineering design for a small, single-warhead missile" with a probable deployment timetable in the early 1990's. Finally, it recommends a vigorous R&D program on "mobility, silo hardening, ballistic missile defense and deep underground basing."

The author was formerly Special Assistant to the Air Force Director of Transportation. He has a lifelong interest in airlift, transportation and aerospace matters. He succeeds Flint DuPre who authored this department for many years and who has stepped down because of ill health.

In submitting the report to the President, Gen. Scowcroft acknowledged that "there was no simple solution to questions that must be answered in basing our forces, achieving equitable arms control agreements, and improving strategic stability." Every president who has attempted to come up with a viable MX posture no doubt appreciates this observation. In one way or another, each was frustrated in finding a solution which would serve the military, public and political interests adequately and acceptably. The present commission's efforts are but another attempt at finding that magic answer.

Hearings of the report were held on both sides of Capitol Hill before the Committees on Armed Services. It was apparent that members from both of the houses and even both of the political parties fully understood and appreciated the difficulty of the tasks that the commission faced. All witnesses were treated with deference and respect and opposition to the provision of the report was generally muted and reserved. Significantly, attendance was sparse when those opposed to the MX testified, not only by Committee members, but also by spectators and press as well.

In addition to the Commission representatives who participated in the hearings, Secretaries Weinberger and Shultz testified as well

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as the Joint Chiefs of Staff, former chairman of the JCS, General David Jones, and other retired military leaders. Others testifying before the committees included representatives from the scientific community, antinuclear groups as well as private individuals.

There is a wide gap that separates the supporters of the Commission's report and those who oppose it. Key words and phrases became repetitive and were manipulated singly or in combination by both sides in a manner designed to support particular positions. Vulnerability, deterrence, arms control, perception, credibility, strategic balance, national will, TRIAD, etc., are the stock-in-trade of both groups and around which the arguments center.

The rift is deepest on the issue of the Commission's proposal to "deploy something like 100 MX missiles" in existing MINUTEMAN silos. The Commission feels that such a deployment would, first, demonstrate U.S. national will and cohesion. Second, it would "reduce the substantial imbalance in the capability of the U.S. ICBM forces compared to those of the Soviet Union." Finally, the Commission concludes that the MX "is essential to induce the Soviets toward negotiation, especially negotiations on an arms control framework which would permit us, and encourage them, to move in the direction of greater stability."

Unanswered Questions

A number of profound and far-reaching questions were raised by the Congressional Committee members on MINUTEMAN silo basing because such a proposal had been previously turned down on the Hill. The issue focused on the vulnerability of the MX in such a basing configuration. A number of the House members and Senators, notably Sam Nunn (D-GA), indicated that they would look long and hard at the vulnerability implications before they would make up their minds on the specific basing recommendation.

Gen. Scowcroft admitted under questioning that there is an element of vulnerability in the short-run in a MINUTEMAN silo based MX, but argued that it "is not so dominant a part of the over-all problem as to require other immediate steps. In the long-run, the vulnerability issue would be somewhat mitigated by the small missile and new developments in silo hardening which could hold promise." Both James Schlesinger and Harold Brown, the former Secretaries of Defense, felt that the vulnerability issue should not be over-exaggerated.

Dr. Brown gave what is probably nearest to the "school solution" to the vulnerability syndrome. He said, "The equation of vulnerability of land-based ICBM's with the vulnerability of our strategic forces is . . . a mistake. The land-based missiles will be vulnerable, but in combination with our other forces, they will provide a strong deterrent."

Dr. Brown's statement is, in essence, designed to justify the so-called TRIAD Concept (current U.S. doctrine is predicated on the maintenance of three separate types of strategic nuclear forces; i.e., land-based ICBM's, sea-based SLBM's and bombers). Such a posture is meant to confuse the enemy's targeting and, as a consequence, reduces the vulnerability of each of the components. Under this theory, it is argued, our strategic forces should be "assessed collectively and not in isolation . . . and their survivability . . . depends on the existence of other components."

It is not likely that the Commission laid to rest the vulnerability issue completely. Critics of the proposed MX basing mode feel that the vulnerability is real and not merely perceived. Furthermore, they maintain hardening is not a viable solution. It was argued strongly that the 100 MX's in the MINUTEMAN silos "are more vulnerable to a Soviet first strike than the 1,000 Minutemen" which are in our current inventory.

Another dominant theme addressed in the report and Secretary Schultz's testimony is that the Commission's MX proposal will have a positive and beneficial effect on deterrence and arms control. As previously indicated herein, the Commission feels very strongly that we need the MX to demonstrate our national will and cohesion and that the failure to go ahead with the program would indicate our lack of will which is considered an essential element of deterrence. The consensus is that the MX will, in fact, push the Soviets towards the conference table and arms control more rapidly.

Secretary Schultz's testimony supports the Commission views on this. He said, "The central goal of our national security policy is deterrence of war and the mainte-

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nance of strategic balance," which the recommendations of the Commission are designed to achieve. It "is a necessary condition for that deterrence. Perceptions of the strategic balance are bound to influence not only our adversaries, but also our allies . . ."

The proposal for the small single warhead missile program, which the Commission feels we should pursue vigorously, was essentially well received.

Among other things, the Commission believes such a weapon would "reduce the value of the target, making it unremunerative to attack and, thus, enhancing the stability of the force . . . and small in order to open up, to a maximum extent, the opportunities for survivable basing, almost certainly to include mobile basing."

It also may have one other attribute with far-reaching and direct arms control implications. The Commission and other supporters and critics feel that it could provide a new departure in arms control. As General Scowcroft said, "Counting by launchers has, perversely, led us to the present structure of very high-value targets, large missiles each with a number of warheads. We must, therefore, turn to counting the forces on both sides by warheads, not launchers. After moving to count warheads, it would be useful to cap or reduce the numbers sharply." He suggested that this could lead to an evolutionary process that could lead to the conclusion that "*large* missiles in silos are a wasting asset."

MIDGETMAN

The single-warhead small missile is described in the report as weighing about 15 tons. Other reports indicate it might weigh even less than that. Dubbed by some as the MIDGETMAN, it is apparently the brainchild of Jan M. Lodal, a former director of program analysis for the National Security Council Staff.

Because it weighs 15 tons or less, it offers more survivable basing opportunities than the 100-ton multiple-warhead MX. The Commission's report indicates that fixed or mobile land basing which would require different types of planned attacks by the Soviets and compounds their targeting problem.

What was not reported in any detail is whether other basing alternatives were considered. Because of its small size, it might be feasible, for instance, to use transport aircraft, in an end of the runway alert posture, either in a weapon or dummy configuration. While the airborne idea was looked at with the C-5 as a basing mode for the MX, it was abandoned because it was prohibitively costly and would tie up a critical national resource since the number of C-5's in the U.S. inventory was very small and their use could impact adversely on other vital military requirements. This is not the case in this instance. The small missile could be accommodated operationally in the 246 C-141 aircraft in the operational inventory of the U.S. Air Force and perhaps even in the C-130 aircraft. In addition, it could provide another mission justification for the C-17 currently in the DOD airlift improvement program.

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MISSILES & ASTRONAUTICS...CONTINUED

Whether by accident or design, critics of American nuclear policy are prone to treat the policy with a myopic perception. Unfortunately, they are inclined to look at deterrence, vulnerability, credibility, strategic balance, etc., in terms of absolutes when, in fact, they are subjects which have to be assessed more realistically in terms of probabilities.

In this context, the issue of whether the Scowcroft proposals are stabilizing or destabilizing merely adds another question to the continuing debate on the MX. Critics contend that they are destabilizing while the other group says that the current significant differences in Soviet and U.S. capabilities create more instability. The answer must lie somewhere in the limbo called Soviet perception of American intentions.

In an effort to get more congressional support for the Commission's recommendations, President Reagan has moved away from the weapons build-up approach to the arms build-down theme. The build-down idea provides for scrapping old nuclear weapons as newer ones are developed and deployed. It is, essentially, the implementation of a Senate resolution sponsored by Senators Sam Nunn and William S. Cohen (R-ME) which states that it is the "sense of the Senate" that the U.S. and Soviet Russia should "adhere to the principle of mutual guaranteed build-down of nuclear forces." The language of the resolution suggests a reduction ratio of 2 to 1.

How this decision will be incorporated into the U.S. proposals to be introduced at the strategic arms reductions talks (START) in Geneva remains to be seen. The President's move is viewed as being entirely consistent with the Commission's recommendations on arms control and arms reductions.

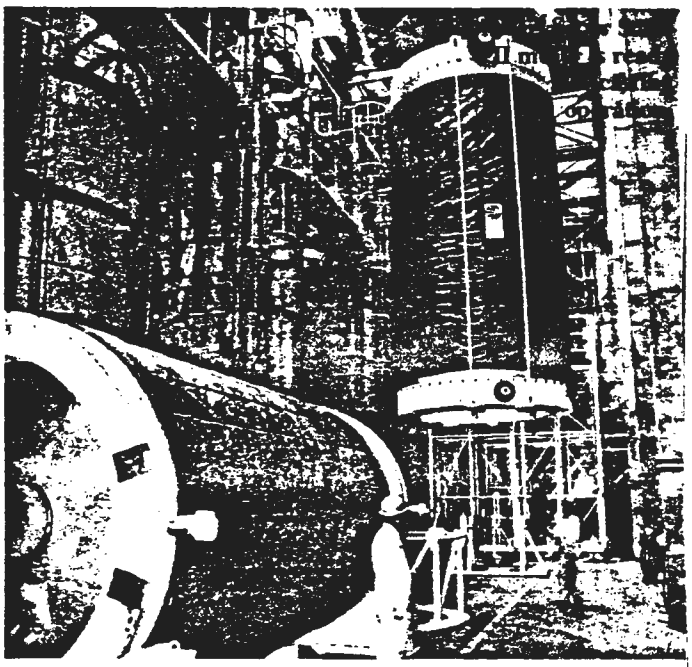
In what is one more thorn in the side of the supporters of the MX is the allegation that the views of the commission were shaped in some measure by political considerations. General Scowcroft admitted under questioning that politics did enter into the discussions on the MX but that the findings reflected a balance between purely military considerations and what was politically expedient. This may well turn out to be an issue of some consequence in the future.

How the MX issue will fare in Congress and what the long-term solution will be remains to be seen. For the immediate future both houses approved, by a large majority, the release of over a half billion dollars for engineering and flight testing of the controversial missile. However, opponents vow that they will still attack the program when it comes up for a vote in the authorization and appropriations bills. In a characteristic way, the battle continues. ■

DEFENSE SYSTEMS REVIEW August 1983 Pgs. 25-29

Solid propellants enhance missile storage safety, provide more power, ensure reliability

By Steven Taylor



The propellant system is responsible for the initial launch and booster firings that enable rockets to travel into space.

With a tremendous roar reverberating over Vandenberg Air Force Base on the southern coast of California, the Air Force launched the first PEACEKEEPER (MX) missile at 7:10 p.m. on June 17. Seconds later, the Stage II solid propellant motor system fired at about 70,000 feet altitude, boosting the missile and its payload of six test reentry vehicles to more than 250,000 feet. This motor was designed, developed and produced by Aerojet Strategic Propulsion Company of Sacramento, California.

The highlights of the PEACEKEEPER Advanced Development Program at Aerojet include the development of a lightweight, highly efficient nozzle with a unique carbon-carbon integrated throat entrance; a stable, high energy HTPB propellant; a low density, high strength composite, Kevlar/resin matrix to increase the performance of the motor case; and a large extendible nozzle exit cone to increase the thrust of the motor during flight.

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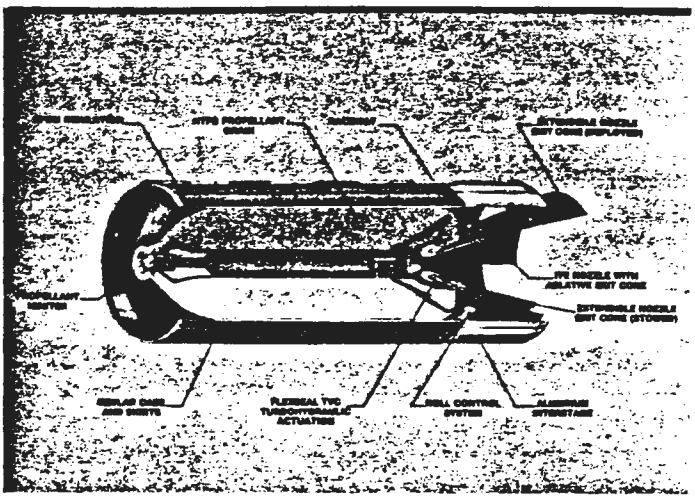

Cutaway view of Peacekeeper (MX) State II motor.

The liquid-solid tradeoff

The first missiles developed by the United States after World War II primarily used liquid propellants to provide the tremendous thrust necessary to launch and power the huge missiles and their payloads to the target area.

In the late '50s, Aerojet produced the first and second stage engines for the Air Force Titan I missiles. Titan I used LOX/RP-1 liquid propellants (liquid oxygen and kerosene) which were very powerful — but the volatile nature of the propellants made them difficult to transport, store and maintain in the field. For example, a TITAN I missile was stored in a concrete silo until launch notification was given. Then a large team of Air Force technicians had to elevate the missile mechanically to ground level and load the chamber with liquid propellant before it could be launched. This operation took between 20 and 30 minutes and was a defect in the TITAN I deterrent weapons system.

In 1958, Aerojet developed an improved storable liquid propellant combination consisting of Aerozine 50 and $N_2\ 0_4$. This new propellant was more stable and could be loaded into a missile and left for several months without boiling, container corrosion, evaporation or other problems. It was also more powerful and could boost larger warheads over a greater distance.

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SOLID PROPELLANTS...CONTINUED

The new propellant combination became a key benefit of the new TITAN II program. With it, TITAN II was a safer missile to handle and deploy and it could be launched more quickly than TITAN I. Working with the program's prime contractor, The Martin Company (now Martin Marietta) of Denver, Colorado, Aerojet designed TITAN II an even more effective deterrent weapons system.

The Air Force has deployed as many as 54 TITAN II missiles uninterrupted for 15 years. NASA has also used Aerojet-built TITAN booster engines as the basic launch vehicle for the Gemini Program. However, from the mid-1950s onward, aerospace chemists and engineers throughout the world have worked to develop missile systems — and particularly propellants — that were powerful enough to carry large payloads over tremendous distances, yet were safe and stable enough to be transported, stored and maintained with a high degree of confidence. Solid propellants were the answer.

Solid vs. liquid propulsion

The main difference between solid and liquid propulsion systems is that solid propellants are composed of a single composite mass containing both oxidizer and fuel in a stable form until ignited. A solid propellant motor is similar to a rifle bullet. A typical solid propellant composition for a strategic motor would consist of the following ingredients: ammonium perchlorate oxidizer - 70 percent; aluminum fuel - 15 percent; rubber binder - 15 percent.

Liquid systems, on the other hand, consist of two separate tanks containing liquid oxidizer in one and liquid fuel in the other. Rocket power is generated only when the oxidizer and fuel are pumped into a common combustion chamber and ignited.

Solid propellant motors are smaller, less complicated, and usually are less expensive to produce than their liquid counterparts. Their missile launch crews are much smaller and their maintenance requirements not nearly as stringent as liquid-propelled engines. (In aerospace terminology, a solid system is called a motor while a liquid system is called an engine.) These two factors reduce the system's overall manpower support requirements and logistics support costs. However, liquid propellant systems can be throttled, stopped and restarted more easily than solid propellant motors. For this reason, most DOD and NASA missile systems today use solid propellant boosters for the lower stages and select liquid propellant engines for the more sophisticated upper stage capabilities.

The Orbital Maneuvering Subsystem (OMS) engines produced by Aerojet TechSystems Company for NASA's space shuttle program are excellent examples of a liquid propellant upper stage using stop/start and throttling capabilities effectively. The function of the OMS is to maneuver the orbiter in space after the main solid motors and liquid engines are spent, and the OMS's is to maneuver the orbiter in space after the main solid motors and liquid engines are spent; the OMS's are fired an average of five times during flight, depending on mission requirements. Engine firings range from a few seconds to more than 200 seconds.

In recent years, Aerojet Strategic Propulsion Company has conducted several research and development programs specifically designed to create a solid propellant system capable of stop/start and throttling characteristics. A number of these programs, particularly the Pintle Nozzle, have proven successful on both the subscale R&D level and in full-scale development tests.

MINUTEMAN

MINUTEMAN I was the first strategic solid rocket motor ICBM authorized by DOD. The U.S. Air Force commissioned Boeing Aerospace, one of several associate contractors, in July 1957 to develop and produce the Minuteman missile. The Air Force then awarded Aerojet the contract to develop the Stage II Motor for MINUTEMAN. This motor featured a polyurethane/ammonium perchlorate solid propellant contained within a steel pressure vessel or chamber. The motor had four swivel nozzles which provided thrust vector control (TVC) for guidance.

Because of the stable, portable characteristics of MINUTEMAN, the Air Force considered deploying the missile in a mobile mode on trucks or railroad cars. At that time, Soviet missiles were not as accurate or powerful as they are today, and in the end, hardened silos were judged sufficiently safe for the deployment of MINUTEMAN. The mobile basing plan was revived in the late 1970s for the MX (PEACEKEEPER) missile as a plan to counteract the improved accuracy of Soviet missiles. The MINUTEMAN family was improved several times between its first deployment in 1964 and the present. More efficient solid propellant technology improved the missile's power and accuracy.

Aerojet developed a new, erosion-resistant nozzle and converted the design from four swivel nozzles to one large nozzle working in tandem with an improved, lightweight TVC system for guidance. A new, high performance propellant was also developed to work in combination with a new, lighter Titanium chamber to significantly increase the range and payload capabilities of MINUTEMAN II.

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SOLID PROPELLANTS...CONTINUED

Aerojet is currently engaged in a remanufacturing program for MINUTEMAN II stage II motors. As motors in the field reach the limit of their service life — about 14 to 17 years — they are selectively brought back to the Sacramento facility where all age-sensitive components are removed and replaced with new components. This process saves the government and taxpayers millions of dollars and ensures that the MINUTEMAN system will be serviceable throughout the 1990s.

In the summer of 1982, Aerojet cast the 30-millionth pound of ANB-3066 propellant used in MINUTEMAN stage II and III motors.

POLARIS

Along with TITAN and MINUTEMAN, Aerojet developed and produced a third strategic missile program during the late '50s and early '60s that made possible the third leg of the DOD Triad deterrent system — Sea Launched Ballistic Missiles (SLBMs).

In many ways, the solid propellant motors built for the Navy's Polaris program were the most dramatic and technically sophisticated systems built by Aerojet. Working with the program's prime contractor, Lockheed Missiles and Space Company of Sunnyvale, California, Aerojet initiated a massive research and development effort to design and produce both motors used in the two-stage POLARIS missile.

These missiles were deployed aboard submarines and launched from vertical tubes beneath the sea. To eliminate the danger inherent in igniting the first stage on shipboard, POLARIS submarines contained a pressurized cold gas launch system which ejected the missile from the submarine's tubes into the sea before Stage I ignition ocurred. This ejection system was later replaced with a steam gas generator.

The POLARIS A-1 motors had steel chambers and four nozzles with jetevator TVC for guidance. The polyurethane/ammonium propellant was powerful enough to boost the missile about 1,380 miles, yet safe enough to meet the Navy's stringent shipboard environment requirements.

POLARIS A-2 motors (also built by Aerojet) were considerably more advanced. Stage II had a fiberglass filament wound composite chamber and a rotary nozzle TVC system. The missile's length increased to about 28 feet for A-1 to 30 feet nine inches for A-2. The A-2 range increased to about 1,700 miles.

POLARIS A-3 featured glass filament-wound cases in both stages. The Aerojet-built first stage used four rotary nozzles for guidance. The A-3 length increased to 32 feet three and one-half inches. The range increased to 2,880 miles.

Aerojet has delivered more than 850 first stage motors to power the A-3 POLARIS missiles of the U.S. Navy and those deployed aboard four submarines of the British Royal Navy.

In 1968, Aerojet began a POLARIS Repair Program that refurbished motors brought back from field deployment. This program lengthened the effective service life of the missile and ensured that POLARIS would be a continuing part of the deterrent weapons systems for both the United States and Great Britain. Like the MINUTEMAN Remanufacturing Program, this represented a savings of millions of dollars for the government and the taxpayer.

In 1982 Aerojet began a POLARIS A-3R program with Lockheed and the British Royal Navy to produce new first stage motors that replicate as closely as possible the original design specifications for the A-3 Stage I motor.

In addition to the large booster rockets such as MINUTEMAN and POLARIS, Aerojet has developed numerous smaller rocket motors for tactical applications. One of the most widely used systems developed by Aerojet is the HAWK ground-to-air rocket.

The HAWK features a unique dual thrust solid rocket motor consisting of a fast burning booster for rapid lift-off combined with a slow burning sustainer to permit accurate target tracking. The two propellants, booster and sustainer, are bonded to each other and configured in two concentric rings to provide the unique dual thrust effect.

Advanced Technology Programs

Many Advanced Technology programs are currently underway which will provide the baseline research and development data necessary to develop future ICBM applications. These include:

- ***Integrated Stage Concept.*** This consists of combining two rocket motor stages so that common hardware components are used to increase the system performance of multi-stage missiles. The results are a more efficient use of the available propulsion system volume while increasing reliability and reducing fabrication costs. Range increases of up to 28 percent for a volume limited system are possible with this concept.

The feasibility of the short, high performance exit cone, discrete throat nozzle plug and clean, low oxidizing propellant have been demonstrated in 70 lb. Ballistic Altitude Test Evaluation system (BATES) tests at the Air Force Rocket Propulsion Laboratory (AFRPL). Super BATES tests are scheduled for 1984. TVC is achieved by

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SOLID PROPELLANTS...CONTINUED

injecting hot gas into the nozzle through a valve. This secondary injection system will be tested in late 1983. A full composite inter-stage joint will also be tested in late 1983.

● ***Advanced Extendible Exit Cone Concepts.*** Aerojet has designed a second generation advanced Extendible Exit Cone (EEC) to continuously compensate for altitude variations while optimizing the packaging volume needed for stowage. This concept, called the Shingle Lap EEC or SLEEC, consists of a number of inner and outer "shingles" made from either ablative or carbon-carbon composite materials. These shingles are uniquely overlapped and packaged tightly around the nozzle's fixed exit cone which results in a greatly reduced stowage volume.

The actuation system consists of synchronized axial and radial cross-drives which provide for simultaneous extension and radial growth while reacting thrust induced axial and hoop loads. Deployment, therefore, occurs as the generation of a larger and larger cone, making it a true variable expansion area device. This permits optimum altitude compensation on booster stages of rocket motors.

● ***Computed Tomography Systems.*** The first of two Air Force/Advanced Computed Tomography Systems (AF/ACTS) was installed at Aerojet in February 1983. AF/ACTS-I, installed and operational at Aerojet, was designed for rapid inspection of relatively small objects such as tactical rocket motors and components and carbon-carbon Integral Throat Entrance Billets.

The second system, AF/ACTS-II, is larger and will be capable of detailed inspection of larger objects, including the Small Missile and PEACEKEEPER Stages I, II, III and IV as well as other large components. System II will be operational at Aerojet in the fall of 1984. Both systems are designed specifically for industrial use. The inspection flexibility, coupled with a sophisticated computational and display software capability, will provide a completely new non-destructive evaluation data base for use in engineering calculations.

● ***Solid Staged Combustion System.*** Aerojet's Solid Staged Combustion System provides increased performance in solid rocket motors by burning a fuel-rich and an oxidizer-rich grain in separate gas generators at low temperatures. The gases created are then injected, mixed and burned in a high performance thruster, producing a secondary reaction that significantly increases the temperature of the gases and so provides the missile system with much higher performance.

Tests have demonstrated that the system attains a 16 to 40 percent increase in performance, and Aerojet experts feel this can be increased by using improved propellants in the gas generators.

The low temperature fuel and oxidizer gases can be individually manifolded to any location in the post boost vehicle bus, then mixed and combusted at the detected thruster location. This combination of liquid and solid rocket motor technology produces the extremely high temperatures necessary for increased rocket power.

● ***Smokeless Propellants.*** As missile detection systems became more and more sophisticated in the 1960s, the complete elimination of visible exhaust became mandatory, especially for tactical rockets such as air-to-ground and ground-to-air. To meet this challenge, the main contributor to exhaust smoke, aluminum, was deleted and high energy propellants containing only ammonium perchlorate and binder are now developed for most tactical rockets. This type of "reduced smoke" propellant is used on such current rocket programs as Improved HAWK, SHRIKE, SKIPPER 2, HARPOON, and STANDARD, all Aerojet programs. Further reductions in exhaust smoke are being achieved by replacing the ammonium perchlorate with high energy components such as HMX and RDX.

● ***BNO Propellant.*** In April 1978, the Air Force issued a challenge to U.S. solid rocket scientists to develop a low hazard propellant with rocket power comparable to those currently used in high energy systems. After a very competitive proposal effort, Aerojet won the program which has resulted in the development of the BNO (butadiene acrylonitrile ethylene oxide) propellant.

Aerojet's BNO systen is the most powerful propellant yet developed which can meet both the Department of Transportation's and the military's stringent low hazard requirements for safe handling and operation. The BNO propellant system is now being refined for use in future solid rocket motor programs.

SURVIVAL July/August 1983 Pgs. 177-186

THE FUTURE OF US STRATEGIC FORCES

The on-going debate on the future of US land-based strategic nuclear forces, manifested most recently in Congressional unhappiness with successive proposals for basing the MX ICBM, *led President Reagan in January 1983 to appoint a bipartisan President's Commission on Strategic Forces. This Commission, led by Lt-Gen. Brent Scowcroft, submitted its report to President Reagan on 11 April 1983. It called for the prompt deployment of 100 MX in existing* Minuteman *silos, the development of a new and potentially mobile single-warhead* ICBM, *and the adoption of a complementary arms-control strategy to encourage movement away from* MIRVed ICBM *and towards single-warhead missiles.*

As the Commission's report noted, its recommended arms-control approach is similar in its general thrust to a number of other proposals which have surfaced in the US in the past year. One such proposal, put forward by Rep. Albert Gore of Tennessee in August 1982, is excerpted below. (The full text, along with supporting analysis, was printed in the Congressional Record *of 10 August 1982).*

REPORT OF THE PRESIDENT'S COMMISSION ON STRATEGIC FORCES (Excerpts) 11 APRIL 1983

I. Deterrence and Arms Control

The responsibility given to this Commission is to review the purpose, character, size, and composition of the strategic forces of the United States. The members of the Commission fully understand not only the purposes for which this nation maintains its deterrent, but also the devastating nature of nuclear warfare, should deterrence fail. The Commission believes that effective arms control is an essential element in diminishing the risk of nuclear war – while preserving our liberties and those of like-minded nations. At the same time the Commission is persuaded that as we consider the threat of mass destruction we must consider simultaneously the threat of aggressive totalitarianism. Both are central to the political dilemmas of our age. For the United States and its allies the essential dual task of statecraft is, and must be, to avoid the first and contain the second. . . .

Deterrence is central to the calm persistence we must demonstrate in order to reduce these risks. American strategic forces exist to deter attack on the United States or its allies—and the coercion that would be possible if the public or decision-makers believed that the Soviets might be able to launch a successful attack . . .

There can be no doubt that the very scope of the possible tragedy of modern nuclear war, and the increased destruction made possible even by modern non-nuclear technology, have changed the nature of war itself. This is not only because massive conventional war with modern weapons could be horrendously destructive – some fifty million people died in 'conventional' World War II before the advent of nuclear weapons – but also because *conventional* war between the world's major power blocs is the most likely way for *nuclear* war to develop. The problem of deterring the threat of nuclear war, in short, cannot be isolated from the overall power balance between East and West. Simply put, it is war that must concern us, not nuclear war alone. Thus we must maintain a balance between our nuclear and conventional forces and we must demonstrate to the Soviets our cohesion and our will. And we must understand that weakness in any one of these areas puts a dangerous burden on the others as well as on overall deterrence.

Deterrence is not, and cannot be, bluff. In order for deterrence to be effective we must not merely have weapons, we must be perceived to be able, and prepared, if necessary, to use them effectively against the key elements of Soviet power. Deterrence is not an abstract notion amenable to simple quantification. Still less is it a mirror image of what would deter ourselves. Deterrence is the set of beliefs in the minds of the Soviet leaders, given their own values and attitudes, about our capabilities and our will. It requires us to determine, as best we can, what would deter them from considering aggression, even in a crisis – not to determine what would deter us.

. . . Stability should be the primary objective both of the modernization of our strategic forces and of our arms control proposals. Our arms control

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proposals and our strategic arms programs should thus be integrated and be mutually reinforcing. They should work together to permit us, and encourage the Soviets, to move in directions that reduce or eliminate the advantage of aggression and also reduce the risk of war by accident or miscalculation. As we try to enhance stability in this sense, the Commission believes that other objectives should be subordinated to the overall goal of permitting the United States to move – over time – toward more stable strategic deployments, and giving the Soviets the strong incentive to do the same. Consequently it believes, for the reasons set forth below, that it is important to move toward reducing the value and importance of individual strategic targets.

II. Soviet Objectives and Programs

. . . Historically the Soviets have not been noted for taking large risks. But one need not take the view that their leaders are eager to launch a nuclear war in order to understand the political advantages that a massive nuclear weapons buildup can hold for a nation seeking to expand its power and influence, or to comprehend the dangers that such a motivation and such a buildup hold for the rest of the world.

Although there is legitimate debate about the exact scope of Soviet military spending in recent years, it is nonetheless clear that the Soviet leaders have embarked upon a determined, steady increase in nuclear (and conventional) weapons programs over the last two decades – a buildup well in excess of any military requirement for defense.

For example, as a result of this determined investment the Soviet ICBM force has grown to nearly 1,400 launchers carrying over 5,000 warheads, with a throw-weight about four times that of the US ICBM force. The US ICBM force has 1,047 launchers and about 2,150 warheads. . . .

While Soviet operational missile performance in wartime may be somewhat less accurate than performance on the test range, the Soviets nevertheless now probably possess the necessary combination of ICBM numbers, reliability, accuracy, and warhead yield to destroy almost all of the 1,047 US ICBM silos, using only a portion of their own ICBM force. The US ICBM force now deployed cannot inflict similar damage, even using the entire force. Only the 550 MIRVed *Minuteman* III missiles in the US ICBM force have relatively good accuracy, but the combination of accuracy and yield of their 3 warheads is inadequate to put at serious risk more than a small share of the many hardened targets in the Soviet Union. Most Soviet hardened targets – of which ICBM silos are only a portion – could withstand attacks by our other strategic missiles.

The Soviet ballistic missile submarine force currently consists of 62 modern submarines: these are armed with 950 missiles, with a total of almost 2,000 nuclear warheads. The US has fewer such submarines (34) and missiles (568), but more warheads (about 5,000), in its submarine force. Our submarines, moreover, are quieter than those of the Soviets. Recent Soviet ballistic missile submarine building programs have been vigorous: four times that of the US rate. While the US has a substantial present advantage in the overall capability of its ballistic missile submarine force, this gap is narrowing. The US also has a present advantage in antisubmarine warfare and submarine quietness, but the Soviets appear to be giving high priority to these areas. . . .

These Soviet programs do not, in and of themselves, indicate plans to initiate nuclear attacks. But they do confirm the value that Soviet leaders place on military programs across the board, both to provide an essential backdrop for their political purposes and – should circumstances dictate – to give them the capability to fight effectively. They also understand that the success of their efforts depends upon the outside world's perception. If comparative military trends were to point toward their becoming superior to the West in each of a number of military areas, they might consider themselves able to raise the risks in a crisis in a manner that could not be matched.

In a world in which the balance of strategic nuclear forces could be isolated and kept distinctly set apart from all other calculations about relations between nations and the credibility of conventional military power, a nuclear imbalance would have little importance unless it were so massive as to tempt an aggressor to launch nuclear war. But the world in which we must live with the Soviets is, sadly, one in which their own assessments of these trends, and hence their calculations of overall advantage, influence heavily the vigor with which they exercise their power.

III. Preventing Soviet Exploitation of Their Military Programs

In our effort to make a strategy of deterrence and arms control effective in preventing the Soviets from political or military use of their strategic forces, we must keep several points in mind.

The Soviets must continue to believe what has been NATO's doctrine for three decades: that if we or our allies should be attacked – by massive conventional means or otherwise – the United States has the will and the means to defend with the full range of American power. . . . effective deterrence requires that early in any Soviet consideration of attack, or threat of attack, with conventional forces or chemical or biological weapons, Soviet leaders must understand that they risk an American nuclear response.

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Similarly, effective deterrence requires that the Soviets be convinced that they could not credibly threaten us or our allies with a limited use of nuclear weapons against military targets, in one country or many. Such a course of action by them would be even more likely to result in full-scale nuclear war than would a massive conventional attack. But we cannot discount the possibility that the Soviets would implicitly or explicitly threaten such a step in some future crisis if they believed that we were unprepared or unwilling to respond. Indeed lack of preparation or resolve on our part would make such blackmail distinctly more probable.

In order to deter such Soviet threats we must be able to put at risk those types of Soviet targets – including hardened ones such as military command bunkers and facilities, missile silos, nuclear weapons and other storage, and the rest – which the Soviet leaders have given every indication by their actions they value most, and which constitute their tools of control and power. We cannot afford the delusion that Soviet leaders – human though they are and cautious though we hope they will be – are going to be deterred by exactly the same concerns that would dissuade us. Effective deterrence of the Soviet leaders requires them to be convinced in their own minds that there could be no case in which they could benefit by initiating war.

Effective deterrence of any Soviet temptation to threaten or launch a massive conventional or a limited nuclear war thus requires us to have a comparable ability to destroy Soviet military targets, hardened and otherwise. If there were ever a case to be made that the Soviets would unilaterally stop their strategic deployments at a level short of the ability seriously to threaten our forces, that argument vanished with the deployment of their SS-18 and SS-19 ICBMs. A one-sided strategic condition in which the Soviet Union could effectively destroy the whole range of strategic targets in the United States, but we could not effectively destroy a similar range of targets in the Soviet Union, would be extremely unstable over the long run. Such a situation could tempt the Soviets, in a crisis, to feel they could successfully threaten or even undertake conventional or limited nuclear aggression in the hope that the United States would lack a fully effective response. A one-sided condition of this sort would clearly not serve the cause of peace.

In order, then, to pursue successfully a policy of deterrence and verifiable, stabilizing arms control we must have a strong and militarily effective nuclear deterrent. Consequently our strategic forces must be modernized, as necessary, to enhance to an adequate degree their overall survivability and to enable them to engage effectively the targets that Soviet leaders most value....

IV. US Strategic Forces and Trends

A. Strategic Forces As A Whole

The development of the components of our strategic forces – the multiplicity of intercontinental ballistic missiles (ICBMs), submarine-launched ballistic missiles (SLBMs), and bombers – was in part the result of an historical evolution. This triad of forces, however, serves several important purposes.

First, the existence of several strategic forces requires the Soviets to solve a number of different problems in their efforts to plan how they might try to overcome them . . . Thus the existence of several components of our strategic forces permits each to function as a hedge against possible Soviet successes in endangering any of the others. For example, at earlier times uncertainties about the vulnerability of our bomber force were alleviated by our confidence in the survivability of our ICBMs. And although the survivability of our ICBMs is today a matter of concern (especially when that problem is viewed in isolation) it would be far more serious if we did not have a force of ballistic missile submarines at sea and a bomber force. By the same token, over the long run it would be unwise to rely so heavily on submarines as our only ballistic missile force that a Soviet breakthrough in anti-submarine warfare could not be offset by other strategic systems.

Second, the different components of our strategic forces would force the Soviets, if they were to contemplate an all-out attack, to make choices which would lead them to reduce significantly their effectiveness against one component in order to attack another. For example, if Soviet war planners should decide to attack our bomber and submarine bases and our ICBM silos with simultaneous detonations – by delaying missile launches from close-in submarines so that such missiles would *arrive* at our bomber bases at the same time the Soviet ICBM warheads (with their longer time of flight) would arrive at our ICBM silos – then a very high proportion of our alert bombers would have escaped before their bases were struck. This is because we would have been able to, and would have, ordered our bombers to take off from their bases within moments after the launch of the first Soviet ICBMs. If the Soviets, on the other hand, chose rather to *launch* their ICBM and SLBM attacks at the same moment (hoping to destroy a higher proportion of our bombers with SLBMs having a short time of flight), there would be a period of over a quarter of an hour after nuclear detonations had occurred on US bomber bases but before our ICBMs had been struck. In such a case the Soviets should have no confidence that we would refrain from launching our ICBMs during that interval after we had been hit. It is important to appreciate that this would not be a 'launch-on-warning,' or even a 'launch under

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attack,' but rather a launch *after* attack – after massive nuclear detonations had already occurred on US soil.

Thus our bombers and ICBMs are more survivable together against Soviet attack than either would be alone. This illustrates that the different components of our strategic forces should be assessed collectively and not in isolation. It also suggests that whereas it is highly desirable that a component of the strategic forces be survivable when it is viewed separately, it makes a major contribution to deterrence even if its survivability depends in substantial measure on the existence of one of the other components of the force.

The third purpose served by having multiple components in our strategic forces is that each component has unique properties not present in the others. Nuclear submarines have the advantage of being able to stay submerged and hidden for months at a time, and thus the missiles they carry may reasonably be held in reserve rather than being used early in the event of attack. Bombers may be launched from their bases on warning without irretrievably committing them to an attack; also, their weapons, though they arrive in hours, not minutes, have excellent accuracy against a range of possible targets. ICBMs have advantages in command and control, in the ability to be retargeted readily, and in accuracy. This means that ICBMs are especially effective in deterring Soviet threats of massive conventional or limited nuclear attacks, because they could most credibly respond promptly and controllably against specific military targets and thereby promptly disrupt an attack on us or our allies.

B. Technological Trends for Strategic Forces

1. Accuracy: The accuracy of strategic weapons in the foreseeable future will continue to increase. There are lower limits, perhaps a few hundred feet, to the accuracy of strategic weapons that do not rely on some kind of terminal guidance. For weapons using terminal guidance, accuracy should be even better. Accuracy is most advanced today in the ICBM forces, but in the 1990s SLBMs should have sufficient accuracy seriously to threaten hardened targets. Nevertheless, ICBM accuracy should remain somewhat better than that for submarine-launched missiles.

These accuracy developments and the ability of an attacker to use more than one warhead to attack each fixed target on the other side increasingly put at risk targets of high value such as fixed launchers for MIRVed ICBMs. Although such fixed targets may retain some survivability for a number of years – because of problems of operational accuracies, planning uncertainties (as discussed at Section V.E. below), and the previously described need to coordinate ICBM and SLBM attacks – their survivability will nevertheless continue to decline over time. Thus reasonable survivability of fixed targets, such as ICBM silos, may not outlast this century, even when one considers them together with the rest of our strategic forces. In time, even non-nuclear weapons with excellent accuracy may be able to attack effectively some fixed targets previously thought to be vulnerable only to nuclear weapons.

2. Superhardening: New concepts and developments in hardening are quite promising. They could lead to the capability to harden such targets as ICBM silos far in excess of what was thought possible only a short time ago. Eventually the survival of even the hardest such targets would be doubtful in light of the accuracy improvements described above. None the less increased hardness would raise the weapons requirements and the risk of attack for some years. Hardening will also be able to postpone vulnerability to, and therefore the probability of, attack by submarine-launched ballistic missiles.

3. Mobility: New techniques in guidance, miniaturization of electronic components, hardening against nuclear effects, and solid fuels will continue to make mobile strategic systems more feasible. Strategically useful hardening of land-based mobile launchers appears more feasible than in the past.

4. Anti-submarine Warfare: The problem of conducting open-ocean search for submarines is likely to continue to be sufficiently difficult that ballistic missile submarine forces will have a high degree of survivability for a long time. Nevertheless, the prospect of concentrating all of the submarine-launched missiles at sea in a few very large submarines raises some concern. Communication links with submarines, while likely to improve, will still offer problems not present for land-based systems.

5. Ballistic Missile Defense: Substantial progress has been made in the last decade in the development of both endo-atmospheric and exo-atmospheric ABM defenses. However, applications of current technology offer no real promise of being able to defend the United States against massive nuclear attack in this century. An easier task is to provide ABM defense for fixed hardened targets, such as ICBM silos. However, even this will be a difficult feat if an attacker can use a large number of warheads against each defended target. . . .

V. Strategic Modernization Programs

Although there is room for improvement and adjustments in the several strategic programs discussed below, the Commission noted that these programs

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are – in the main – proceeding reasonably well. Therefore this report concentrates on the current issues presented by the ICBM force (Section E below) and its relation to arms control (Section VI). The current and recommended programs, taken as a package, should give us high confidence in maintaining an effective deterrent in the years to come.

A. Command, Control, and Communications

Our first defense priority should be to ensure that there is continuing, constitutionally legitimate, and full control of our strategic forces under conditions of stress or actual attack. No attacker should be able to have any reasonable confidence that he could destroy the link between the President and our strategic forces.

The Commission urges that this program continue to have the highest priority and urges the investigation of ways in which the planned improvements could be augmented by low-cost back-up systems.

B. Sea-based Missile Programs

1. Deployment: The Commission supports the continuation of the *Trident* submarine construction program. It also supports the continued development and the deployment of the *Trident* II (D-5) missile as rapidly as its objectives of range, accuracy, and reliability can be attained. The *Trident* submarine's significantly reduced noise level and the D-5 missile's greater full-payload range will add importantly to the already high degree of survivability of the ballistic missile submarine force. Given the increased importance of that force, both programs are essential. The D-5 missile's greater accuracy will also enable it to be used to put some portion of Soviet hard targets at risk, a task for which the current *Trident* I (C-4) missile is not sufficiently accurate. The Commission also stresses the importance of the command, control, and communication improvements of particular relevance to the submarine force – namely the ELF communication system, the ECX aircraft, and the *MILSTAR* satellite.

The Commission does not recommend the development and deployment of a system for the launch of ballistic missiles from surface ships....

For the reasons stated in section IV.A., above, the Commission recommends strongly against adopting a strategic force posture relying solely on submarines and bombers to the exclusion of ICBM modernization; it recognizes, however, the increasing importance of the ballistic missile submarine force.

2. Research: The Commission notes that – although it believes that the ballistic missile submarine force will have a high degree of survivability for a long time – a submarine force ultimately consisting solely of a relatively few large submarines at sea, each carrying on the order of 200 warheads, presents a small number of valuable targets to the Soviets. Vigorous pursuit of the longstanding program to avoid technological surprise by the Soviets in anti-submarine warfare is thus of vital importance.

Consistent with the long-term program recommended for the ICBM force, below, to reduce the value of individual targets, the Commission recommends that research begin now on smaller ballistic-missile carrying submarines, each carrying fewer missiles than the *Trident*, as a potential follow-on to the *Trident* submarine force....

C. Bomber and Air-Launched Cruise Missile Programs

...The Commission – having concentrated its efforts on the ballistic missile forces and related issues – has no changes to recommend in these bomber and cruise missile programs.

D. Ballistic Missile Defense

Vigorous research and development on ABM technologies – including, in particular, ways to sharpen the effectiveness of treaty-limited ABM systems with new types of nuclear systems and also ways to use non-nuclear systems – are imperative to avoid technological surprise from the Soviets. Such a vigorous program on our part also decreases any Soviet incentive – based on an attempt to achieve unilateral advantage – to abrogate the ABM treaty. At this time, however, the Commission believes that no ABM technologies appear to combine practicality, survivability, low cost, and technical effectiveness sufficiently to justify proceeding beyond the stage of technology development.

Of particular importance, however, is the ability to counter any improvement in Soviet ABM capability by being able to maintain the effectiveness of our offensive systems....

E. ICBM Programs

The problem that led to the establishment of this Commission is the same one that has been at the heart of much of the controversy concerning strategic forces and arms control for over a decade – the future of our ICBM force....

The Commission believes ... because of changing technology, arms control negotiations, and our own domestic political process, this issue – the future of our ICBM force – has come to be miscast in recent years.

To many the problem has become: 'How can a force consisting of relatively large, accurate land-based ICBMs be deployed quickly and be made survivable, even when it is viewed in isolation from the rest of our strategic forces, in the face of increasingly accurate threatened attacks by large numbers of warheads – and how can this be done

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under arms control agreements that limit or reduce launcher numbers?' It is this complex problem that many, inside and outside the government, have sought to solve for a variety of reasons. These reasons fall into five main groups.

First, in order to serve one of the necessary purposes of a strategic force – namely to hedge against possible failure by the others, such as would be caused by a Soviet breakthrough in anti-submarine warfare – many have felt that any new ICBM deployment should be almost totally survivable even when viewed in isolation from our bomber force and the rest of our strategic forces. The threat now posed by accurate Soviet ICBMs to the *Minuteman* force, viewed in isolation, has also led many to argue that this particular survivability problem has to be solved quickly.

Second, the overall perception of strategic imbalance caused by the Soviets' ability to destroy hardened land-based targets – with more than 600 newly-deployed SS-18 and SS-19 ICBMs – while the US is clearly not able to do so with its existing ballistic missile force, has been reasonably regarded as destabilizing and as a weakness in the overall fabric of deterrence. In particular, since the ICBM force helps to deter massive conventional or limited nuclear attack against us or our allies, this has led many to believe that the serious imbalance between US and Soviet capabilities should be rectified quickly in the overall interest of the Alliance.

Third, arms control agreements – in part to be verifiable without resort to the sorts of co-operative measures such as on-site inspection typically opposed by the Soviets – have concentrated to a significant degree on limiting or reducing strategic missile launchers rather than warheads. This is in some measure because launchers are more easily counted by satellite reconnaissance than are other ICBM characteristics and because launcher numbers provide relatively unambiguous terms for a treaty. Launcher or missile limits have the indirect effect, however, of encouraging both sides to build large ICBMs with many warheads.

Fourth, if one sets aside survivability, basing, and other cost considerations and looks solely at the cost of the missiles themselves, it is cheaper to deploy a given number of warheads in a few relatively large missiles than to deploy the same number of warheads on a larger number of smaller missiles. Fewer expensive guidance systems need to be purchased, for example.

Fifth, for for almost two decades our *Minuteman* ICBM force had virtually all of the positive characteristics desirable for any strategic system. It was survivable, even when an attack on it was viewed in isolation, because Soviet accuracies were not good enough to threaten silos. Command and control was comparatively easy. ICBMs were more accurate than submarine-based missiles and could reach their targets faster than bombers. And, when compared to either submarine-based missiles or bombers, silo-based ICBMs, once purchased, had strikingly low annual operating costs. This history has led many to continue to seek to replicate those two decades of *Minuteman* history, and in so doing to try not only to meet these objectives, but to do so with a single way of basing a single type of ICBM that would have all of these desirable characteristics.

These five sets of considerations, different ones of them of greater importance to different decision-makers at different times, have led us as a nation in recent years to try to re-create all of the desirable characteristics that *Minuteman* possessed during the sixties and much of the seventies. We have tried to do so by deploying a few relatively large missiles as quickly as possible, in a single basing mode, on land, under arms control agreements limiting or reducing launcher numbers, in the face of a threat of attack by increasingly accurate and numerous warheads – and to do so in a manner that seeks to preserve ICBM survivability for the long term, even when the ICBM force is viewed in isolation. But by trying to solve all ICBM tasks with a single weapon and a single basing mode in the face of the trends in technology, we have made the problem of modernizing the ICBM force so complex as to be virtually insoluble.

In arriving at its recommendations regarding ICBM programs, the Commission was mindful of the following criteria. For the near term, it would concentrate on possible deployments and basing modes that appeared to have straightforward and achievable technical and military value. For the long term, compatibility of ICBM programs with the need for flexibility and innovation in responding to possible Soviet actions would be of great importance. Economic cost would be considered carefully. The Commission would not insist on seeking a single solution to all the problems – near-term and long-term – with which the ICBM force must cope. Finally, and of great importance, our ICBM programs should support pursuit of a stable regime of arms control agreements.

The Commission has concluded that the preferred approach for modernizing our ICBM force seems to have three components: initiating engineering design of a single-warhead small ICBM, to reduce target value and permit flexibility in basing for better long-term survivability; seeking arms control agreements designed to enhance strategic stability; and deploying MX missiles in existing silos now to satisfy the immediate needs of our ICBM force and to aid that transition.

A more stable structure of ICBM deployments would exist if both sides moved toward more

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survivable methods of basing than is possible when there is primary dependence on large launchers and missiles. Thus from the point of view of enhancing such stability, the Commission believes that there is considerable merit in moving toward an ICBM force structure in which potential targets are of comparatively low value – missiles containing only one warhead. A single-warhead ICBM, suitably based, inherently denies an attacker the opportunity to destroy more than one warhead with one attacking warhead. The need to have basing flexibility, and particularly the need to keep open the option for different types of mobile basing, also suggests a missile of small size. If force survivability can be additionally increased by arms control agreements which lead both sides toward more survivable modes of basing than is possible with large launchers and missiles, the increase in stability would be further enhanced.

In the meantime, however, deployment of MX is essential in order to remove the Soviet advantage in ICBM capability and to help deter the threat of conventional or limited nuclear attacks on the Alliance. Such deployment is also necessary to encourage the Soviets to move toward the more stable regime of deployments and arms control outlined above.

The Commission stresses that these two aspects of ICBM modernization and this approach toward arms control are integrally related. . . .

1. ICBM Long-term Survivability: Toward the Small, Single-Warhead ICBM: The Commission believes that a single-warhead weighing about fifteen tons (rather than the nearly 100 tons of MX) may offer greater flexibility in the long-run effort to obtain an ICBM force that is highly survivable, even when viewed in isolation, and that can consequently serve as a hedge against potential threats to the submarine force.

The Commission thus recommends beginning engineering design of such an ICBM, leading to the initiation of full-scale development in 1987 and an initial operating capability in the early 1990s. The design of such a missile, hardened against nuclear effects, can be achieved with current technology. It should have sufficient accuracy and yield to put Soviet hardened military targets at risk. During that period an approach toward arms control, consistent with such deployments, should also seek to encourage the Soviets to move toward a more stable ICBM force structure at levels which would obviate the need to deploy very large numbers of such missiles. The development effort for such a missile need not and should not be burdened with the uncertainties accompanying a crash program; thus its timing can be such that competitive development is feasible.

. . . having several different modes of deployment may serve our objective of stability. The objective for the United States should be to have an overall program that will so confound, complicate, and frustrate the efforts of Soviet strategic war planners that, even in moments of stress, they could not believe that they could attack our ICBM forces effectively.

Different ICBM deployment modes by the US would require different types of planned Soviet attacks. Deployment in hardened silos would require the Soviets to plan to use warheads that are large, accurate, or both. . . . Mobile deployments of US missiles would require the Soviets to try to barrage large areas using a number of warheads for each of our warheads at risk, to develop very sophisticated intelligence systems, or both. In this context, deployment of a small single-warhead ICBM in hardened mobile launchers is of particular interest because it could permit deployment in peacetime in limited areas such as military reservations . . . the key advantages of a small single-warhead missile are that it would reduce the value of each strategic target and that it is also compatible with either fixed or mobile deployments, or with combinations of the two. . . .

2. Immediate ICBM Modernization: Limited Deployment of the MX Missile: (*a*) *The MX in Minuteman Silos.* There are important needs on several grounds for ICBM modernization that cannot be met by the small single-warhead ICBM.

First, arms control negotiations – in particular the Soviets' willingness to enter agreements that will enhance stability – are heavily influenced by ongoing programs. . . . It is illusory to believe that we could obtain a satisfactory agreement with the Soviets limiting ICBM deployments if we unilaterally terminated the only new US ICBM program that could lead to deployment in this decade. . . . Abandoning the MX at this time . . . would also undermine the incentives to the Soviets to change the nature of their own ICBM force and thus the environment most conducive to the deployment of a small missile.

Second, effective deterrence is in no small measure a question of the Soviets' perception of our national will and cohesion. Cancelling the MX, when it is ready for flight testing, when over $5 billion have already been spent on it, and when its importance has been stressed by the last four Presidents, does not communicate to the Soviets that we have the will essential to effective deterrence. Quite the opposite.

Third, the serious imbalance between the Soviets' massive ability to destroy hardened land-based military targets with their ballistic missile force and our lack of such a capability must be redressed

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promptly. Our ability to assure our allies that we have the capability and will to stand with them, with whatever forces are necessary, if the Alliance is threatened by massive conventional, chemical or biological, or limited nuclear attack is in question as long as this imbalance exists... we must have a credible capability for controlled, prompt, limited attack on hard targets ourselves. This capability casts a shadow over the calculus of Soviet risk-taking at any level of confrontation with the West...

Fourth, our current ICBM force is aging significantly. The *Titan* II force is being retired for this reason and extensive *Minuteman* rehabilitation programs are planned to keep those missiles operational.

The existence of a production program for an ICBM of approximately 100 tons[1] is important for two additional reasons. As Soviet ABM modernization and modern surface-to-air missile development and deployment proceed – even within the limitations of the ABM Treaty – it is important to be able to match any possible Soviet breakout from that treaty with strategic forces that have the throw-weight to carry sufficient numbers of decoys and other penetration aids; these may be necessary in order to penetrate the Soviet defenses which such a breakout could provide before other compensating steps could be taken. Having in production a missile that could effectively counter such a Soviet step should help deter them from taking it. Moreover, in view of our coming sole reliance on space shuttle orbiters, it would be prudent to have in production a booster, such as MX, that is of sufficient size to place in orbit at least some of our most strategically important satellites.

These objectives can all be accomplished, at reasonable cost, by deploying MX missiles in current *Minuteman* silos.

In the judgment of the Commission, the vulnerability of such silos in the near term, viewed in isolation, is not a sufficiently dominant part of the overall problem of ICBM modernization to warrant other immediate steps being taken such as closely-spacing new silos or ABM defense of those silos. This is because of the mutual survivability shared by the ICBM force and the bomber force in view of the different types of attacks that would need to be launched at each, as explained above (Section IV.A.). In any circumstances other than that of a particular kind of massive surprise attack[2] on the US by the Soviet Union). Soviet planners would have to account for the possibility that MX missiles in *Minuteman* silos would be available for use, and thus they would help deter such attacks. To deter such surprise attacks we can reasonably rely both on our other strategic forces and on the range of operational uncertainties that the Soviets would have to consider in planning such aggression – as long as we have underway a program for long-term ICBM survivability such as that for the small, single warhead ICBM to hedge against long-term vulnerability for the rest of our forces.

None of the short-term needs for ICBM force modernization set forth above would be met by deploying any missile other than the MX....

A program of deploying on the order of 100 MX missiles in existing *Minuteman* silos would, on the other hand, accomplish the objectives set forth in this section and it would do so without threatening stability. The throw-weight and megatonnage carried by the 100 MX missiles is about the same as that of the 54 large *Titan* missiles now being retired plus that of the 100 *Minuteman* III missiles that the MXs would replace. Such a deployment would thus represent a replacement and modernization of part of our ICBM force. It would provide a means of controlled limited attack on hardened targets but not a sufficient number of warheads to be able to attack all hardened Soviet ICBMs much less all of the many command posts and other hardened military targets in the Soviet Union. Thus it would not match the overall capability of the recent Soviet deployment of over 600 modern ICBMs of MX size or larger. But a large deployment of several hundred MX missiles should be unnecessary for the limited but very important purposes set forth above. Should the Soviets refuse to engage in stabilizing arms control and engage instead in major new deployments, reconsideration of this and other conclusions would be necessary.

(*b*) *Other Possible MX Basing Modes:* The Commission assessed several basing modes for the MX missile as a way of solving the problem of long-term ICBM survivability.

Deploying the MX missile in Multiple Protective Shelters (MPS) meets the need of long-term survivability reasonably well. It would have a similar advantage to the deployment of small, single-warhead missiles in silos or shelters – namely it would force an attacker to plan to deal with a multiplicity of targets. It would not, however, have the advantages of the missile being able to move, in the event of an attack, outside its basing complex – a capability that is potentially available in some

[1] MX weighs 195,000 pounds. Thus it is a 'light ICBM' under the terminology of SALT II, approximately the same size as the 330 newly-deployed Soviet SS-19 ICBMs. The MX is well under half the dimensions of the much larger 308 newly-deployed SS-18s; the latter are designated as 'modern heavy ICBMs' under SALT II.

[2] An attack in which thousands of warheads were targeted at our ICBM fields but there were no early detonations on our bomber bases from attacks by Soviet submarines.

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types of small missile deployments. The basing complex required for MPS necessarily affects a land area sufficiently large that local political opposition to it has been significant. There is also a possibility that, over the long run, even if the SALT II Agreement were ratified, a Soviet abrogation or refusal to renew the limits on ICBM launchers or on the number of warheads per missile contained therein could create difficulties for MPS basing. It could lead to the need either to add shelters (and not clearly at a lower cost than the Soviets' cost of adding warheads) or the need to defend the MPS basing complex with an ABM deployment in excess of that permitted under the ABM Treaty.

Another alternative MX deployment that has some attractiveness for long-run survivability is closely-spaced basing (CSB). Such a deployment (e.g. 100 missiles in 100 new closely-spaced silos) would sharply reduce the land area required by the MPS system and could cause significant difficulties for some types of planned Soviet attacks by forcing the attacker to take account of the circumstances under which one of his attacking warheads would destroy others ('fratricide'). This basing scheme would require newly-developed techniques for hardening silos in order to avoid the possibility that one attacking warhead could destroy more than one silo. It would also, by its close spacing, make several potential types of ABM defense of the ICBM deployment more feasible. Some of these ABM defenses, countering some potential types of Soviet attacks, could be deployed within the numerical limits of the 1972 ABM Treaty, but other more generally effective ones could not. The effectiveness of a CSB deployment in preserving the survivability of the ICBM force over the long run would depend significantly upon advances in hardening silos; the effectiveness of this is yet to be demonstrated and the cost is as yet uncertain. It also would depend upon fratricide effects that are not fully understood.

These uncertainties would not be eliminated by adding multiple hardened shelters for each missile to a CSB deployment to permit deceptive basing – a combination of MPS and CSB . . .

(c) *Research and Development Work on ICBM Basing:* The Commission believes that the work done to date (much of it in connection with designing CSB) is impressive on the technology for dramatic improvements in hardening ICBM silos or shelters. It thus recommends that vigorous research should proceed on new techniques for hardening silos and shelters generally. A specific program to resolve the uncertainties regarding hardness should be undertaken under the leadership of the Defense Nuclear Agency, and with the cooperation of the Air Force and of those Department of Energy laboratories with expertise in the relevant technology.... Research on the circumstances in which there could be mutual destruction of one attacking warhead by another (fratricide) should be continued.

Vigorous investigation should proceed on different types of land-based vehicles and launchers, including hardened vehicles, for the mobile deployment of small ICBMS . . .

VI. Arms Control

It is a legitimate, ambitious, and realistic objective of arms control agreements to channel the modernization of strategic forces, over the long term, in more stable directions than would be the case without such agreements. Such stability supports deterrence by making aggression less likely and by reducing the risk of war by accident or miscalculation. The strategic modernization program recommended herein and the arms control considerations contained in this report are consistent with an important aspect of such stability. In light of the developments in technology set forth in Section IV.B. above, they seek to enhance survivability by moving both sides, in the long term, toward strategic deployments in which individual targets are of lower value. The recommended strategic program thus proposes an evolution for the US ICBM force in which a given number of ballistic missile warheads would, over time, be spread over a larger number of launchers than would otherwise be the case....

Over the long run, stability would be fostered by a dual approach toward arms control and ICBM deployments which moves toward encouraging small, single-warhead ICBMS. This requires that arms control limitations and reductions be couched, not in terms of launchers, but in terms of equal levels of warheads of roughly equivalent yield. Such an approach could permit relatively simple agreements, using appropriate counting rules, that exert pressure to reduce the overall number and destructive power of nuclear weapons and at the same time give each side an incentive to move toward more stable and less vulnerable deployments.

Arms control agreements of this sort – simple and flexible enough to permit stabilizing development and modernization programs, while imposing quantitative limits and reductions – can make an important contribution to the stability of the strategic balance. An agreement that permitted modernization of forces and also provided an incentive to reduce while modernizing, in ways that would enhance stability, would be highly desirable. It would have the considerable benefit of capping both sides' strategic forces at levels that would be considerably lower than they would otherwise reach over time. It would also recognize, realistically, that each side will naturally desire to configure its own

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strategic forces. Simple aggregate limits of this sort are likely to be more practical, stabilizing, and lasting than elaborate, detailed limitations on force structure and modernization whose ultimate consequences cannot be confidently anticipated.

Encouraging stability by giving incentives to move toward less vulnerable deployments is more important than reducing quickly the absolute number of warheads deployed. Reductions in warhead numbers, while desirable for long-term reasons of limiting the cost of strategic systems, should not be undertaken at the expense of influencing the characteristics of strategic deployments. For example, warhead reductions, while desirable, should not be proposed or undertaken at a rate that leads us to limit the number of launching platforms to such low levels that their survivability is made more questionable.

For a variety of historical, technical, and verification reasons, both the SALT II unratified treaty and the current START proposal contain proposals to limit or reduce the number of ICBM launchers or missiles. Unfortunately this has helped produce the tendency to identify arms control with launcher or missile limits, and to lead some to identify successful arms control with low or reduced launcher or missile limits. This has, in turn, led to an incentive to build launchers and missiles as large as possible and to put as many warheads as possible into each missile. Such an incentive has been augmented by the cost savings involved in putting a given number of warheads on a few large missiles rather than on a number of smaller ones . . .

We will have for some time strategic forces in which the number of launchers on one side are outnumbered many times over by the number of warheads on the other. Under such circumstances, it is not stabilizing to use arms control to require mutual reductions in the number of launching platforms (e.g. submarines or ICBM launchers) or missiles. Such a requirement further increases the ratio of warheads to targets. It does not promote deterrence and reduce the risk of war for the Soviets to have many more times the number of accurate warheads capable of destroying hard targets than the US has ICBM launchers.

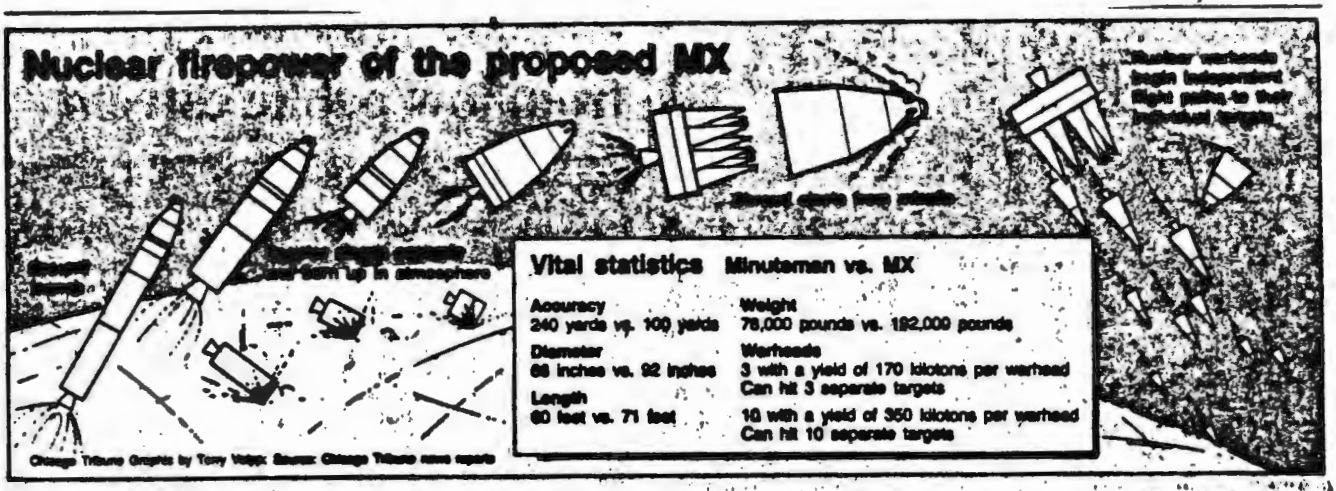
In time we should try to promote an evolution toward forces in which – with an equal number of warheads – each side is encouraged to see to the survivability of its own forces in a way that does not threaten the other. But if the Soviet Union chooses to retain a large force of large missiles, each with many warheads, the US must be free to match this by the sort of deployment it chooses. Any arms control agreement equating SS-18s and small single-warhead ICBMs because each is one missile or because each is on one launcher would be destabilizing in the extreme.

The approach toward arms control suggested by the Commission, moreover, is compatible with the basic objectives and direction of several other current arms control proposals. However, it should be noted that, as a method of restricting ICBM modernization, the negotiated SALT II Treaty, which would have expired in 1985, would have prohibited testing of more than one new ICBM. The two-part ICBM modernization program suggested by the Commission would not violate that negotiated agreement because testing of a small, single-warhead ICBM could not begin before this expiration date. Of more long-term importance, however, the approach toward arms control and force modernization suggested here is fundamentally compatible with the sort of stability that SALT II sought to achieve. . . .

The current Administration's START proposal is centered on warhead limitations and reductions, with some attention to throw-weight limitations. These are consistent with the Commission's recommended program. It also contains a proposed limit on launchers that the Commission believes should be reassessed since it is not compatible with a desirable evolution toward small, single-warhead ICBMS . . .

Finally, the Commission is particularly mindful of the importance of achieving a greater degree of national consensus with respect to our strategic deployments and arms control. For the last decade, each successive Administration has made proposals for arms control of strategic offensive systems that have become embroiled in political controversy between the Executive branch and Congress and between political parties. None has produced a ratified treaty covering such systems or a politically sustainable strategic modernization program for the US ICBM force. Such a performance, as a nation, has produced neither agreement among ourselves, restraint by the Soviets, nor lasting mutual limitations on strategic offensive weapons. . . .

DES MOINES REGISTER 7 August 1983 Pg. 3A



Answers to common questions on MX

By PAT TOWELL

WASHINGTON, D.C. — Both houses of Congress have voted to authorize production of the MX missile, which until now has not moved beyond the testing stage. The following questions and answers seek to explain some of the major issues surrounding this important new weapon in the nation's nuclear arsenal.

Q. What is the MX?

A. It is an intercontinental ballistic missile, or ICBM, that is about 71 feet long and 7 feet, 8 inches wide, weighing about 192,000 pounds. It is designed to carry nuclear warheads — each with the explosive power of more than a third of a million tons of TNT — to individual targets at a range of 6,000 miles and to have an even chance of coming within 100 yards of each target. The missile has been under development since the early 1970s and flew its first test flight this June.

Q. Why does the president want it?

A. The Pentagon has wanted the missile for years because it can carry more warheads with greater accuracy than the current Minuteman ICBMs. Moreover, some parts of the existing Minutemen, such as the solid rocket fuel, wear out over time, so the missiles would need to be replaced or extensively rebuilt.

Years were spent trying to design a basing method for the MX that would protect the new missile against Soviet ICBMs deemed accurate enough to destroy the underground silos that house the Minuteman. That search now has been abandoned. President Reagan accepted the recommendation of a White House advisory commission — the so-called Scowcroft commission — to deploy 100 MXs in Minuteman silos while designing a new, single-warhead ICBM one-sixth the weight of the MX. The small missile could be carried around more easily in a mobile launcher to avoid Soviet attack.

Q. What will the MX cost?

A. That depends on how it is based and on the cost of inflation the rest of this decade. The Scowcroft commission estimated that its plan for 100 missiles in existing silos would cost less than $20 billion in fiscal 1982 dollars. The actual cost, allowing for inflation, might run up to $30 billion.

Q. Has Congress approved this expenditure?

A. Congress in late July voted to authorize procurement of the MX, but that is just the first step toward production. Until members vote to appropriate the funds necessary for the MX, work on the missile cannot advance. A vote on paying for MX production will not come until later this year. It could be a squeaker; the MX survived the House authorization showdown by only 13 votes.

Q. Why bother with the MX if something better is coming along?

A. So far, the small missile recommended by the Scowcroft commission exists only on paper, and its deployment in mobile launchers may turn out to be expensive enough to arouse substantial opposition.

Even if the new one eventually works out as hoped, the administration argues for the MX on the ground that, by matching ICBMs already in the Soviet force, it will improve nuclear deterrence and nudge the Russians toward an arms control agreement that would force deep reductions in the U.S. and Soviet nuclear arsenals.

Q. How does it help arms control to deploy a new, more lethal missile?

A. The administration position is that the really dangerous weapons — the ones we want the arms control process to do something about — are large, multiwarhead ICBMs like the MX, of which the Russians have more than 700.

Moscow has invested years of effort and hundreds of millions of dollars in developing those multiwarhead, or MIRVed, missiles, which, in turn, threaten U.S. nuclear forces. It is argued that the Russians are unlikely to give up their big missiles while the U.S. ICBM force lacks the accuracy and power to threaten the Soviet force.

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ANSWERS...CONTINUED

Q. Does that mean the MX is a "bargaining chip?"

A. Not in the sense that it is being built to be given up. The administration apparently hopes to persuade the Soviets to agree to limit the number of large, MIRVed ICBMS by implicitly threatening to build enough MXs to threaten destruction of the entire Soviet ICBM force.

Q. Are the Russians likely to buy that reasoning?

A. Not according to administration critics, who argue that Moscow will respond to MX deployment by deploying additional missiles and possibly by putting its existing missiles on a hair trigger in times of international tension, ready for immediate launch at the first sign — however ambiguous — of a U.S. attack.

Q. Why do we need a new ICBM when we have thousands of nuclear warheads aboard submarines and bombers, most of which would survive any Soviet attack?

A. The administration argues that we have to be ready — and be seen by the Russians to be ready — to respond with nuclear weapons to relatively "limited" Soviet attacks by quickly disrupting Soviet military forces.

To be credible, it is maintained, the threatened U.S. retaliation must itself be "limited," at least to the degree that it would not kill so many Soviet citizens that Moscow could be expected to reply by destroying U.S. cities. Otherwise, Moscow might threaten a first strike in the expectation that the retaliatory U.S. second strike would be deterred by the prospect of a Soviet third strike.

ICBMs uniquely combine the speed and accuracy needed to threaten the kinds of limited attacks on armored military targets — such as underground command posts and missile launchers — this strategy envisions. Submarine-launched missiles are not accurate enough, so far, while bombers take too long to reach their targets and are too vulnerable to antiaircraft defenses.

Q. That sounds more like a plan to fight a nuclear war than to deter one.

A. According to this view, you can deter a nuclear war only if your opponent believes that you could fight one if called on. A U.S. capability to level every city in Russia might not deter, say, Soviet seizure of Persian Gulf oil fields, because the U.S. threat would not be credible.

Q. This talk of a limited nuclear war sounds pretty unreal.

A. The contention is not that any of these scenarios is likely to happen, but rather that a perception of Soviet superiority in this kind of situation would create a far-reaching image of relative advantage.

If Soviet forces were seen to be "stronger," it is argued, Moscow would become correspondingly more assertive in infringing on U.S. global interests, Washington more timid in defending those interests and U.S. allies and neutrals more inclined to accommodate Soviet demands.

Q. Is that view of deterrence widely held?

A. Not by everyone. Many liberal arms control advocates contend mutual U.S.-Soviet nuclear deterrence is an inescapable result of the nuclear balance of terror, regardless of the details of that balance. Each of the superpowers is deterred from using nuclear weapons — even in an ostensibly limited attack — by the sheer destructive power of even a fraction of its opponents' nuclear force, according to this view.

That, in turn, implies that there is nothing special about ICBMs, and that missile submarines and bombers are indeed an adequate deterrent.

From this perspective, it is downright dangerous to buy weapons like the MX that might foster speculations about limited nuclear wars. This school of thought believes that any use of nuclear weapons would quickly escalate into a global cataclysm; but weapons designed for limited war scenarios might foster an illusion of strength that could encourage nuclear confrontations and thus increase the risk of war.

WASHINGTON POST 24 August 1983 Pg. 1

Reagan Urges Arms Buildup, Talks as a 'Dual Approach'

By David Hoffman
Washington Post Staff Writer

SEATTLE, Aug. 23—President Reagan launched another effort to increase political support for development of the MX missile today, arguing that critics have failed to understand his "dual approach" of seeking both to modernize U.S. nuclear weapons and to negotiate a reduction of superpower arsenals.

In a speech to 5,000 American Legion delegates here, Reagan said there has been "encouraging movement" in arms reduction negotiations with the Soviet Union, indicating this was evidence that his approach was working.

Saying his critics "willfully ignore" this "hand-in-hand" relationship of nuclear arms modernization and negotiations, the president argued that the "peace movement" would rather "wage peace by weakening the free." He suggested that it was making "the same old mistake" that British Prime Minister Neville Chamberlain did in seeking peace with Nazi Germany before World War II.

Reagan used his speech to the 65th annual convention of the American Legion to begin building support for House votes next month on appropriations for the MX long-range, multiple-warhead nuclear missile. He has been losing support for the MX among Democrats who voted for it previously but have since expressed doubts about Reagan's commitment to nuclear arms reductions.

The president was given a warm but not wildly enthusiastic reception by the Legionnaires. Outside the hall, several hundred demonstrators carried placards protesting his nuclear arms buildup and budget cuts for social programs. Some protested the assassination in Manila Sunday of Philippine opposition leader Benigno Aquino Jr.

Reagan, who is making a series of political speeches this week, also made a wide-ranging review of his foreign policy efforts that echoed his 1980 presidential campaign theme of "peace through strength."

On arms reductions, he noted that for the first time in the strategic arms reduction talks (START) negotiations, "the Soviets are willing to talk about actual reductions." He also said there has been "movement" on verification issues at the conventional force talks in Vienna, and "progress" in discussing confidence-building measures.

He said these indicators, while "modest," also "point in the same positive direction: new hope for arms reductions and a more secure world."

Reagan also attempted to answer those critics who say he has focused too heavily on the arms buildup. He said the administration has "steadfastly" pursued both a modernization of strategic forces and arms cuts.

"There is no contradiction in this dual approach, despite what some of the critics in Washington might have you believe," Reagan said. He added that the MX, as well as the effort to develop a new, small, single-warhead missile, will "maintain state-of-the-art readiness" against the Soviets but also provide an "essential incentive" for Moscow to negotiate seriously.

Accusing his critics of often miss-

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REAGAN...CONTINUED

ing this main point, Reagan said that "one argument contends that the MX Peacekeeper would pose a first-strike threat to the Soviet Union."

But this "runs counter to the whole history of America," he added. "Our country has never started a war, and we have never sought, nor will we ever develop, a strategic first-strike capability."

Reagan contended that "there is no way that the MX, even with the remaining Minuteman force, could knock out the entire Soviet ICBM force. So the argument is a false one, both philosophically and technically.

"What we really want . . . is enough force that tells the enemy we would do them a lot of damage," Reagan said in a comment that hadn't been included in his prepared text.

In discussing first-strike capability, Reagan did not mention the Navy's new Trident II missile, which is scheduled to be operational late in the 1980s, soon after the MX. The Trident II is advertised as being as accurate as the MX, and some arms control advocates argue that the combination of the MX and the Trident II will give the United States a first-strike capability when they are deployed.

Going beyond the MX, Reagan attacked the "so-called 'peace movement' " that has provided much of the opposition to the MX and his defense buildup.

"Neville Chamberlain thought of peace as a vague policy in the '30s, and the result brought us closer to World War II," Reagan declared. "Today's so-called 'peace movement'—for all its modern hype and theatrics—makes the same old mistake. They would wage peace by weakening the free. That just doesn't make sense.

"My heart is with those who march for peace," the president added. "I'd be at the head of the parade if I thought it would really serve the cause of peace." But he said the "real peace movement" is made up of people like the Legionnaires who "understand that peace must be built on strength."

On his broader foreign policy efforts, Reagan said "we have no intention of becoming policeman to the world." But he said the United States has a "responsibility to help our friends keep the peace."

Reagan defended his efforts to help friendly nations in Central America with a "security shield" of U.S. forces.

"Now there are some—in Moscow and Havana—who don't want to let our Caribbean neighbors solve their problems peacefully," he said. "They seek to impose their alien form of totalitarianism with bullets instead of ballots."

Reagan described the goals of his Central America policies as helping people of the region build "a better life—to help them toward liberty and to help them reverse centuries of poverty and inequity." He dropped from the prepared text the goal of helping them "toward peace."

He also attacked Col. Muammar Qaddafi of Libya for what he called "naked, external aggression" in helping rebels in Chad.

Reagan added that the Libyans are drawing upon $10 billion worth of Soviet arms and ammunition, including "Soviet-built fighter-bombers, T55 tanks and artillery in a blatant attempt to destroy a legitimate government."

"There's a democratic revolution going on in this world," he said. "It may not grab the headlines, but it's there and it's growing. The tide of history is with the forces of freedom—and so are we."

NEW YORK TIMES 24 August 1983 Pg. 1

REAGAN RIDICULES ARMS PROTESTERS FOR PEACE 'HYPE'

In Seattle, He Cites Slow but Consistent Gain in Foreign Policy and MX Project

By FRANCIS X. CLINES
Special to The New York Times

SEATTLE, Aug. 23 — President Reagan criticized the "so-called peace movement" today, saying its supporters "would wage peace by weakening the free."

In a speech to a veterans' organization here, Mr. Reagan also claimed slow but steady progress for his foreign policy as well as for his arms control and rearmament programs.

"Peace is a beautiful word, but it is also freely used, sometimes even abused," the President said in a speech to a national convention of the American Legion.

Those who abuse it, Mr. Reagan said, are engaged in a campaign of "modern hype and theatrics."

"The members of the real peace movement — the real peacemakers — are people like you," he said at the Seattle Civic Center in exhorting the legion's members to press Congress for continued financing of the MX missile.

Gentler Undertone Discerned

While he once again portrayed the Soviet Union as an antagonist on the world stage, the President did so with less sharp-edged oratory than in past denunications of Moscow as "an evil empire." Some of his strategists consider this a crucial distinction in Mr. Reagan's effort to reassure voters on the so-called peace issue.

"We have learned over and over again that only common resolve in the West can bring responsiveness from the East," he said.

A gentler undertone was discernible, too, at one point in his criticism of those who demonstrate against nuclear arms. "My heart is with those who march for peace," the President said, adding that he would lead the parade if he thought it would "really serve" peace.

"Peace is an objective, not a policy," Mr. Reagan declared. "Those who fail to understand this do so at their own peril."

"Neville Chamberlain," the British Prime Minister of 50 years ago, "thought of peace as a vague policy in the 30's, and the result brought us closer to World War II," he said.

"Today's so-called peace movement, for all its modern hype and theatrics, makes the same mistake. They would wage peace by weakening the free. That just doesn't make sense."

Mr. Reagan, whose political strategists expect the peace issue to be a dominant one in next year's Presidential campaign, emphasized the theme of peace throughout his 25-minute speech, using it to embrace a broad array of initiatives including the MX.

Citing his program of exerting economic and military pressure in Central America, his programs of assistance in the Middle East and Africa and his programs on military spending and arms control, the President declared: "As a nation, we have closed the books on a long, dark period of failure and self-doubt and set a new course."

He defended his military buildup program: "History teaches us that by being strong and resolute we can keep the peace."

He claimed increasing support for the multiwarhead MX: "America has finally begun to forge a national consensus for peace and security."

He cited "strong reason for hope" in the arms negotiations with the Soviet Union: "We're making headway, headway for peace."

And he vowed new efforts in "our commitment as peacemaker" in Central America, Africa and the Middle East.

"We have no intention of becoming policeman to the world," Mr. Reagan said. "But as the most powerful country in the West, we have a responsibility to help our friends."

'Necessary Incentives'

He described his arms policy as a "dual track of deterrence through modernization" and said there was no contradiction in this approach.

"Both are necessary incentives for successful negotiations," he said. "Many of our critics willfully ignore this interrelationship," he added, accusing them of "wishful thinking or downright misinformation."

"The real national defense issue of our time is maintaining deterrence while seeking arms reductions," he said.

'Encouraging Movement'

In discussing the arms control talks, the President praised his own strategy as "sound, well thought-out" and said there had been "encouraging movement in these negotiations." He said he had discerned a Soviet willingness to talk about strategic weapon reductions and Soviet "movement" as well in the talks on conventional weapons.

"All these indicators, modest though they may seem, point in the same positive direction — new hope for arms reductions and a more secure world," Mr. Reagan said.

In discussing Central America, he insisted that, "other than training our own troops," the only purpose in staging war games in the region was to "demonstrate our commitment to the free aspirations and sovereign integrity of our neighbors."

He again accused Havana and Moscow of interfering in the region against democratic forces. "We could never be certain of ourselves, much less of the future," he said, "if we turned our back on our nearest neighbors' struggle for peace, freedom and evolving democracy."

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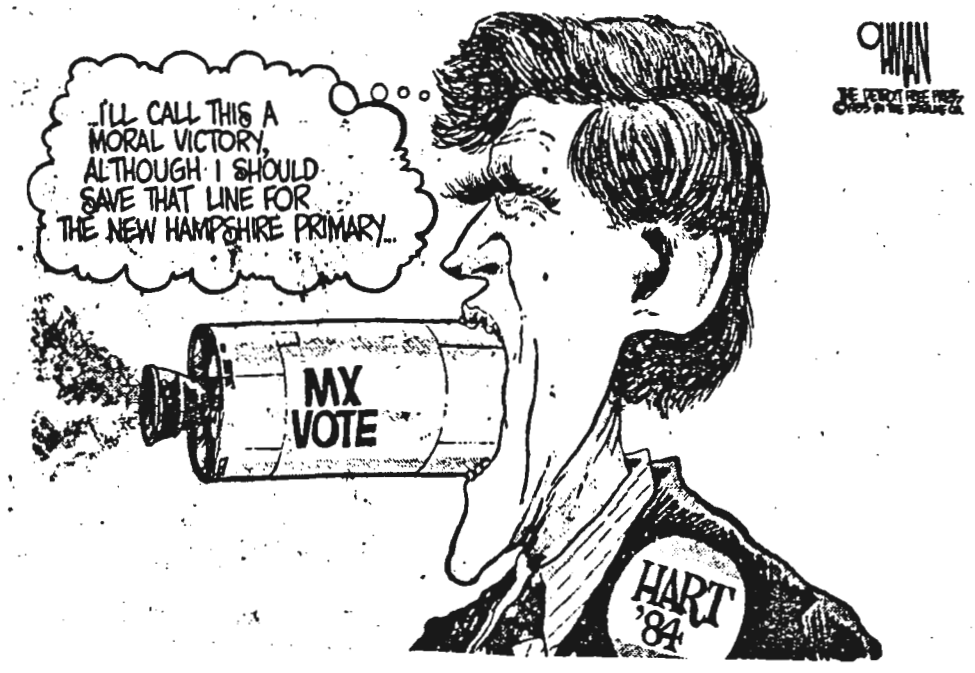

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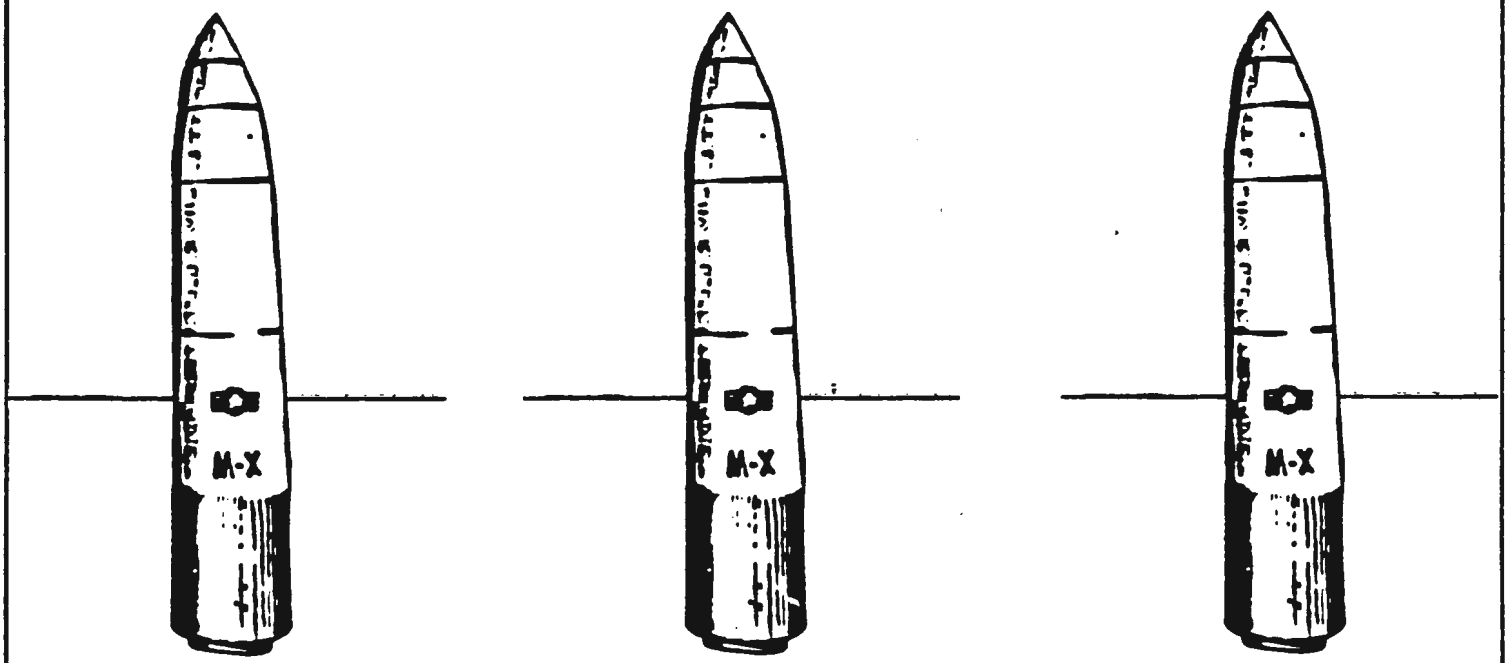
MX MISSILES



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WASHINGTON POST 30 August 1983 Pg. 5

Panel Urged to Suggest New Arms Stance

By Michael Getler
Washington Post Staff Writer

The special bipartisan commission that recently recommended deployment of MX nuclear missiles should "get back into business" and suggest changes in Reagan administration negotiating positions at the strategic arms reduction talks (START) with the Soviet Union, Rep. Les Aspin (D-Wis.) said yesterday.

In a letter to commission Chairman Brent Scowcroft, Aspin said the 11-member President's Commission on Strategic Forces "is just about the only body of people with the chance to bridge the ideological void" between the administration and many Democrats and moderate Republicans who doubt administration sincerity in seeking arms accords with the Soviets.

At a news conference, Aspin said that even though the administration may not like an outside commission recommending changes in White House negotiating positions it would be the best way to deal with the doubters, bolster declining congressional support for the MX and perhaps reach agreement with Moscow.

Aspin said that "If the administration wants to keep the bipartisan consensus on the deployment of MX . . . it has also got to have a bipartisan arms-control policy." He said the administration has made progress but still has "very little credibility" on arms-control issues.

Allowing Democrats, through the commission, to have a greater say in the negotiating stance, Aspin said, would give resultant bipartisan policy a better chance of surviving the 1984 election intact no matter who wins. This might end, he said, the constant discarding by one administration of its predecessor's policy in the complex arms-control field.

President Carter discarded President Ford's initiatives, and President Reagan has overturned Carter's efforts, he noted.

Rather than writing Reagan, Aspin said, he wrote to Scowcroft to urge the commission to play a "prominent role" in arms control because, if the president reinvokes the commission, political suspicion would be raised.

Although Aspin said he has no assurance about how his request will be received, he made clear that it had been discussed with Scowcroft and the White House and that Scowcroft would hold a news conference within a few days to announce a new effort by the commission.

Aspin denied that his proposal would throw a monkey wrench into the Geneva talks even though recent progress there has been reported.

In June, Reagan ordered that the commission's life be extended but said he did not intend to have it alter internal White House positions at the arms talks.

Aspin said the United States would submit a new proposal at the next round of the START talks to begin Oct. 6. He said he hopes the commission can recommended changes in time for inclusion in that proposal and that the White House will accept the changes.

The START negotiations deal with reducing the number of intercontinental-range missiles and bombers on both sides.

The original Scowcroft commission of well-known former government officials and public figures from both parties was appointed by Reagan last year in an effort to solve the five-year question of what to do with the MX.

The commission recommended deploying 100 missiles, but also recommended a move away from the big, multiple-warhead MX missiles to smaller, single-warhead weapons, something favored by arms-control advocates. It also urged pressing ahead with negotiations but made few detailed recommendations in that regard.

Many congressional moderates have supported the MX on the basis of administration acceptance of the commission report and its pledge to press ahead on arms control. Aspin is a pivotal figure among them.

He noted that winning margins on MX votes in Congress recently have declined sharply and predicted that, if the moderates abandon the missile this fall, it will certainly lose in the House. He said it might even lose in the Republican-controlled Senate if the White House does not come through on promises made to key senators to include in a revised START proposal the so-called "build-down" plan for reductions.

Aspin said this situation gives the moderates "more leverage than ever . . . to nudge the administration toward a more bipartisan arms control policy" with Democrats making greater contributions.

He said the U.S. negotiating stance is still "murky" and has not been explained well to Congress or the public.

He said, for example, that the administration timetable for big cuts in the Soviet arsenal of very large missiles is unclear. If the administration plans to force such cuts quickly, that will never lead to agreement, he said.

Aspin said he doubts that a START agreement can be reached before the 1984 presidential election, but that some agreement in principle might be reached similar to the accord at Vladivostok reached by President Ford and Soviet leader Leonid I. Brezhnev in 1975.

BALTIMORE SUN 30 August 1983 Pg. 4

Aspin urges arms-curb changes

By Charles W. Corddry
Washington Bureau of The Sun

Washington — Representative Les Aspin (D, Wis.), asserting that the Reagan administration lacks credibility on arms control, yesterday urged the bipartisan Scowcroft commission to formulate arms-negotiating proposals that both liberals and conservatives could support.

Without such a new approach, Mr. Aspin told a press conference, the MX intercontinental missile — keystone of the administration's strategic weapons program — could go down to defeat in Congress.

With crucial new votes on the MX lying ahead, Mr. Aspin undertook a political maneuver that at first look seemed to short-circuit the White House and call for direct intervention of an outside panel in framing the nation's proposals for negotiating with the Soviet Union.

On closer observation, however, it seemed fair speculation that his move was part of an orchestrated effort which would bring the desired response from the Scowcroft commission and administration willingness to sit still for the undertaking.

The commission, headed by retired Air Force Gen. Brent Scowcroft, was originally set up by President Reagan to devise a basing plan for the MX at a time when administration plans were being thwarted in Congress.

With bipartisan representation, the commission proposed building 100 MX missiles, developing a new and small missile for the future and pursuing new arms-control approaches. Mr. Reagan endorsed the panel's package.

With pursuit of arms control as a quid pro quo, Mr. Aspin and several other moderate-to-liberal Democrats formed a coalition that backed the MX and enabled the administration to win two victories in the House.

Now the time is coming for House votes on appropriating money for the production of the MX, which the House earlier endorsed as a policy matter.

The outcome is in doubt.

Mr. Aspin said yesterday that earlier MX approvals were contingent on a new approach to arms control — "the core concern of many of us" — but many in Congress and in the public "fail to see any progress in arms control."

While he himself generally accepts what the administration is seeking to do in Geneva talks and in pursuing development of the small missile, Mr Aspin contended there were two problems:

First, most arms-control developments take place behind closed doors Second, "the administration lacks credibility so it cannot just describe changes in general terms and win nods of approval."

Arms control has not been delivered, he said, and "people are wary of being snookered."

In his letter to General Scowcroft, Mr. Aspin urged that proposals be developed on three major arms-control issues in order to produce "an honest and bipartisan position."

These issues, on which liberals and conservatives have varying positions, involve the "throw-weight", or total destructive power in superpower nuclear arsenals, limitations on bombers (as well as missiles), and provision of incentives for both sides to move gradually away from big missiles carrying multiple warheads.

Since military bureaucracies do not like to dismantle weapons, Mr. Aspin said, the reductions in total destructive power and in multiheaded missiles should be harnessed over a period of years to "the natural bureaucratic drive to replace aging weapons."

NEW YORK TIMES 30 August 1983 Pg. 18

MX Panel Urged to Alter Arms Treaty Plan

By CHARLES MOHR
Special to The New York Times

WASHINGTON, Aug. 29 — Representative Les Aspin urged the President's Commission on Strategic Forces today to put forward a new, "bipartisan" and more flexible proposal for a treaty to reduce intercontinental nuclear weapons.

Mr. Aspin, a Wisconsin Democrat whose vote and influence in the House were credited with helping the White House win an early victory on the MX missile earlier this year, said rejection of his advice was likely to result in a defeat for the program when Congress votes on appropriations for the weapon in the fall.

Mr. Aspin, a member of the Armed Services Committee and a former Pentagon official, made his proposal in a news conference this afternoon and in a letter to the chairman of the commission on strategic forces, Brent Scowcroft, a retired Air Force lieutenant general. Representative Aspin said he had also advised the White House of his suggestion and asserted that "some people in the Administration think it's a good idea."

Report Is Expected Soon

The Congressman said his suggestion was "put forward in the expectation that it is going to happen" and that the commission would be able to report on a bipartisan arms control proposal in "about a month."

General Scowcroft, who was national security adviser to President Ford, had no immediate comment, but one official said Mr. Scowcroft was likely to make a statement later in the week.

The 11-member commission was appointed by President Reagan to save the MX missile program, which became endangered last year when Congress rejected the President's proposal to base the missile in a tight cluster, a system called dense pack. The panel's report linked a recommendation that 100 of the missiles be deployed in fixed silos with recommendations that the United States develop a small, single-warhead missile and pursue a strategic arms control agreement with the Soviet Union that would lead to equal numbers of warheads of roughly equivalent explosive power.

Reagan Changed Early Plan

Mr. Aspin and some other key Democrats stressed that they viewed the Scowcroft recommendations as a "package."

Mr. Reagan did modify his original strategic arms reduction proposal by raising a proposed limit on missile launchers upward from 850 and later by dropping a demand that each power be limited to only 2,500 warheads on land-based missiles. However, Mr. Aspin said today that the President's position was "murky" and that it seemed to many members of Congress to amount to a nonnegotiable demand that the Soviets dismantle most of their nuclear arsenal.

Representative Aspin said permitting the Scowcroft commission to "get back in the arms control business here" would tend to convince skeptical members of Congress that Mr. Reagan's arms control intentions were credible. A "bipartisan" negotiating proposal would also help in ultimately achieving the necessary consent of two-thirds of the Senate to any treaty, Mr. Aspin said.

No 'Ultimatums' As Yet

Support for the Scowcroft recommendations as "a package" by Mr. Aspin and by Representatives Albert Gore Jr. of Tennessee and Norman D. Dicks of Washington, both Democrats, figured in the House vote last month to authorize production of the MX.

Mr. Aspin said he was issuing no "ultimatums" and was "on board with the Scowcroft package" as long as the White House was seen to be keeping its end of the bargain. But he added that if Democrats such as himself, Mr. Gore and Mr. Dicks abandon the President, "MX goes down in the House."

He later said that while he did not now contemplate changing his vote, the missile would be defeated anyway unless the White House made a more flexible arms control proposal when negotiations resume in Geneva on Oct. 6.

Mr. Aspin did not offer a detailed negotiating position himself, but in a paper accompanying his letter to Mr. Scowcroft, he suggested several broad principles. One involved the issue of throw weight, which is the weight of warheads, guidance equipment, warhead dispenser and decoys that a missile can lift. The Soviet Union, which has developed much larger missiles than the United States is believed to have about 13 million pounds of throw weight on 2,300 missiles, in contrast to about 4.5 million pounds on 1,600 American ballistic missiles.

The Congressman said the Administration's demands that the Soviet Union rapidly give up its throw weight advantage caused Congressional liberals to doubt that Mr. Reagan was negotiating in "good faith." But Mr. Aspin said that liberals who believed that the issue of throw weight was unimportant were mistaken.

"A possible compromise," he wrote to Mr. Scowcroft, "would provide for substantial reductions in Soviet throw weight, but over a number of years" so that it could be part of a normal modernization cycle when aging missile systems are replaced.

WYOMING EAGLE 28 August 1983 Pg. 1

Group Maps Its MX Fight

By ROSIE HARTY
Sunday Staff Writer

In a press conference in Casper Saturday, members of the Wyoming Nuclear Freeze Coalition announced that they aren't ready to give up the fight against the MX missile in the state.

The coalition, with 1,500 members scattered throughout the state, held a meeting "to plan strategies" and announce the establishment of newly-formed anti-MX groups in Gillette, Cody, Lander, Worland and Wheatland, according to chairperson Jeff Zacharakis-Jutz.

"The MX is not necessarily coming to Wyoming," he said, adding the group hopes to mount a campaign of "education and awareness" to mobilize what they see as a sizeable percentage of state residents opposed to the missile, and in favor of a bilateral, verifiable nuclear freeze.

Groups in several cities are planning walkathons as fundraisers for the coalition's efforts and as a demonstration of opposition, he said. The coalition is also planning to publicize "informational forums" between the Air Force and other groups opposed to the MX missile, sponsored by the League of Women Voters. Zacharakis-Jutz said the group is now ironing out "scheduling problems" but is tentatively planning public forums in Gilette, Casper, Laramie and Rock Springs.

The coalition has also begun work on a grant from the state to bring in speakers to represent both sides of the debate on a nuclear freeze.

Part of the meeting's purpose, he said, "was to encourage Wyoming people to become involved in the MX issue."

"We really want to concentrate on getting Wyoming people to speak out," he said.

Only a small portion of the state's residents stongly favor the missile and its deployment and that number is steadily declining, he said. He pointed to a survey by the conservative Wyoming Heritage Foundation which showed a decline in support for basing the missile in Wyoming. Based on 410 responses, the poll showed 57 percent favored the missile, as opposed to 64 percent in a poll taken for Senator Alan Simpson.

Zacharakis-Jutz said there are enough current supporters of the MX that are "soft" and can be persuaded against the missile to make a difference in the state. He said the group hopes to work with them "in a positive way."

"There are a lot of people who will be changing their mind," he said. "In Utah, they first accepted the MX, and then rejected it. It can happen here."

Zacharakis-Jutz said group members believe Cheyenne is not as well-informed on all sides of the MX, and not aware that some people in other parts of the state oppose it strongly.

"People in Cheyenne really need to know that the feeling is different in other parts of the state," he said.

The economic benefits of the MX "are clouding" the basic facts surrounding the missile, he said.

"People in Cheyenne are not getting all the information," he said. "They're still grabbing on desperately to the hope that it's going to create jobs and that's not going to happen.

"The people of Cheyenne are being taken down the primrose path."

The freeze coalition works with groups like the Tri-State Anti-MX Coalition and Western Solidarity against the MX, but focuses its attention on building support for a state-wide freeze resolution. Zacharakis-Jutz said the group had a good following, and presented strong testimony at legislative hearings on a bill concerning a freeze motion last year "that went on for hours." The motion was frozen in committee, but the coalition plans to launch another drive for the 1985 legislative session and their organization is working with neighboring states and groups that have launched successful freeze campaigns in their states.

"It's easy to get behind the freeze — the network nationwide is very strong," he said. "Wyoming is one of the weaker states because we have a difficult system to get a referendum in."

Developing support in Wyoming for the freeze won't be accomplished overnight, he added, but Wyoming can catch up with the national momentum.

"It's a matter of education and awarenesss," he said. "We've spent 20 years developing a nuclear mentality and it's going to take time to change that."

WETA-TV, PBS NETWORK 7 August 1983

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DEPARTMENT OF DEFENSE

From the Editor's Desk WETA-TV
PBS Network

August 7, 1983 11:30 A.M. Washington, D.C.

Arms Control

RICHARD HEFFNER: Joining me today is Robert Kurvan (?) of the New York Times Editorial Board. Also with me here at the Editor's Desk is Walter Isaacson, associated editor of Time magazine. And our guest in Washington is United States Senator Charles Mathias, Republican from Maryland, Chairman of the powerful Senate Rules Committee.

* * *

WALTER ISAACSON: I'd like to get to the subject of arms control, if I could for a minute. What is your feeling now on the MX? You sort of tied it in with the President's sincerity to bargain with Moscow on strategic arms limitations talks. Are you going to support the MX the next time it comes up?

SENATOR CHARLES MATHIAS:: I have supported the MX through the authorization process because I thought that that was an essential element in the Scowcroft Report. The Scowcroft Report was a carefully balanced recommendation that we go forward with a limited deployment of MX, but with a rather radical change in our arms control negotiating posture.

Now, we've put up our ante. We have agreed to the limited MX deployment. The authorization process has passed through the Senate. It's now up to the President to put up his ante. And I hope that he will do so. And if he does, then I think we can continue to work in the kind of coordinated way which the Founding Fathers conceived when they wrote the Constitution.

DENVER POST 4 September 1983 Pg. 8B

AF General 'Pleased' by Response to MX

The MX missile site east of Cheyenne, Wyo., 'is still a target in the Soviet view,' no matter what sort of weapons are deployed there, said Brigadier Gen. Gordon Fornell.

By PAT MCGRAW
Denver Post Staff Writer

The installation of 100 MX missiles in existing silos east of Cheyenne, Wyo., makes the area no more of a military target than it has been for about two decades, an Air Force defense expert said in Denver last week.

Brigadier Gen. Gordon Fornell said the site "is still a target in the Soviet view," no matter what sort of weapons are deployed there.

He characterized most residents in the Cheyenne area as viewing the MX deployment of the MX as "taking out a less-capable missile and replacing it."

The general, special assistant for MX matters at Air Force headquarters at the Pentagon, was in Denver to review programs at Lowry Air Force Base, where personnel are being trained to set up and maintain the missiles, each armed with 10 nuclear warheads.

Though the plans to replace the aging Minutemen missiles with the MXs has met with resistance from antiwar groups, the 46-year-old pilot said his agency has been "very pleased and encouraged" by the response to the program by residents in the vicinity of the silos.

He added that the below-ground silos do not disturb wildlife. "A cow can come up and rub against the fence while the (silo) hums away," explained Fornell.

The first missiles were put into silos in 1963 on the windswept and barren missile site where the borders of Wyoming, Colorado and Nebraska converge. The MX missiles would spread from southeastern Wyoming across the border into Nebraska.

Fornell added that the Air Force is aware of, and will try to do something about about construction activity at the silos that has brought "a boom-or-bust cycle" to the area's economy.

During a discussion with The Denver Post's editorial board, Fornell said replacing the old missiles with the new ones is all the Air Force has planned for the area.

He said a program to "harden" the silos to enable them to better withstand an attack isn't envisioned at the moment, though "there is some potential in construction tehniques" that might lead to reconstruction later on.

Likewise, he said, there are no plans to protect the new missile with an anti-missile system. That approach, Fornell said, makes sense when all of the attacking missiles "have to come down the same funnel" to reach their objective. It wouldn't make sense in this case, because the missiles are spread out over hundreds of square miles.

Though another missile system involving smaller missiles in mobile launch vehicles already is being discussed, Fornell said the MXs are expected to serve as part of the American arsenal past the year 2000.

The first flight test of the MX was completed successfully on June 17, and another is scheduled later this month.

Though the question of whether to deploy such a system has been debated hotly, Congress now appears committed to the program and the Air Force is proceeding on an established timetable.

Hearings on the environmental impact of the project are planned for late October and early November, and Fornell said the Air Force hopes to have a final report ready for the Environmental Protection Agency by June 1984.

WYOMING STATE TRIBUNE 17 August 1983 Pg. 32

Kimball Awaits MX Deployment Calmly

KIMBALL, Neb. (UPI) — City Administrator Robert Arraj, who watched the Air Force replace its Atlas missile system with Minuteman missiles in area silos, calmly awaits the proposed deployment of the MX.

Calling his western Nebraska community of 3,600 residents unique, Arraj said, "Kimball has always welcomed whatever." He said deployment of the MX in existing Minuteman silos promised "more pros than cons" for his community.

He said he has received few negative comments from residents about the Air Force's plan to deploy 100 MX in silos on the Warren Air Force Base in western Nebraska and eastern Wyoming. Kimball is near the center of the base's 200-silo field.

"It's just been a way of life," Arraj said of being sorrounded by missiles. "We haven't even given it a second thought." He predicted deployment of the MX would have no psychological impact upon residents.

Both the Kimball and Sidney city councils have voted to support the basing of the MX missiles in their areas.

Kimball also has organized a citizen military affairs committee that is working with the Air Force to coordinate deployment of the MX in Kimball County.

Save America Now, a group endorsing the MX deployment, has members in both communities.

At a Save America Now meeting in April, spokesman Wayne Robbins, a former Kimball mayor, said, "You're either for America or against America. We better just draw a line and have our representatives get on one side or the other so we know who to vote for. It's the first duty of every American to stand up for this country's defense."

A gray plastic model of the Titan 1 sits in Arraj's office. An actual Titan has been sitting in the Kimball park for more than a decade.

Townspeople objected vehemently in 1980 when representatives from Ellsworth Air Force Base in South Dakota asked if they could have the missile to put in a military museum. The military dropped its request.

"The timing is perfect," Arraj said of the plan that officials say would mean road construction and work at the silos probably starting next year.

Kimball's population dropped 15.2 percent during the 1970s while Kimball County's population dropped 18.8 percent. Those figures showed the area lost a higher percentage of residents than any other region in Nebraska during that time.

Local, state and federal officials are unsure how many employees would be drawn to the Kimball area for deployment of the MX.

Martha Beaman, state policy research analyst, said the Air Force has yet to decide if it will put a staging area near the Kimball area. Employees are dispatched from staging areas each day to work on the missile deployment.

Ms. Beaman said a staging center might be put in Kimball or the Air Force might dispatch workers solely from the Cheyenne area.

Arraj said he believed the Air Force and a consulting firm it hired to prepare an environmental impact statement would address anything that might be involved with the missile deployment.

"I personally can find no fault with the military," Arraj said of his past dealings with them.

WYOMING EAGLE 22 August 1983 Pg. 2

Kirkbride's Fight Against MX Based on Protecting Family

MERIDEN (UPI) — Rancher Linda Kirkbride says she would like to concentrate her energies on raising her three children and tending her garden on the family's 60,000-acre spread.

But for Mrs. Kirkbride, 34, the presence of Minuteman silos on the ranch has shaken up those priorities.

All three silos are to house MX, or Peacekeeper, missiles as early as 1986 if the deployment in eastern Wyoming and western Nebraska becomes a reality.

So Mrs. Kirkbride became a co-founder of Wyoming Against the MX in an area that draws its lifeblood from jet fuel and names its streets after nuclear weapons.

Her role as spokesperson for rural MX opposition took her to the Soviet Union in December 1982 on a journey called "Ranchers for Peace."

"It was really a while there that I thought, 'Should I really be speaking out on this? Should I be involved?' And now I just have no qualms at all about where I stand and how I feel," she said in a recent interview on a patio opening onto the windswept Wyoming range.

Mrs. Kirkbride said she wonders about the future of her ranch and family if the MX comes.

"They pass four missile silos on their way to school," she says, nodding toward her three children, adding she wanted them to be aware of what was in the silos and why it was there.

Four generations of Kirkbrides have ranched near Cheyenne, and the family prides itself on its affinity for the land.

"We'd like to pass it on pretty much just as we found it," she said.

"I just want to go putz in my garden and raise my kids like everybody else does, and this was just something that has really interrupted our lives," she said.

Mrs. Kirkbride, a Baptist from Lubbock, Texas, said she also feels a "kind of spiritual commitment" to try to stop the MX. She said today's military decisions will affect her children.

"Those little guys ... have to undo these things, and it's so complicated now and complex and there are no easy solutions ... if there is anything to undo, that is.

"One more nuclear weapon is not going to make either country any safer. That's the big lie, and both sides have got to get more serious at the bargaining table," she said.

WYOMING EAGLE 30 August 1983 Pg. 1

Presidential Panel Urged To Tackle Arms Control

WASHINGTON (UPI) — Rep. Les Aspin, D-Wis., a key figure in congressional acceptance of a presidential panel's recommendations on the MX missile, called on the commission Monday to draft a new strategic arms proposal.

Congressional sources said the commission is expected to take up the task, despite some concerns in the administration about the bipartisan group taking the lead in arms control, and hopes to have some recommendations in time for resumption of the Strategic Arms Reduction Talks Oct. 6 in Geneva. A commission spokesman said the panel has not yet received the letter but added he expected there would be a response.

"Arms control was one of three legs of the commission's proposal last spring," Aspin said in a letter to retired Air Force Gen. Brent Scowcroft, chairman of the President's Commission on Strategic Forces. "It is obviously the weakest leg and needs attention if the Scowcroft package is to be a reality."

The Scowcroft commission recommended last April that about 100 MX missiles be deployed in existing Minuteman silos, that work begin on developing a small, mobile single-warhead missile and that the administration fashion a new approach to arms control.

Reagan enthusiastically accepted the recommendations and recently extended the life of the commission with a broad mandate of monitoring progress toward its suggestions.

Congress narrowly approved procurement of the MX and has broadly endorsed the small-missile concept, dubbed "Midgetman."

"I think it is essential that the Scowcroft Commission now move into high gear for the specific purpose of helping to frame an arms control position," Aspin said in the letter. "This would require the commission to consult broadly with liberals and with conservatives for the purpose of outlining an arms control position that would have broad bipartisan support."

Aspin is one of a key group of moderates in the House and Senate who have agreed to back the controversial, 10-warhead MX nuclear missile if it is linked to arms control. Development of a small, mobile missile is seen as a move toward greater stability because they would make less tempting targets.

The group was instrumental in bringing a turnaround in Congress on the MX this year, following votes last December that had put a hold on the 10-warhead strategic nuclear weapon.

FOREIGN REPORT 11 August 1983 Pg. 1-2

Troubles for MX and nerve gas

The **Reagan** administration's plans to deploy MX missiles and to produce nerve gas could run into serious difficulties when congress reconvenes on September 12th. The first hurdle will be a vote on the defence authorisation bill, whose terms have been worked out by a conference committee of the senate and house or representatives. The second will come later when congress debates the appropriation of funds for MX.

The house of representatives rejected new production of nerve gas in a 216-202 vote on June 15th; the senate approved it only after the vice-president, **George Bush**, broke a 49-49 tie on July 13th. In conference, delegates of the house of representatives went along with the senate.

Now the chairman of the house foreign affairs committee, **Clement Zablocki**, says he has turned against voting for the MX because it is included in the authorisation bill providing for production of nerve gas. He says he will vote against it and claims to be able to take 10 formerly favourable votes into the opposition. If he carries out his threat, Zablocki could stop MX production as well as nerve gas. Alternatively, the administration might decide to withdraw the plan to produce nerve gas.

A potentially more serious difficulty for the MX will come in the appropriation debate. Congress has had serious doubts about MX since it was first told that MX had to be mobile to avoid destruction by Soviet missiles and is now being asked to approve its installation in permanent silos. Congressional leaders also want to see some clear signs of movement by the administration in arms-control negotiations with the Soviet Union to match a decision to go ahead with the MX. Votes on MX in the authorisation debates were close: 58-41 in the senate and 220-207 in the house.

As the appropriations debate approaches there are increasing complaints in congress and the administration over the apparent lack of movement by the president to press forward with his commitment (given during the authorisation debate) to arms control. Suspicious senate-house conferees tied approval of MX to the development of the much smaller "midgetman" intercontinental missile. This was intended to oblige the administration to adopt a more vigorous negotiating policy since under the Salt agreements with the Soviet Union it may develop only one new missile—and this is the MX. A new agreement must be found for "midgetman".

In the White House, the word is that the president has gone as far as he can go in the negotiations in Geneva. On Capitol Hill, however, congressional experts say that the appointment of **Robert McFarlane**, deputy national security adviser, as Reagan's special Middle East envoy means that arms-control advocates have lost their best supporter in the president's entourage.

One of Reagan's close advisers, retired **Lieutenant-General Brent Scowcroft**, would like to see more action. Some critics say the secretary of state, **George Shultz**, has no time for the complex issue of arms control and the new head of the arms control and disarmament agency, **Kenneth Adelman**, has no political influence. They would like to see the widely respected **Paul Nitze**, now in charge of negotiations on tactical nuclear forces in Geneva, brought back to Washington and put in charge.

TIME MAGAZINE 5 September 1983 Pg. 10

Nuclear Carrots and Sticks

A stern congressional warning, a new flutter from Andropov

It has always been an unlikely alliance: liberal Democrats joining with the Reagan Administration to save the controversial MX missile. But Congressmen Les Aspin of Wisconsin, Norman Dicks of Washington, and Albert Gore Jr. of Tennessee never promised their support with no strings attached. When the Scowcroft Commission's report on strategic forces came out last April, the three were widely credited with engineering the package's major *quid pro quo:* congressional support for the MX in exchange for the Administration's good-faith pursuit of a U.S.-Soviet arms-control deal. So far the Congressmen have delivered on their end. Since the report's publication, the MX has survived two funding votes in the House. But as doubts about Reagan's intentions to deliver on his end of the bargain have grown, support has slipped. The most recent authorization vote in the House, in July, passed by a scant 13-vote margin.

Aspin has now publicly put the Administration on notice that it must modify its arms-control policy or Congress will begin to starve the MX. In a letter to retired Air Force Lieut. General Brent Scowcroft, made public last week, Aspin called on the commission Scowcroft chairs to formulate a new U.S. proposal for the Strategic Arms Reduction Talks (START) and recommended that the Administration agree to substitute the commission's version for its own. The letter also outlines broad suggestions for modifying the U.S. stance at START.

Aspin made clear that his vote and those of other pro-MX Democrats hinge on arms-control progress. Said he: "People aren't about to be snookered." That message is not new. Aspin, Dicks and Gore sounded the same warning in early August at a private White House meeting with National Security Adviser William Clark. But the pressure is being turned up at a time when both the START talks and the Intermediate-range Nuclear Forces (INF) talks in Geneva are in a deep-freeze.

For its part, the Administration can certainly point to some signs, however slight, of an increased pace in the dialogue with Moscow. Last week both countries signed a multiyear grain pact, and the U.S. ended its restrictions on the sale of pipe-laying tractors to the Soviets. Most intriguing of all was an offer from Soviet Leader Yuri Andropov. He seemed to suggest, for the first time, that the Soviets might now be willing to destroy 81 of their 243 SS-20s in Europe so as to equal the number of British and French missiles targeted at the Soviet Union. He said the U.S.S.R. "would liquidate all the missiles to be reduced."

Even if the latest Andropov statement means what it seems to, it will hardly bridge the gap between the superpowers' positions in Geneva, since the U.S. refuses to count the British and French nuclear forces in the INF talks and since the Soviets are making their offer contingent upon the cancellation of all new Pershing II and cruise missile deployment. Moscow's central purpose is almost surely to impress West Europeans with its flexibility and thus to encourage opposition to the installation of those new American missiles, due to start later this year.

The White House is mindful of the potential 1984 election benefits of progress in arms control. But it insists that the MX is an essential bargaining lever to achieve that goal. Still, the growing congressional pressure is sure to widen the already existing split between the Administration's moderates, who favor an arms-control agreement in part to help re-elect Reagan, and its hard-liners, who remain deeply suspicious that the Soviets will ever negotiate seriously. The key defense appropriations votes in the Senate could come very close to the scheduled resumption of the START talks in early October. ■

WYOMING STATE TRIBUNE 18 August 1983 Pg. 13

Is MX a Bargaining Chip?

WARREN AIR FORCE BASE, Wyo. (UPI) — The deployment of 100 MX missiles is believed enough to persuade the Soviet Union to cooperate in an arms reduction agreement, but an Air Force official says the situation could change someday.

"It is viewed by the administration that the deployment of 100 missiles would provide the necessary negotiation leverage to give the Soviet Union the incentive to seriously reduce their arms," Capt. Mike McMullin said.

A spokesman for the office of the special assistant for the Peacekeeper from Air Force headquarters in Washington, McMullin recently was interviewed about the plans for MX deployment near Cheyenne.

The Air Force has dubbed the MX the Peacekeeper, saying the missile is the countermilitary might needed to deter the Soviets and others from using their nuclear weapons against the United States.

Plans call for 100 MX missiles to be placed in existing Minuteman silos in Wyoming and western Nebraska. The silo field includes 200 silos and spans 12,600 square miles. An existing 100 Minuteman missiles would be left in place.

"Without that (MX) deployment, the president feels and so do the START negotiators feel that they're virtually helpless," McMullin said.

Critics of the MX have suggested citizens would be powerless to limit the number of missiles deployed once production started. Some have said the 100 figure is a bargaining chip to use against the Soviets.

"The president is flexible in his arms control approach," McMullin said. "He's not suggesting that, 'Hey I will make this a bargaining chip or that it is a bargaining chip.'

"But what he has said is that it (100 missiles) gives us that negotiating leverage that we desperately need to bring the Soviets to the table seriously ... It gives us a bargaining position and strength," McMullin said.

He said the Air Force plans to produce 223 missiles, of which 100 would be deployed, probably starting in 1986.

The other 123 missiles would be used as spares and for testing, he said. Periodically, missiles are pulled from the Warren silos, their warheads removed and the missiles taken to Vandenburg Air Force Base, Calif., for test firing.

Twenty test launches are planned before the 100 MX would be deployed. The remaining 103 would be used to replace deployed missiles that were removed from the silos for testing or that had to be replaced because of malfunctions.

When asked if 100 MX would be enough to deter the Soviets from using their missiles, McMullin said it was based on the existing and projected threat.

"A lot of it is conditional. It is conditional on what the Sovict response is to our deployment, it's conditional upon what happens in the ongoing strategic arms reduction talks," McMullin said.

He said a small mobile missile with one warhead is being considered for the mid to late 1990s.

SALT II, an unratified treaty McMullin said both countries are using, had been set to expire in 1985. It would have limited the two major arms powers to one new intercontinental missile system each.

"None of us are fortune tellers," McMullin said, adding it is unlikely more than 100 MX might be deployed because of the time required to get authorization for missile funding and production.

"You have to take it over a five-year defense plan and what's going to happen in that time. So for us to sit here and predict what's going to happen ... beyond the five-year period is very difficult," he added.

WYOMING EAGLE

26 August 1983

MX Support Down

CASPER (UPI) — A recent poll for the conservative Wyoming Heritage Foundation says there has been a slight decline in support for basing the MX missile in Wyoming, compared with a poll done in May.

The foundation's annual poll was conducted by Research Services Inc. of Denver earlier this month.

Among the questions asked: "As you probably know, one plan has been announced that would locate the MX missile near Cheyenne. From all you have heard or read about the MX missile system, do you favor or oppose locating the MX missile in Wyoming?"

Of 410 respondents, 57 per-

. cent said they favored putting the MX in Wyoming, 36 percent were opposed and 7 percent had no answer, the foundation said in a news release today.

A similar question in a poll of 500 people for Sen. Alan Simpson, R-Wyo. in May showed 64 percent in favor, 30 percent opposed and 6 percent undecided.

"Among industry groups, foundation executive director Harry Roberts, said today, "we found that 76 percent of those in construction favored the MX, along with 71 percent in agriculture, and 66 percent of those in business trades.

"By age group, the most opposition came from those 18 to 24 years old — 49 percent of whom oppose the MX — and those over 65, with 51 percent in opposition."

Roberts said the foundation has taken no position on the MX and was releasing the poll results as an informational service.

Other results of the poll showed Republicans favored the MX by a margin of 60 percent to 26 percent. Democrats opposed the basing plan, with 50 percent against it and 38 percent favoring it.

WYOMING STATE TRIBUNE

26 August 1983

Heritage Foundation Paid for Own MX Poll

CASPER (UPI) – The conservative Wyoming Heritage Foundation says it paid for a recent poll showing a slight decline in support for basing the MX missile in Wyoming, compared with a poll done for Sen. Alan Simpson, R-Wyo., in May.

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WYOMING STATE TRIBUNE 16 August 1983 Pg. 16

Nebraska Rancher 'Ground Zero' If MX Missile Comes

SIDNEY, Neb. (UPI) — To Marian Lenzen, deployment of the MX, or Peacekeeper, missile means the sacrifice of agriculture and to her, that does not make much sense.

"Agriculture is the United States' greatest strength," the 55-year-old rancher said. "It's the one thing we've got that Russia has never ever been able to duplicate or even come close to. And yet, you're going to come out here and sacrifice your agriculture for a missile that isn't even needed?"

Mrs. Lenzen is a co-founder and director of Nebraskans Opposed to MX, or NO-MX.

Largely rural in make-up, NO-MX works with farm groups to try to stop the planned deployment of the 100 missiles in Wyoming and Nebraska.

"There's more to national defense and national security than a stockpile of weapons," she said. "I think it depends on a strong economy, healthy people, educated minds; that contributes just as much as nuclear weapons."

Thirty-one Minuteman silos in Nebraska are targeted for MX deployment, and Mrs. Lenzen said she and other area residents take that as a personal threat to their health and well-being.

"As far as I'm concerned I'm Ground Zero if the MX comes into Kimball County and Banner County ... I'm going to have my bag packed, I'm going to have it sitting at the back door and I'm going to be ready to get the hell out of here," she said.

"I am prepared to live with the Minuteman because I've lived with it for 30 years. But that doesn't mean I have to accept the MX," Mrs. Lenzen said.

"People ask me, 'What's the difference?' My God, there's a hell of a lot of difference," she said. "If there wasn't any difference, then why do we need the MX?"

Mrs. Lenzen also said there are plenty of other ways the money could be put to better use.

"We've got $200 billion deficits staring us in the face, we have an increase in malnutrition in children, we have people living in deserted buildings in our cities, living in their cars and trailers, camping all up and down the canyons and the Rockies, millions of people unemployed, and yet we're going to blow $20 billion on an MX missile? I just can't see it," she said.

WYOMING EAGLE 14 August 1983 Pg. 6

JAN JOHNSON, a local poet and musician, will provide entertainment at a fund-raising spaghetti dinner hosted by the Tri-State MX Coalition. The dinner, Aug. 19 at 6:30 p.m. at St. Mark's Parish Hall, will feature updated information on the MX and how it may effect Wyoming residents.

MX Coalition Hosts Dinner

The Tri-State MX Coalition will host a spaghetti supper followed by entertainment and the latest MX information on Friday, Aug. 19 at 6:30 p.m. All members of the coalition and the public are invited to participate in the event which will be held at St. Mark's Parish Hall, 19th and Central.

Entertainment will be provided by Jan Johnson, who will accompany herself on the autoharp. There will also be a slide show and material will be available to send Sen. Alan Simpson (R-Wyo.) the message to vote against further MX deployment legislation.

Cost of the dinner will be $4.50 for individuals and $9 for families.

"This fall will see important votes for MX funding coming up and we are committed to letting Senator Simpson know that the majority of people in Wyoming don't want the MX here," Coalition member Linda Kirkbride said. "After seeing the price of the MX increase dramatically this summer as Congress is asked to buy 223 rather than the original 100 MX missiles, opposition to the deployment in Wyoming is growing. The event on Friday will provide a good way for people to share information and enjoy good food and fun."

WYOMING EAGLE 16 August 1983 Pg. 2

SAUCE TESTER—The Tri-State MX Coalition will host a spaghetti supper followed by entertainment and the latest MX information August 19, at 6:30 p.m. at St. Mark's Parish Hall, 19th and Central. All members of the public and the coalition are cordially invited to participate in the event. Here Father Richard Hitt seems anxious to test Jan Johnson's spaghetti sauce. Johnson is practicing for the dinner August 19th.

WYOMING STATE TRIBUNE 16 August 1983 Pg. 2

MX Coalition Asks WHC Who Will Pay

United Press International

The Tri-State MX Coalition has called on the Wyoming Highway Commission to decide who will pay for improvement and maintenance of roads in Laramie County that would be used for access during deployment of MX missiles.

"Although appropriations for the deployment of the MX have not yet passed Congress, the Wyoming Highway Department is advertising bids for stockpiling materials for the road work," said Sister Frances Russell, coordinator of the coalition. "We believe that it is appropriate at this time to ask if the Air Force will pay for the improvements or will the taxpayers of the state or of the counties."

Sister Russell said the Nebraska Highway Commission has agreed that the federal government should pay for the surfacing of 80 miles of roads in Banner and Kimball counties that lead to the 31 Minuteman III sites proposed to house MX missiles in its state.

The Nebraska commission also wants the Air Force to pay for strengthening of two bridges and 12 culverts so they can support the trucks that haul the huge missiles to the silos.

The estimated cost of the work in Nebraska is $18.5 million, and it remains unclear whether the Air Force will pick up the tab.

"Will the Wyoming Highway Commission demand that the Air Force pay for the improvements as the Nebraska commission has done, or will we remain 'Willing Wyoming,' allowing the Air Force to set the rules?" Sister Russell asked.

WYOMING EAGLE 18 August 1983 Pg. 1

Rock Springs Wants Air Force to Talk MX

ROCK SPRINGS (UPI) — Green River and Rock Springs are more than 250 miles west of where the U.S. Air Force plans to plant the MX missiles, but a group of protesters wants the Air Force to hold a meeting in the area.

Members of Sweetwater County Residents Against MX, known as SCRAM-X, Tuesday night convinced the city councils in the two cities to ask the Air Force to bring their information programs to the two southwest Wyoming cities.

The Green River City Council decision was unanimous; the Rock Springs City Council decision was split 7-1 over the strenuous objections of Mayor Keith West.

"I just don't want to have the city involved in any degree of activitism that won't help the city," West said Wednesday.

He said opponents of the MX are just looking for forums for their fight.

"I've got enough problems in Rock Springs without trying to figure out how to run the national government on MX missiles," said West.

He said he will comply with the council's decision and write a letter to the Air Force asking them to conduct a public meeting in Rock Springs on Sept. 8 or 9. But that is the end of it for him, he added.

SCRAM-X presented the Rock Springs City Council with petitions bearing 150 signatures of people opposed to the MX.

WYOMING EAGLE 13 August 1983 Pg. 12

Liason Officer Assigned

By GARY LONG
Eagle Staff Writer

After a first week on the job spent laying the groundwork, Air Force Capt. Michael C. McMullin says he hopes to insure there is a smooth transition to deployment of the MX—Peacekeeper missile in Wyoming and Nebraska.

The Air Force on Monday opened a Peacekeeper liaison office in the federal office building at 21st and Capitol, with McMillan as its head. McMillan's assignment is to work with local, county state and federal agencies to see that deployment of the MX is an orderly process.

The Air Force plans to deploy 100 MX missiles in existing Minuteman III silos in southeast Wyoming and western Nebraska. Congress has approved funds for the first 21 of the missiles but has yet to make the actual appropriation.

McMillan said construction at F.E. Warren Air Force Base in Cheyenne could start as early as late spring, 1984 with missile site construction to start in late 1985, and deployment of the first 10 missiles scheduled for late 1986.

Air Force estimates of the number of workers that will be required for MX construction have fluctuated between 1,500 and 2,000 since President Reagan first proposed deployment under the command of the 90th Strategic Missile Wing at Warren. McMullin said the Air Force hopes to have concrete employment and other figures regarding deployment by mid—September.

The liaison officer said he spent this week making courtesy calls to local state and federal officials, and added he views his job "in the positive sense that MX—Peackeeper deployment can be accomplished in an orderly manner."

He also pointed out he is not assigned to Warren, but that his commanding officer is Brig. Gen. Gordon E. Fornell, special assistant for the Peacekeeper program at the Pentagon.

The decision to base the liaison office in downtown Cheyenne, said McMillan, was made so that it would be accessible to the general public as well as state, local and federal officials.

McMullin also is to make speeches concerning the MX to various civic groups, answer questions on the system, clarify policy matters, and identify issues associated with deployment. He also is to serve as liaison with the state's congressional delegation and attend meetings concerning MX deployment.

McMullin was stationed at Warren from 1974 to 1979 as a Minuteman III missile crew member, and as a plans officer and executive support officer to the 4th Air Division. His most recent assignement was in the Peacekeeper office at the Pentagon as executive officer and arms control project officer.

He said he and his family are happy to be returning to Cheyenne and view the area as their home.

Capt. McMullen

WYOMING STATE TRIBUNE 15 August 1983 Pg. 3

Nebraska Waiting for Reports From AF to Study MX Impact

United Press International

Nebraska officials await reports from the Air Force on the impact of the proposed deployment of the MX missile before conducting studies of their own.

Martha Beaman of the state Policy Research Office of Lincoln said she was waiting for the Air Force to release its environmental impact statement and a socioeconomic impact statement.

The Air Force plans to deploy 100 MX missiles in existing Minuteman silos on Warren Air Force base in southeastern Wyoming and western Nebraska starting in 1986.

She said the state would conduct some impact studies after the Air Force releases its reports. Public hearings would be conducted on the EIS, which is expected to be released by October.

Ms. Beaman said the federal socioeconomic study probably would concern primarily Wyoming because the population shift would occur there first.

She said Nebraska's state officials primarily would study the impact of additional workers and road construction upon the southern Panhandle.

Improvements will be required before rural roads can support the vehicles that will transport the MX missiles to the Minuteman III silos.

The road work probably would begin in 1984. The state Roads Department has asked for $18.5 million to pave a system of transport for the missiles.

The missiles are expected to be transported in vehicles that are heavier than a semi-trailer truck, Air Force Capt. Mike McMullin of Washington has said.

The Air Force has yet to decide if it will establish a staging area near Kimball. Employees are dispatched from staging areas each day to work on missile deployments.

Ms. Beaman said a staging center might be put in Kimball or the Air Force might dispatch workers solely from the Cheyenne area.

"We're keeping up with what's going on, but it's too early to make any predictions," Ms. Beaman said.

WYOMING EAGLE 22 August 1983 Pg. 2

MX Air Force Liason Office Opens Here

United Press International

The Air Force has announced it has opened a liason office in the Federal Building in Cheyenne to handle questions and concerns about the MX missile.

One hundred MX missiles, re-named the "Peacekeeper" by President Reagan, are scheduled to be deployed in existing Minuteman III silos in Wyoming and Nebraska.

Selected to head the liason office is Capt. Michael McMullin, who has worked with the MX office in the Pentagon as executive officer an arms control project officer and who previously served at F.E. Warren Air Force Base at Cheyenne as a Minuteman missile crew member.

The Air Force said McMullin will work with local, county, state and federal agencies to ensure the deployment of the MX is accomplished in an "orderly manner."

Other duties would include giving speeches explaining MX deployment, answering citizens' questions on the MX, attending local government meetings and working as a liaso with the Wyoming congressional delegation.

WYOMING STATE TRIBUNE 16 August 1983 Pg. 2

McMullin Named to Head Peacekeeper Liaison Office

The Air Force announced recently that it has opened a Peacekeeper liaison office in the Federal Building here with Capt. Michael C. McMullin as head.

McMullin was assigned to head the office by the secretary of the Air Force, Verne Orr. Earlier this year, Secretary of Defense Casper Weinberger advised the Air Force to open an office in Cheyenne that would represent him and the Air Force in all matters pertaining to the deployment of the Peacekeeper in Wyoming and Nebraska. After an intensive screening process throughout the Air Force, McMullin was selected for the job.

McMullin's job is to ensure that the concerns and issues that arise from the deployment of the Peacekeeper are worked out by the Air Force and the Department of Defense. He will report directly to Brig. Gen. Gordon E. Fornell, special assistant for the Peacekeeper in the Pentagon. McMullin will work with local, county, state and federal agencies to ensure that the deployment of the Peacekeeper missile system is accomplished in an orderly manner. He will be the conduit and extension of the Air Force for the states of Wyoming and Nebraska.

Other duties McMullin will accomplish include: speeches, answering questions on the system and policy matters, identifying issues associated with deployment, attendance at meetings with local, county, state and federal agencies, liaison with the congressional delegations.

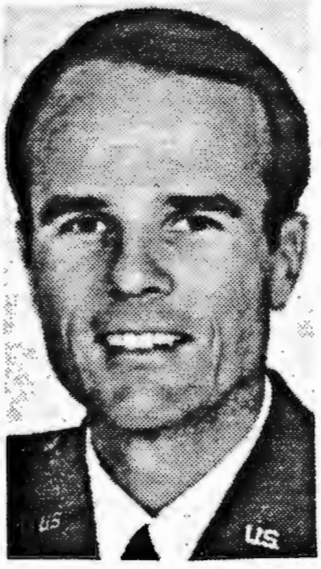
The office is located in Room 8007, Federal Center, Cheyenne, 82001 and the telephone number is 772-2828.

McMullin returns to Cheyenne where he served as a Minuteman III missile crew member, a plans officer and executive support officer to the Fourth Air Division commander from 1974 through 1979.

He is a graduate of Brigham Young University with a degree in communications. He received his commission through ROTC as a distinguished graduate in 1974. His last assignment was in the Peacekeeper office in the Pentagon as the executive officer and arms control project officer. Prior to this assignment, he served for a year in the Arms Control and Disarmament Agency in Washington, D.C. His medals include the Meritorious Service Medal, the Outstanding Unit Award and the Senior Missile Badge.

McMullin was notified July 20 that he has been selected for promotion to the grade of major.

"I am very happy to be returning to Cheyenne. My family and I consider this to be our home," he said. "I look upon this assignment as the highlight of my career, but more importantly, I want to let the people of Wyoming and Nebraska know the Air Force and the Department of Defense will do everything possible to make the deployment of the Peacekeeper missile system an orderly process."



CAPT. MICHAEL C. McMULLIN was recently assigned to head a Peacekeepr liaison office the Air Force will be opening in Cheyenne.

LOUISVILLE COURIER JOURNAL 21 August 1983 Pg D-3

MX gives U.S. ability to fight a nuclear war, 'makes one more likely'

The writer, a professor of political science at Purdue University, is a fellow of the World Policy Institute and a member of the Committee for National Security. He has lectured and published widely on U.S. nuclear strategy.

By LOUIS RENÉ BERES
Special to The Courier-Journal

The Reagan administration's justification for MX has undergone a curious metamorphosis. For the first time since this weapon system emerged from the drawing boards, a president of the United States has admitted that a nuclear-war-fighting capacity, not survivability, is the true purpose of MX. Although it has been something of a tacit admission — one made necessary by the obvious limitations in placing new counterforce missiles in old silos — it is an admission with far-reaching implications.

The Reagan administration surely does not want a nuclear war. It does believe, however, that the adequacy of our deterrence posture is dependent on the capacity to fight such a war. But this is an erroneous belief. The Soviet Union is no more likely to be deterred by an adversary that has announced its intention to dominate escalation during a nuclear war than by one that remains content with the capacity for "assured destruction."

In assessing the anticipated effects of various attack scenarios, Soviet leaders would be unmoved by the prospect of "losing" more in a nuclear war than the United States. Indeed, there is no reason to believe that these leaders would calculate that absorption of *any* U.S. nuclear reprisal could fall within "acceptable" levels, unless, of course, they were convinced that a U.S. first-strike were imminent, an expectation made *more likely* by deployment of MX.

Rejecting the plausibility of limited nuclear war, the Soviets already calculate on the basis of total nuclear effort by both sides. It follows that since the U.S. search for a nuclear-war-fighting capability heightens Soviet fears of an American first-strike, this search actually *degrades* this country's security. Moreover, MX weapons that are counterforce targeted to conform to nuclear-war-fighting doctrines of deterrence will have significantly reduced deterrent effect, since their use in a second strike would produce substantially less damage to the U.S.S.R. than would extensive "countervalue" (countercity) attacks.

These facts notwithstanding, the U.S. position tying MX to improved deterrence is contingent on the expectation that a Soviet first-strike would be limited. This is the case because if the Soviet first-strike were unlimited, this country's retaliation would hit only empty silos. Yet there is no reason why the Soviets would ever choose rationally to launch a limited first-strike against the United States. Understandably, the Soviets quite naturally fear that the MX is geared to achieving a first-strike capability against their nation.

In response, the Reagan administration argues that the Soviets have a refiring and reconstitution capability with their missiles and that even an unlimited first-strike would take place in several successive stages. Hence, the MX, used in retaliation, would not necessarily hit only empty silos. It would also hit silos that might otherwise spawn weapons to enlarge the damage of the Soviet first-strike.

Even here, however, the administration argument is devoid of correct reasoning. Contradicting its own stated rationale for MX, which is that it will strengthen deterrence by creating a nuclear-war-fighting capacity, this argument accepts the likely prospect of a nuclear war and the probable failure of deterrence. Oriented entirely to actual nuclear-war fighting, it concerns itself — together with plans for multilayer ballistic-missile defense, air defense and civil defense — exclusively with *intra-war* damage limitation. Yet, there would be very little of the United States left to protect after the first round of Soviet attacks had been absorbed.

In this connection, we must remember that the United States doesn't even target Soviet submarine-launched nuclear weapons (SLBMs). And the MX-counterforce strategy makes Soviet attacks more likely in the first place by signaling U.S. first-strike intentions. Looked at in cost-benefit terms, therefore, it is incontestable that the alleged damage-limitation benefits that would accrue to the United States from its MX forces during a nuclear war are greatly outweighed by that weapon system's deterrence-undermining costs.

This conclusion underscores the central flaw in current U.S. nuclear strategy. By encouraging a climate of strategic interaction wherein the Soviet Union must exist in a continuing and increasing expectation of attack, the United States compels its adversary to take steps to strike first itself. Naturally, these steps are perceived as aggressive in turn, and in "reaction" to apparent Soviet military designs an unstoppable cycle of move and countermove is initiated. The net effect, of course, is insecurity for all concerned.

Where are we heading? The direction seems to be one of unrestrained nuclear competition. Vitalized by an exaggeratedly tragic expectation of Soviet intentions, this competition will lead to the expression of all the poison and impotence of U.S. foreign policy since World War II. In its drowning of any remaining hopes for long-term cooperative security with the U.S.S.R., the MX deployment will offer a routinization of omnicide that may ultimately project Armageddon from desolate imagination to reality.

WASHINGTON POST 31 August 1983 Pg. 7

White House Would Eye New Ideas From Panel On A-Talks

By David Hoffman
Washington Post Staff Writer

SANTA BARBARA, Aug. 30—The White House, reacting to a proposal from Rep. Les Aspin (D-Wis.), said today it would make "maximum benefit" of any new suggestions by the Scowcroft commission regarding strategic arms talks with the Soviets.

Aspin urged the President's Commission on Strategic Forces Monday to put forward a new, "bipartisan" and more flexible proposal for a treaty to reduce intercontinental nuclear missiles.

Presidential spokesman Larry Speakes told reporters here that the administration would "hold our own counsel" on the question of a new negotiating position.

But he said the administration, which is now reviewing its position during the current recess in the Geneva talks, would "seek maximum benefit" from any commission suggestions.

The commission is chaired by retired Air Force Lt. Gen. Brent Scowcroft, who was national security affairs adviser to President Ford.

In a report earlier this year, the commission called for deployment of the MX missile and the development of a small, single-warhead missile while also urging the pursuit of arms control agreement with the Soviets.

Scowcroft is expected to respond to Aspin in the next few days.

Speakes said President Reagan's original madate for the commission was "broad" and included arms control issues as well as the MX.

A vote is expected on MX appropriations shortly after Congress reconvenes Sept. 12. Aspin warned that the administration would lose the vote unless it agreed to a new, more flexible bipartisan negotiating position in Geneva.

The White House has been concerned about a slippage in congressional support for the MX, but Speakes did not say whether Aspin's specific suggestion would be accepted.

WASHINGTON TIMES 24 August 1983 Pg. 1

Reagan tells vets peace is an aim and not a policy

By Jeremiah O'Leary
WASHINGTON TIMES STAFF

SEATTLE — President Reagan yesterday told the American Legion national convention that the so-called "peace movement" is making the same mistake made by Neville Chamberlain of viewing peace as a policy instead of an objective.

Continuing his campaign-style oratory during his three-week stay in the West, Reagan said, "Today's so-called 'peace movement,' for all its modern hype and theatrics, would wage peace by weakening the free.

" My heart is with those who march for peace. I'd be at the head of the parade if I thought it would really serve the cause of peace. But the real peace-makers are people like you who understand that peace must be built on strength."

When Reagan's motorcade arrived at the Seattle covention center, he was greeted by several hundred demonstrators for the nuclear freeze movement and several other peace groups. Seattle is the home base of the new Trident submarine and attracts numerous pickets against nuclear arms.

But thousands of Legionnaires cheered loudly when Reagan entered the hall and was introduced as both the president of the United States and as a member of Pacific Palisades Post 283 of the American Legion.

Reagan covered much the same ground as he did in his address earlier this month to the Veterans of Foreign Wars, charging that past American leaders hesitated or naively hoped for the best while the Soviet Union was left free to pile up new nuclear arsenals without any real incentive to negotiate arms reductions seriously.

He said weakness inevitably leads to trouble and can only encourage the enemies of peace and freedom. But he said that by being strong and resolute, the United States can keep the peace and even reduce threats to peace.

The president said he has kept his pledge to strive for arms reduction agreements with the Soviet Union but declared, "We will not, we cannot, accept anything that would be detrimental to our security."

He said the MX Peacekeeper missile and the program to develop a new, small single-warhead missile are critical to the nation's present and future safety. These weapons will ensure stability and deterrence by making it clear that Soviet aggression would never pay.

Both programs, Reagan said, are an essential incentive for the Soviets to negotiate seriously for genuine arms reduction because modernization goes hand-in-hand with deterrence.

"Many of our critics willfully ignore this interrelationship and focus their attention on some single point which does not address the central issue," Reagan declared.

"Often it's based on wishful thinking or downright misinformation. Our country has never started a war and we have never sought, nor will we ever develop, a strategic first-strike capability. There is no way that the MX, even with the remaining Minuteman force, could knock out the entire Soviet intercontinental ballistic missile force."

Reagan said the U.S. negotiating positions in the strategic and intermediate nuclear force talks in Geneva have been strengthened, but he asked the Legionnaires for their support as the administration approaches the next legislative round on appropriations for the MX this fall.

For the first time, he said, the Soviets are willing to talk about actual reductions in the strategic arms negotiations and are showing movement in the Vienna talks on verification measures needed to negotiate reductions in the conventional forces.

The president said an issue of critical importance to all Americans is the responsibility of peacemaker, which is the centerpiece of U.S. foreign policy, but he declared the nation has no intention of becoming policeman to the world.

He said the U.S. commitment to be a peacemaker means supporting its friends and defending its interests, most visibly in Central America, the Middle East and Africa.

He said that is why the United States supports a security shield in the Caribbean basin for nations threatened by the determination in Moscow and Havana to impose alien totalitarianism with bullets instead of ballots. He said the only purpose for the U.S. military exercises in the region other than training is to demonstrate America's commitment to the free aspirations and sovereign integrity of its neighbors.

There is a parallel U.S. commitment in Africa for economic development and the growth of democracies, he said. American economic aid is four times larger than is spent on security assistance in Africa, contrasted with Soviet military aid that outpaces other assistance by a ratio of seven-to-one.

"Add more than 40,000 Soviet and surrogate military personnel stationed in Africa and it's no wonder that Africa is rife with conflict and tension," Reagan said. "Naked external aggression is what is taking place in Chad today. In Chad, the U.S. is a partner in a multinational economic assistance package designed to get this tragically poor and strife-torn country on its feet. Without protection from external aggression by Libya, there can be no economic progress."

Reagan did not mention the arrival in Chad of French troops and war planes, a sore subject with France's President Francois Mitterand.

NATIONAL JOURNAL 6 August 1983 Pgs. 1624-1626, 1628

Administration Debates Arms Cuts With Congress As Well As the Soviets

Some in Congress, upset over lack of progress in arms reduction talks, demanded a revised Administration stance in return for their support of the MX missile.

BY MICHAEL R. GORDON

The MX missile soared through Congress recently when the Senate and the House passed authorization bills that provide for procurement, testing and deployment of an initial lot of the 10-warhead missiles.

On the surface, the votes for the MX seemed to be an endorsement of the Reagan Administration's contention that the missile is needed to modernize the U.S. strategic arsenal, increase the capability to strike "hardened" Soviet targets and strengthen the hand of U.S. arms control negotiators in Geneva. But for many Members of Congress, there is a larger issue at stake. For them, the vote was a referendum on the Administration's pledge to reform its arms control proposals.

Support of the MX has been "our part of an agreement with the Administration to proceed with a militarily controversial program in exchange for a strong commitment to proceed seriously and immediately with a reformulation of the U.S. START [strategic arms reduction talks] proposal," William S. Cohen, R-Maine, told the Senate on July 20.

That agreement may still be in jeopardy, despite the congressional show of support for the MX. As Cohen warned, unless the Administration makes major revisions in its arms control philosophy, the vote on the MX could turn out differently when the appropriations bill comes around.

While much attention has focused on U.S. talks with the Soviet Union in Geneva, the Reagan Administration is involved in an equally delicate arms control negotiation in Washington. One key factor in these informal talks is congressional skepticism about the practicality of the Administration effort to force a major restructuring of the Soviet strategic nuclear forces through a START agreement. Another is pressure on the Administration to commit itself immediately to a mutual U.S.-Soviet plan to "build down" their nuclear forces. At present, it is difficult to see how the Administration and congressional moderates will ultimately paper over their differences.

The basis for the current confrontation was laid in 1982, when the State Department, the Defense Department, the Joint Chiefs of Staff, the Arms Control and Disarmament Agency and the White House tried to hammer out a formal negotiating position for the START talks.

A key concern of Administration hardliners was to limit the "throw-weight" of Soviet missiles—the amount of payload they can carry. "Limiting throw-weight has been Ed Rowny's obsession for 10 years in conjunction with his close ally, Richard Perle," said a participant in the interagency negotiations, referring to START negotiator Edward L. Rowny and Richard N. Perle, assistant Defense secretary for international security policy. Eugene V. Rostow, former director of the arms control agency, was another strong proponent of restricting throw-weight.

The Soviet Union possesses a decided lead over the United States in missile throw-weight. The Soviet force of land and sea-based missiles is capable of carrying about five million kilograms. In contrast, the U.S. land and sea-based missiles carry about two million kilograms, according to the State Department.

The Soviet Union has concentrated on land-based missiles, which represent more than half of its launchers and carry 75 per cent of its deliverable nuclear weapons. Many of these land-based missiles are large, liquid-fueled systems such as the SS-17, SS-18 and SS-19. The United States has a more evenly distributed triad of bombers and land and sea-based missiles and has stressed the development of smaller, solid-fueled Minuteman missiles.

Nonetheless, some conservatives see the Soviet lead in throw-weight as an advantage that has political and military significance. The 1979 strategic arms limitation treaty (SALT II) prohibited the Soviet Union from taking full advantage of its lead in throw-weight by restricting the number of warheads that could be placed on a single missile. But, for SALT critics, that was not good enough because it left the Soviet Union with the technological option to "break out" of the agreement by putting many more warheads on their missiles than the treaty allowed. The large throw-weight of a missile also makes it possible to carry large warheads.

Perhaps more important, conservatives who have portrayed the Soviet Union's heavy land-based missiles as a first-strike threat to the U.S. Minuteman missile force have seen reductions in throw-weight as a "real" arms control measure that would reduce the Soviet arsenal of medium and heavy missiles, something that SALT II did not require.

But other experts view the emphasis on throw-weight as a fruitless quest to pressure the Soviet Union to dispense with the most prized elements of its strategic forces. To single out throw-weight as the basis of an arms control agreement is "to pick out the coin of the realm which is most difficult to negotiate," said William G. Hyland, a former deputy national security adviser under President Ford.

"Throw-weight is political poison," added a congressional staffer associated with moderate House MX supporters. "No matter how you work it technically, when the Administration says throw-weight, Congress reads that as no agreement."

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DEBATES . . . CONTINUED

Some experts also argue that warheads provide a better measure of the arms balance than throw-weight because they say that improvements in accuracy minimize the advantages of destructive power and that warheads represent the potential number of targets that may be struck. If bombers are included, the United States has about 2,000 more warheads than the Soviet Union. Not counting bomber-delivered weapons, the United States and the Soviet Union both have roughly 7,000 warheads on their land and sea-based missiles. *(See NJ, 4/16/83, p. 800.)*

GETTING STARTED

As it turned out, the negotiability of a proposal based on throw-weight was a key concern during the 1982 wrangle over the initial U.S. START position. As those deliberations began, the arms control agency stressed the need to shape a negotiating position based on the weight of new warheads added to each side's arsenal and sought to relate warhead weight to missile throw-weight.

The arms control agency also proposed a limitation on warheads, though this restriction has wide support and several other agencies claim authorship of it.

The office of the of Defense Secretary, in the person of Perle, stressed the need to deal with throw-weight directly.

The Joint Chiefs of Staff put forward a proposal that emphasized deep reductions in the number of land and sea-based missile launchers to 850. The United States has 1,593 missile launchers with 7,109 warheads; the Soviet Union has about 2,400 missile launchers with about 7,000 warheads.

The State Department favored higher launcher limits but later lined up with the Joint Chiefs of Staff. The department also opposed couching an agreement in terms of throw-weight.

As the START position was hammered out, compromises were struck that resulted in a patchwork agreement. "It was a bit of a Chinese menu," acknowledged a White House official.

The START plan was divided into two phases, and it was agreed that throw-weight would not be directly addressed in the first. Instead, throw-weight would be indirectly restricted through "collateral constraints." For example, the over-all number of warheads that could be placed on land and sea-based missiles was limited to 5,000, of which no more than 2,500 could be mounted on land-based missiles.

The proposal stipulated that there would be a series of launcher limits. Within the over-all limit of 850 launchers, no more than 210 in the Soviet force could be for medium and heavy land-based missiles: the SS-17, SS-18 and SS-19. A further sub-limit of 110 was set for the SS-18, the largest Soviet missile. The Soviet Union has about 770 SS-17, SS-18 and SS-19 missiles, 308 of them SS-18s.

In the second phase of the talks, throw-weight would be taken up directly. According to a report by the Carnegie Endowment for International Peace, the objective would be to reduce U.S. and Soviet throw-weight to below present U.S. levels. Discussion of air-launched cruise missiles—a major Soviet concern—would also be postponed until this phase of the talks.

The United States, however, soon took up the issue of bombers and air-launched cruise missiles after the Soviets raised it, and in the third round of the talks last winter proposed a limit of 400 on bombers and a counting rule that held that each bomber carrying cruise missiles would be considered to have 20 missiles. Sea-launched cruise missiles have never figured in the formal U.S. negotiating position, partly because they present formidable verification problems.

As some officials tell it, the dividing line between the two phases of the talks was deliberately left ambiguous. On some occasions, START negotiator Rowny suggested that both phases of the talks had to be completed before a new treaty would be signed. But according to a State Department official, the agencies had received "presidential guidance" to be ready to implement the first phase of the proposed agreement before the second phase was concluded in the unlikely event that the Soviets agreed with the U.S. position.

This "brokered" START position attracted considerable criticism. For one thing, the severe restrictions placed on missile launchers preserved or, under some projections, even worsened the ratio of Soviet warheads to U.S. missiles.

"Ironically, neither of the two most politically prominent proposals, the nuclear freeze and the President's deep-cuts approach, does much to solve the problem of strategic vulnerability that undermines crisis stability," concluded the report by the Carnegie Endowment panel of former government officials and defense specialists.

"If the Soviets had accepted our START proposal, we would have had to reject it," said Paul C. Warnke, chief SALT II negotiator and director of the arms control agency during the Carter Administration.

The President's Commission on Strategic Forces, chaired by retired Gen. Brent Scowcroft, more gently chided the Administration's START proposal in its recent report. Along with its other recommendations to deploy up to 100 MX missiles and commence developing a small, mobile missile dubbed "Midgetman," the Scowcroft commission recommended dispensing with limits on missile launchers in favor of limits on warheads.

Privately, some Administration officials agreed with this criticism. One said the low launcher limit was established in part to give the public the impression that the Administration was pushing for deep reductions. Other officials noted that the original launcher limit was proposed by the Joint Chiefs of Staff and suggested that the 850 figure had more to do with the Air Force's and Navy's procurement plans than with efforts to craft a stable strategic balance.

In effect, low launcher limits helped the case for the planned multi-warhead

Richard N. Perle, a Pentagon official, Edward L. Rowny, U.S. negotiator at the START talks, and Eugene V. Rostow, former head of the Arms Control and Disarmament Agency (from left), are outspoken proponents of limiting the throw-weight of Soviet missiles.

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DEBATES...CONTINUED

missiles, such as the MX, by blocking the option to produce a large number of single-warhead missiles. Moreover, this approach reflected what the military might opt for in any event.

"The United States could comply with START limits by retiring all 450 single-warhead Minuteman II missiles (the oldest in the inventory), along with 50 Minuteman III missiles [with three warheads each] in order to clear the way for deployment of 100 MX missiles with 10 warheads apiece," noted the Carnegie report. Nor would the proposal prevent the deployment of 100 B-1B bombers and thousands of cruise missiles. The deployment of Trident II submarine-launched missiles could also go forward.

But the proposed launcher limits would be far tougher on the Soviets, whose land-based missiles would be subject to special restrictions under the START proposal. As the Carnegie report noted, "A major restructuring of the land-based Soviet strategic force, which carries 75 per cent of Soviet warheads and striking power, would be necessary."

STARTING OVER

In the wake of the Scowcroft commission report and calls by advocates of small one-warhead missiles to drop the launcher limits or raise them dramatically, the Administration took a second crack at formulating a START proposal. In the interagency deliberations last spring, the arms control agency, now under the stewardship of Kenneth D. Adelman, pushed once again for a limit on throw-weight. *(For a look at Adelman and the agency, see box, pp. 1626-27.)*

In private discussions with Members of Congress and their staffs, Adelman outlined a proposal that would establish a throw-weight limit higher than that carried by U.S. missiles but substantially lower than that of Soviet missiles.

The idea behind the proposal would be to secure "equal rights" to the same amount of throw-weight. But the proposal would not necessarily result in "equal limits" because the United States would not exercise its right to build up to its throw-weight ceiling.

This proposal is billed by its proponents as a more flexible way of addressing the throw-weight question than setting limits on Soviet heavy and medium missiles. Such an agreement would allow the Soviet Union to decide which missiles it wanted to keep.

Some congressional staffers who have discussed this notion with Adelman, however, maintain that the Soviet Union would find it unacceptable. "Our view is that the Soviets would have a difficult time trusting us," said one.

A State Department official argued that the throw-weight limits discussed in some interagency meetings would provide little flexibility in practice and would in effect require the same drastic reductions in throw-weight as under the previous START proposal.

During the second round of interagency talks, however, Adelman was not the most influential proponent of basing an agreement on throw-weight. Perle, representing the Defense Department, also pushed for throw-weight restrictions. But at the last minute, an official said, "Perle struck a deal with the Joint Chiefs of Staff" and left the arms control agency as the sole proponent of direct throw-weight limits. With the Joint Chiefs, Perle favored altering the 850 limit but leaving the sub-limits on Soviet medium and heavy missiles.

Paul C. Warnke, chief SALT II negotiator and head of the arms control agency during the Carter Administration: "If the Soviets had accepted our START proposal, we would have had to reject it."

The State Department favored raising the launcher limit as well as the launcher sub-limits on medium and heavy missiles.

The final outcome, in May, produced a draft treaty that would raise the launcher limit from 850 to a higher level—perhaps 1,200—to be negotiated. The low limits on medium and heavy Soviet missiles, spelled out in the original START proposal, were left on the negotiating table, as was the 2,500 ceiling on the number of warheads that could be mounted on land-based missiles. The United States, however, took the position that such restrictions were negotiable and invited Soviet suggestions on alternative ways to deal with throw-weight. A separate ceiling was proposed for bombers.

After the revision of the START proposal, a House staffer reported, Perle called Norman D. Dicks, D-Wash., a key House moderate who has attempted to tie MX production to reform of the Administration's arms control policy, and complained that the Administration had been forced to back away from throw-weight under pressure from Congress.

Some congressional staff members read this call as a sign that Perle's influence within the Administration was waning. "Perle and Rowny's wings have been clipped," said one.

In contrast, an Administration official suggested that Perle's call to Dicks was a bit of political theater designed to give House moderates the impression that they were prevailing over Perle on key issues when in fact only "minor adjustments" to the START proposal were made. The Soviets have reportedly been far more concerned about the sub-limits on their medium and heavy missiles than on the over-all 850-missile limit.

Another difference between the superpowers lies in the treatment of bombers. The United States has argued that missiles are potential first-strike weapons and need to be subjected to a separate limit. The Soviet Union, which has fewer long-range bombers than the United States, favors subjecting missiles and bombers to a single ceiling.

STARTING TO WORRY

Some moderate congressional supporters of the MX continue to question the Administration's intentions, although there is a diversity of views among the moderates. House Members, led by Les Aspin, D-Wis., Dicks and Albert Gore Jr., D-Tenn., have sought assurances from the Administration that it would be flexible in the START negotiations, especially on sensitive issues such as the limits on heavy missiles. And, until recently, some staffers had been encouraged by signs that the White House might be moving to assume more direct control over the arms control process.

In July, for example, the White House established a special committee, chaired by national security adviser William P. Clark, to manage arms control policy. Committee members include Perle; Fred C. Ikle, Defense undersecretary for policy; Kenneth W. Dam, deputy secretary of State; Richard R. Burt, assistant secretary of State for European Affairs; Adm. Jonathan Howe, director of the State Department's Bureau of Politico-Military Affairs; and Adelman and others.

CONTINUED NEXT PAGE

DEBATES...CONTINUED

The White House also has moved to beef up its arms control expertise by naming Ronald F. Lehman II as senior director of the NSC's arms control unit. Lehman previously worked under Perle at the Pentagon as deputy assistant Defense secretary for international security policy.

Another addition to the NSC is Christopher M. Lehman, no relation to Ronald Lehman but the brother of Navy Secretary John Lehman. He had previously served as director of the office of strategic nuclear policy in the State Department's Bureau of Politico-Military Affairs.

For House moderates, by far the most important personality was Robert C. (Bud) McFarlane until his recent appointment as successor to special Middle East envoy Philip C. Habib. House moderates conceived of McFarlane as a pragmatic White House conservative likely to encourage a compromise position on arms control, largely in the interest of improving President Reagan's prospects for reelection.

"McFarlane was the key," said an aide to a Democratic House Member, who said McFarlane had influenced Reagan's recent speeches on arms control while draft speeches by Perle and other hard-liners had been rejected. House MX moderates were not consulted about McFarlane's appointment as Middle East envoy and are distressed at his departure from the arms control area. "Who in the hell do we talk to now?" asked another staffer.

In general, House moderates have little confidence in the flexibility of START negotiator Rowny, who also draws criticism from some conservative Administration officials. They compare him unfavorably with Paul H. Nitze, chief negotiator to the talks on intermediate-range nuclear weapons, also in Geneva.

In meetings with the White House, House moderates have suggested, but not demanded, that Rowny be replaced.

House moderates have tried in other ways to bind the Administration to various Scowcroft recommendations. Aspin, for example, successfully pushed an amendment to the 1984 defense authorization bill that would link deployment of the MX to the development of the single-warhead Midgetman missile.

Specifically, that amendment would restrict to 10 the number of MX missiles that could be deployed before a Midgetman prototype had undergone a flight test. Also, no more than 45 MX missiles could be deployed before the Midgetman missile entered full-scale engineering development.

Aspin's amendment would also limit the Midgetman to 33,000 pounds—a restriction that Aspin explained was intended to prevent the Air Force from transforming it into a larger "Tubby-man." The amendment did not encounter Administration opposition—and is in line with Air Force plans.

Moderate MX supporters in the Senate are troubled by the Administration's arms control position. Cohen and Sen. Sam Nunn, D-Ga., who favor a "build-down" proposal under which more than one warhead would be retired for every new warhead that was deployed, have complained that the Administration has not gone far enough in reforming its arms control policies. In his speech last month, Cohen complained that he saw "reluctance" on the part of the Pentagon to approach a build down "in a positive way," though he praised McFarlane and Shultz for their cooperation.

Congressional moderates such as Rep. Les Aspin (left) and Sen. William S. Cohen say Reagan Administration flexibility in the arms control talks is needed in return for support of the MX missile.

Cohen warned that if the Administration did not incorporate a build-down proposal in its current negotiating stance, he would side against production of the MX missile by the time the Defense appropriation bill came around.

Administration officials have tried to maintain support from congressional moderates for their strategic program by arguing that the Administration's military buildup and its tough negotiating line will induce the Soviets to make some significant concessions.

Specifically, Perle told reporters that recent Soviet counter-offers in START showed the virtues of the Administration's hard-line approach. The Soviets would set an over-all limit on missiles and bombers at 1,800—down from the 2,250 ceiling that the SALT II treaty would have eventually imposed. The Soviet proposal would set a 1,080 limit on land and sea-based missiles with multiple warheads, compared with a 1,200-missile limit in SALT II.

While Perle said he saw the Soviet moves as steps "in the right direction," he also argued that the concessions were not significant because they did not seriously affect the Soviet Union's medium and heavy missiles.

The Scowcroft commission, for its part, may play the role of matchmaker between supporters and foes of throw-weight restrictions in the Congress and the Administration. In a recent meeting with House Members, Scowcroft said his panel would study ways to include bombers in an agreement that regulated throw-weight. Such an inclusion could facilitate a START accord because the United States has a lead in bombers and it would narrow the U.S.-Soviet throw-weight gap.

This approach would present many technical difficulties, however. Some Pentagon officials agree, for example, that bomber and missile throw-weight cannot be equated because bombers would have to face an extensive Soviet air defense system.

Other experts, such as Hyland, argue that the best prospect for an agreement involves using warheads as the primary measure of strategic power and merging the START talks and the parallel negotiations on intermediate range nuclear weapons. Throw-weight, Hyland maintained in an interview, would inevitably be reduced as a by-product of deep reductions in the number of warheads and missile launchers.

He argued, however, that some throw-weight limits were appropriate for the new single-warhead missiles being developed by the Soviet Union and the United States, to ensure that such missiles could not be transformed into weapons that would carry many warheads.

Whether the gap between Congress and the Administration will be bridged is not clear. Some experts maintain that the outcome of the domestic negotiations will determine the success of any arms control negotiations with the Soviets.

"We've got to create a situation where the Soviets can't play one part of the American body politic off against the other," said R. James Woolsey, a former Navy undersecretary and a member of the Scowcroft panel. "Somehow we've got to get it together." □

DEFENSE DAILY 15 August 1983 Pg. 240

August 15, 1983 **Defense Daily** Page 240

FORMER AF OFFICIAL SAYS MX THREE TIMES AS CAPABLE AS SS-18

A former Air Force official, who opposes deployment of the MX ICBM, says that the U.S. is not catching up with the Soviet heavy SS-18 ICBM by deploying the MX but instead instituting a new arms spiral by introducing a weapon with three times the hard target capability of the Soviet weapon.

Dr. Robert M. Bowman, director of advanced space programs for the Air Force in the Carter Administration and now president of the non-profit Institute for Space and Security Studies, specifically took exception to the statement by Sen. James McClure (R-Ida.) that the Soviets have already deployed "820 new ICBMs equivalent to our MX" (Defense Daily, Aug. 10), including 330 SS-19s, 308 SS-18s and 150 SS-17s.

"The fact is, the Soviet's don't have any ICBMs equivalent to our MX," Bowman said. "The Pentagon index for measuring a weapon's hard-target kill potential rates the MX three times as capable as the best Soviet missile--the SS-18."

[The 308 SS-18's now deployed by the Soviets each carry 10 warheads. The 100 MX which the U.S. plans to begin deploying in 1986 will also carry 10 warheads, although they will be smaller than their Soviet counterparts.]

Bowman said the assertion made by McClure, and earlier by others, that the Soviet warheads are more accurate than U.S. warheads is simply not true.

The former Air Force official reported that the most accurate Soviet warheads have a CEP (Circular Error Probable) of "about 1200 feet" while U.S. accuracies, actual and projected, are as follows:

* Minuteman III ICBM	700 feet
* MX Peacekeeper ICBM	300 feet
* Pershing II IRBM	130 feet
* Tomahawk Cruise Missile	60 feet

Bowman said that a July 1983 study conducted by E-Systems shows that the Soviets "are still 5 years behind the U.S. in accuracy improvements" (see contrasting view by Defense Department, Defense Daily, July 25, p. 124).

He added that since 65 percent of U.S. strategic warheads are on bombers and submarines at sea compared to only 4 percent for the Soviets, "even our present Minuteman missiles present a greater first-strike threat to Soviet forces than theirs do to ours."

WASHINGTON TIMES 30 August 1983 Pg. 5

Aspin asks panel to set arms plans

By Walter Andrews
WASHINGTON TIMES STAFF

Rep. Les Aspin, D-Wis., who led Democrat support in the House for the MX missile, said yesterday the Scowcroft commission should be used to formulate new arms control proposals.

The Wisconsin Democrat criticized the administration's own arms control proposals as vague and murky.

It was President Reagan's Scowcroft commission (named after its chairman, retired Air Force Gen. Brent Scowcroft) which put together the package that was instrumental in getting congressional approval of the MX missile.

"Approval of the MX was clearly contingent on a new approach in arms control. . . . The arms control part of the package has not been delivered. People are wary of being snookered," Aspin told a Capitol Hill press conference.

Aspin said the Scowcroft commission should play a major role in formulating a bipartisan arms control package for the Oct. 6 Geneva Strategic Arms Reduction Talks (START).

"Without that, the administration will lose its MX. That's not a threat from anyone who's voted for the MX; it's simply a description of the political realities," Aspin commented.

He noted that in the last House authorization vote of 220 to 207, support for the MX had deteriorated to 13 votes, down from a margin of 53 in an earlier vote. Congress will vote on the actual money appropriation for the MX sometime after it returns from the summer recess next month.

Aspin said Democrat supporters of the MX will use the leverage gained from the latest close vote to "make it (arms control) a bipartisan approach."

One benefit, he observed, could be a continuing U.S. arms control policy and not abrupt changes each time a new administration comes into office.

Aspin said the odds are against an arms control agreement being reached with the Soviets on intercontinental nuclear weapons before the presidential elections in 1984, although a statement of principles could be achieved.

"A basic outline of the thing can be done fairly quickly," he said.

Aspin placed his proposal for a bipartisan approach in a letter to Scowcroft.

The congressman said he had discussed the proposal with some unnamed officials in the White House, but added, "I've gotten no assurances . . . I'm not talking from assurances."

Aspin said Reagan's support is essential if the bipartisan approach is to work.

Scowcroft is out of town, and could not be reached for comment. The chief U.S. negotiator in the Strategic Arms Reduction Talks, Ambassador Edward L. Rowny, also was out of town. His office declined comment on the Aspin proposal.

In its original START proposals, the United States had sought to place specific limits on warheads, missiles and bombers, large missiles and the total nuclear payload capability or throw weight of these weapons.

Earlier this year, in a more flexible approach, the United States proposed to keep the firm limit of warheads at 5,000 and put aside all the other restrictions to which the Soviets had objected.

In its more flexible approach, the United States offered to negotiate a throw weight limit somewhere between the 1.8 million kilogram capability of American weapons and the 5.6 million kilogram capability of the Soviets.

In effect, the ball was thrown in the Soviet's court.

"Approval of the MX was clearly contingent on a new approach in arms control. . . . The arms control part of the package has not been delivered. People are wary of being snookered," Aspin told a Capitol Hill press conference.

ST. LOUIS POST DISPATCH 15 August 1983 Pg. 15

The 'Peacekeeper' Foments Unrest On Plains

By Paula Dittrick
Of United Press International

KIMBALL, Neb.

THEY CALL IT the Peacekeeper, but some western Nebraska and eastern Wyoming residents wonder how 100 MX missiles with 10 warheads each could be called peaceful.

Others say they would welcome deployment of the missiles with open arms because they love their country.

The Air Force has dubbed the MX the Peacekeeper, saying the missile is the countermilitary necessary to deter the Soviets from using their nuclear weapons against the United States or its allies.

Plans call for the missiles to be placed in existing Minuteman silos on Warren Air Force Base. The silo field includes 200 silos and spans 12,600 square miles. An existing 100 Minuteman missiles would be left in place.

Critics of the MX have suggested that citizens would be powerless to limit the number of missiles deployed once production started. Some have said the 100 figure is a bargaining chip to use against the Soviets.

THE PEOPLE who live on the windswept plains are seldom polled about the Air Force plans. When asked individually, their answers are as diverse as the land on which they live.

Linda Kirkbride, a rancher in rural Laramie County, Wyo., said she would like to concentrate her energies on raising her three children and tending her garden on the family's 60,000-acre spread.

But for Mrs. Kirkbride, 34, the presence of three Minuteman silos on the ranch has shaken up those priorities. All three silos are to house MX missiles if the deployment becomes a reality.

So Mrs. Kirkbride became a co-founder of Wyoming Against the MX in an area that draws its lifeblood from jet fuel and names its streets after nuclear weapons.

Her role took her to the Soviet Union in December 1982 on a journey called "Ranchers for Peace."

To Marian Lenzen of Sidney, Neb., deployment of the missiles means the sacrifice of agriculture and that to her does not make much sense.

"Agriculture is the United States' greatest strength," the 55-year-old rancher said. "It's the one thing we've got that Russia has never ever been able to duplicate or even come close to. And yet, you're going to come out here and sacrifice your agriculture for a missile that isn't even needed?"

Mrs. Lenzen is a co-founder and director of Nebraskans Opposed to MX, or NO-MX.

"As far as I'm concerned, I'm ground zero if the MX comes into Kimball County and Banner County. . .I'm going to have my bag packed, I'm going to have it sitting at the back door and I'm going to be ready to get the hell out of here," she said.

She said she was prepared to live with the Minuteman, but not the MX.

"People ask me, 'What's the difference?' My God, there's a hell of a lot of difference," she said. "If there wasn't any difference, then why do we need the MX?"

FORTY MILES to the west in Kimball, Neb., City Administrator Robert Arraj calmly awaits the proposed deployment of the MX.

Arraj, who watched the Air Force replace its Atlas missile system with Minuteman missiles in area silos, said Kimball was unique.

"It's just been a way of life," Arraj said of being surrounded by missiles. "We haven't even given it a second thought."

Both the Kimball and Sidney city councils have voted to support the basing of the MX missiles in their areas.

Save America Now, a group endorsing the MX deployment, has members in both communities.

At a Save America Now meeting in April, spokesman Wayne Robbins, a former mayor of Kimball, said: "You're either for America or against America. We better just draw a line and have our representatives get on one side or the other, so we know who to vote for. It's the first duty of every American to stand up for this country's defense."

LOS ANGELES TIMES 22 August 1983 pg. 5B

The Critical Link Between MX Funds, Arms Control

By JOSEPH KRAFT

Before leaving town for a vacation in California, President Reagan's national-security adviser, William P. Clark, set the machinery rolling toward the next step in arms-control policy. The problem is to integrate congressional support for defense appropriations with progress in U.S.-Soviet negotiations. The answer, almost certainly, will be a new call on the bipartisan presidential commission headed by Gen. Brent Scowcroft.

At present the decisive forum for discussion is the Senior Arms Control Policy Group, an interagency panel created last month and headed by Clark. Besides Clark, those participating include Deputy Secretary of State Kenneth W. Dam; Undersecretary of Defense Fred C. Ikle; the arms-control administrator, Kenneth A. Adelman, and, from the National Security Council staff, Ron Lehman. Assistant Secretary of State Richard R. Burt and Assistant Secretary of Defense Richard N. Perle, though on vacation last month, are also members.

In a break with the conventional norm, the group has held sessions with leading Democratic defense experts from Congress. Among others, Sen. Sam Nunn (D-Ga.) and Rep. Les Aspin (D-Wis.) have been consulted. Out of the conversations has emerged a clear sense of the link between defense appropriations and arms control.

Defense appropriations are critical because, unless the President can win congressional authority for his projected military buildup, the Soviets are under no pressure to come to terms on arms control. The rhetoric of Defense Secretary Caspar W. Weinberger, however, has not impressed Democratic experts. They find many flaws in his basic approach, and have fixed on one difficulty in particular—the scheme for basing the new multi-warhead MX missile.

After two projected basing schemes failed to win congressional support, the President appointed the Scowcroft commission. In its report in April the commission recommended installing 100 MX missiles in existing silos and then moving toward a small mobile weapon with a single warhead, the Midgetman. The theory was that the 100 larger weapons could be used as a bargaining chip in an arms-control deal. The Midgetman could be deployed in ways fostering a ratio between the number of U.S. weapons and the number of Soviet targets, entirely consistent with arms control.

The defense Democrats in Congress bought the Scowcroft commission concept.

But, being uncertain of the President's commitment to arms control, they moved to keep MX appropriations on a short string, doling out money bit by bit in return for manifest progress in the negotiations with the Soviet Union.

In the last legislative test the House supported the authorization of funds for the MX by less than a score of votes. Since then there has been an erosion of Democratic backing for the MX, with all leading presidential candidates coming out against it. The vote on appropriations for the missile is set for the fall. Aspin and other Democratic supporters of the MX concede that unless they have some new step forward in arms control to show for their troubles they will not be able to hold a majority for appropriations.

The negotiating situation dovetails exactly with the legislative requirement. Under pressure from Congress and the European allies, Reagan has already moved from his original bargaining position. But progress in the talks on Intermediate Range Forces or Euromissiles, clearly awaits the test of political strength that will come when the North Atlantic Treaty Organization moves to deploy 572 Pershing 2 and cruise missiles in Germany, Britain and Italy this fall. The so-called START talks on intercontinental missiles are hung up on American proposals for major cutbacks in Soviet blockbuster missiles—the SS-18s and 19s.

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FUNDS...CONTINUED

The Scowcroft commission, being both bipartisan and expert, is ideally suited to redefine the U.S. position for the START talks. Aspin suggested such an assignment informally when he met with Clark's group. Having consulted colleagues in Congress, he is now putting the idea in writing.

So far no decision has been made, and some elements in the Clark group oppose the suggestion. The Pentagon has never liked ceding strategic planning to the Scowcroft commission. Clark's own staff has said that giving another assignment to the commission would be a confession of incompetence by the Reagan Administration. But the State Department sees in the commission an ally against the Defense Department hawks. If Secretary of State George P. Shultz climbs aboard, the need to push the MX appropriation past Congress would prove decisive. The Scowcroft commission would be back in business, and arms control would still have a future.

Joseph Kraft is a syndicated columnist in Washington.

THE LINCOLN STAR 24 August 1983 Pg. 34

Orr: Farmers welcome MX

Air Force secretary makes stopover enroute to Washington

U.S. Air Force Secretary Verne Orr said Tuesday he believes the prospect of having MX missiles based in Minuteman silos in western Nebraska is being greeted with enthusiasm by area farmers.

"I think this has been accepted by most farmers," he said. "In fact, some of them speak with pride, like, 'My MX in the back 40.'"

The Air Force plans to place 100 MX missiles — each with 10 nuclear warheads — into existing Minuteman silos in the Nebraska Panhandle, eastern Wyoming and several other states.

Nevada and Wyoming also have been very supportive, Orr said, but Utah has been a bit anxious about the situation.

Orr spoke for about 10 minutes at the Nebraska Air National Guard base in Lincoln Tuesday, during a refueling stop enroute to Washington, D.C., from Hill Air Force Base at Ogden, Utah.

He said his visit to Utah dealt with the recent shortage of spare military parts for the U.S. Air Force.

"Over the past 1½ years, prices for spare parts in our weapons system have been growing much faster than they should — and they were overpriced to begin with," Orr said.

Too little attention was paid to the spare parts problem between 1974 and 1979, according to Orr. "And only now are those spare parts hitting the shelves in bases like this (Lincoln)."

Orr said the Air Force is developing several programs to ease the situation, such as more active competition for suppliers and improved bidding procedures.

Orr also said:

— Americans have a good fighting edge over the Soviets in view of the fact that American-built planes in Lebanon scored 90 victories to the Soviet planes' two.

— The Air Force is starting to provide better equipment to its guard and reserve bases, rather than favor the active bases.

— He is working to improve "people programs" of the Air Force — better housing and increased travel expenses.

BALTIMORE SUN 7 September 1983 Pg. 4

Pro-defense climate expected in Congress

By Charles W. Corddry
Washington Bureau of The Sun

Washington — Key congressional and administration sources expect firmer support for the Reagan defense program but no immediate effort to increase it in the aftermath of the Soviet Union's destruction of a South Korean airliner.

It may now be easier to win forthcoming votes on the MX missile, the centerpiece of the strategic nuclear weapons part of the program, but much still will depend on President Reagan's seriousness and flexibility on arms control, several sources said.

Over the longer term much will depend on Soviet actions regarding the airliner incident, arms-control negotiations and other issues, they said.

On the matter of defense in general, Senator Robert C. Byrd (D, W.Va.), the minority leader, said that the "upside" to the plane incident could be "even stronger support" in Congress. There would certainly not be a reverse effect — attempts to cut — he said.

The first test — which is unlikely to be much of a test at all — is due next week when the House and Senate are scheduled to vote on the fiscal 1984 defense authorization bill.

This policy measure authorizes the later appropriation of $187.5 billion — $10.5 billion less than the administration requested — for research; development and purchase of weapons and equipment, and operations and maintenance of the forces in the year starting October 1.

The measure carries $4.8 billion for the MX and for start-up work on a small intercontinental missile that is favored by congressional arms-control advocates.

The airliner's destruction may further diminish the chances of a challenge to MX funds next week, as Representative Les Aspin (D, Wis.) suggested yesterday. He is a leader of a group of liberal-to-moderate Democrats supporting the MX and simultaneously demanding progress on the small missile and on arms negotiations with Moscow.

The next real challenge to the MX had been expected later in the fall when the main defense appropriations bill, now being written in committees, reaches the House floor. The bill provides the funds authorized in the policy measure and, additionally, money to pay the forces.

A challenge still is expected then. Majorities for the weapon in the House have been narrowing, and opponents have planned to make a major effort during the appropriations debate, probably in November. By then much in U.S.-Soviet relations could change, or seem to change, and thereby affect voting.

Representative Jim Wright (D, Texas), the House majority leader, said the airliner incident had "enhanced the president's chances" of winning on the MX in the fall appropriations votes. Mr. Wright has voted for the missile once this year and against it once.

The first reaction of various informed congressional and administration sources was that significant change in the defense program, if any were to result from the shooting incident, would show up in the president's fiscal 1985 budget, to be sent to Congress in January.

Cut severely this year, by their own standards, administration officials may seize on the incident as rationale for seeking a bigger increase next year than they might otherwise have thought politically possible.

Mr. Reagan had proposed a 10 percent increase, after compensating for inflation, for fiscal 1984. Congress has drawn the line at 5 percent. The internal defense debate in the administration now is about how much of an increase to request for 1985. The airliner incident may embolden planners to go for 10 percent.

Moscow's behavior in the meantime will have a heavy influence on decisions to be made between now and December.

Republican leadership sources said yesterday there is no plan now to try to get an increase in the 1984 measure coming up next week.

The reason is clear-cut. The authorization bill was fashioned by a Senate-House conference committee during long hours after bruising debates in both houses preceding their passages of separate measures.

With all constituencies now reasonably well satisfied, no one apparently is eager to reopen a debate on more defense, which could in turn lead to reopening the whole issue of domestic spending and taxation.

CONGRESSIONAL QUARTERLY 30 July 1983 Pgs. 1543-1546

Critics Encouraged by Close Votes:

MX Survives Heavy Attacks As Congress OKs Defense Bill

President Reagan's plan for the MX missile retained its numerically comfortable but politically tenuous Senate majority July 26, when a move to delete MX procurement funds from the fiscal 1984 defense authorization bill (S 675) was rejected 41-58.

The move was led by Gary Hart, D-Colo., and Mark O. Hatfield, R-Ore.

Senators lined up essentially as they did May 25, when the Senate approved the start of MX flight tests. The pro-MX majority consisted of most Republicans and a dozen Democrats who typically take a hard line on defense issues.

The only change in the July 26 tally compared with the earlier vote was Bob Packwood, R-Ore., who had voted for flight testing but opposed the fiscal 1984 authorization. *(Vote 214, p. 1583; May 25 tally, vote 114, Weekly Report p. 1084)*

The Senate then rejected 42-57 an amendment by Daniel Patrick Moynihan, D-N.Y., that would have barred deployment of MX. Lawton Chiles, D-Fla., joined the anti-MX side of that vote. *(Vote 215, p. 1583)*

But Hart, the leader of a group of about 15 MX opponents who had filibustered the bill for nearly two weeks, claimed a victory far more significant than the gain of one vote.

"A case [against the missile] has been made and not refuted," he told reporters after the vote.

The case Hart and his allies had emphasized was that MX would make the U.S.-Soviet nuclear balance more dangerous because of the decision to deploy it in existing missile silos, which are vulnerable to Soviet missile attack. The deployment would force the United States to adopt a policy of "launch-on-warning," the critics said, placing the U.S. nuclear force on a hair trigger to be pulled at the first sign of enemy attack.

Public and congressional unease over that prospect would be exacerbated by a general rise in international tensions arising from the volatile situation in Central America, Hart predicted. *(Story, p. 1535)*

Since the House had approved MX in its version of the defense bill by a margin of only 13 votes, he said, there is a good chance of killing procurement of the missile when Congress takes up the defense appropriations bill later this year, unless there is a radical improvement in prospects for a U.S.-Soviet arms control agreement.

Defense Bill. After rejecting the anti-MX amendments, the Senate passed S 675 on July 26 by a vote of 83-15. *(Vote 217, p. 1583)*

The House version (HR 2969) was passed several hours later, 305-114, early on July 27. *(Vote 261, p. 1586)*

The Senate bill authorizes about $186 billion for weapons procurement, military research and operating costs. The House bill authorizes $187.4 billion for the same programs.

(The Senate bill had included nearly another $13 billion for military construction and for nuclear weapons programs run by the Department of Energy. But by unanimous consent, those two sections were removed from S 675 and passed as amended versions of separate bills: HR 2972, authorizing military construction and S 1107, authorizing the Energy Department's military programs.)

Major differences between the two bills include initial production of a new type of lethal chemical weapons called binary munitions — rejected by the House — and more optimistic Senate estimates of the impact of inflation. *(House action, earlier Senate action, Weekly Report p. 1483)*

Senate MX Debate

During the nearly two weeks that Hart and his allies tried to draw the pro-MX faction into debate, they attacked the new missile for its impact on arms control and on the state of the U.S.-Soviet nuclear balance.

How to Negotiate?

All parties to the battle seemed to endorse the view that the long-term goal of U.S. nuclear arms policy should be abolition of large, accurate multiple-warhead (MIRV) missiles such as the MX, the 600-plus Soviet SS-18s and SS-19s already deployed and the new Soviet SS-24, currently undergoing flight tests.

This was the position of a White House advisory panel chaired by former presidential national security adviser Brent Scowcroft which proposed the MX plan now pushed by the administration. *(Weekly Report p. 727)*

—By Pat Towell

Sen. John Tower

Sen. Gary Hart

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MX SURVIVES...CONTINUED

The argument is that if both nuclear superpowers deploy roughly the same number of MIRV missiles, the balance of nuclear terror will be unstable because whichever side attacked first could, theoretically, destroy its opponents' missiles while retaining a large part of its own force for subsequent attacks.

That threat would be obviated if MIRVs were replaced with small, single-warhead missiles, it is argued, since either power then could destroy its opponent's missiles only by using up its own. An amendment by Carl Levin, D-Mich., endorsing that proposition was approved 92-6. *(Vote 216, p. 1583)*

According to MX supporters, including the Scowcroft panel and the administration, deploying 100 MXs in existing silos would boost the chances of negotiating the eventual abolition of MIRVs by posing the same kind of threat against the Soviet missiles that they currently pose against the U.S. missile force.

"The Soviets do not enter into arms control out of some benevolent desire for peace," Tower said, but rather when "there is a compelling military rationale for doing so." In this view, the 1972 treaty limiting anti-ballistic missiles (ABM) was the model of how to cut an arms control deal with Moscow: Only after Congress had agreed to build a U.S. ABM system did the Russians agree to a treaty limiting their own similar weapons.

But MX opponents underscored a different bit of arms control history — the deployment in the early 1970s of the very MIRV missiles that currently are the source of strategic instability. That began as a U.S. effort to have a military edge over Soviet forces but resulted simply in the Russians matching the U.S. weapon, they argued.

"I defy any senator to cite one weapon system we have built that has brought the Soviets closer to the bargaining table," Hart said. "There are not any."

Moreover, the critics argued, it is unrealistic to expect Russia to abandon the large land-based MIRVs that make up the vast bulk of its nuclear force, and for the administration to insist that it do so is a sign that Washington is not seriously seeking an arms control agreement.

The statement of administration arms control chief Kenneth L. Adelman that MX would be abandoned in return for dismantling of the Soviet MIRV force was "offering to swap a moo for a cow," according to Patrick J. Leahy, D-Vt.

How to Deter

In the last days before the Senate MX vote, opponents increasingly turned to the argument that MX would increase the problem of MIRV-caused instability in the nuclear balance. This was because the new missile would pose a lethal threat to the Soviet missile force but would itself be vulnerable to a Soviet first strike.

Time and again, Hart and his allies quoted to MX supporters their own demands (made in earlier years) that the new missile be based in launchers that would not be vulnerable to Soviet missiles.

Against that background, the critics warned, deployment of MX in existing missile silos that are admittedly vulnerable would appear to Moscow a radical change in U.S. policy. "There is one and only one inescapable conclusion that the Soviet strategic planners could come to," said Dale Bumpers, D-Ark., "and that is that [MX] is not a weapon to deter [but] a weapon which will be used as a first strike weapon."

The result, critics warned, would be that both the U.S. and Soviet missile forces would have to be on a hair trigger, ready for instant launch at the first sign of an enemy attack.

If a warning of attack were received, no matter how ambiguous,

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MX SURVIVES...CONTINUED

Hill Arms Control Moderates Decry Move

Senate moderates are concerned over the likelihood that Robert C. McFarlane, President Reagan's deputy national security assistant, will no longer be White House congressional liaison on arms control.

The removal of McFarlane from day-to-day involvement in arms control policy negotiations on Capitol Hill led Larry Pressler, R-S.D., to join eight Senate Foreign Relations Democrats July 27 in overriding their chairman, Charles H. Percy, R-Ill. They succeeded in scheduling a meeting Aug. 2 — prior to a five-week congressional recess — to debate the nuclear freeze and other arms control proposals; Percy had scheduled the meeting for Sept. 20.

Sen. Larry Pressler

Pressler is one of at least 20 senators demanding that the administration propose a U.S.-Soviet agreement to "build-down" nuclear arsenals by dismantling two existing nuclear weapons for each new one deployed.

In tandem with a group of House moderates, the build-down proponents — many of them with clear reluctance — have provided critical support for the MX missile in return for administration promises of a more flexible arms control posture.

But McFarlane has been the principal interlocutor between the administration and the congressional moderates. After he was named the administration's new Middle East trouble-shooter July 22, Pressler became suspicious that the resulting personnel shuffle would delay presentation of a final build-down proposal until November or December.

(Though McFarlane will retain his position as deputy to national security assistant William P. Clark, it is assumed he will be unable to continue his central role as liaison with congressional moderates.)

"They're going to get three or four [pro-MX] votes out of us before we get the [build-down] information," Pressler protested to a reporter.

Though he opposes the current version of the nuclear freeze resolution backed by most Foreign Relations Democrats, Pressler said, he helped them reschedule the committee meeting on the freeze in hopes that a modified freeze resolution might be reported by the panel and would spur the administration to quicker action on the build-down proposal.

Pressler will try to amend the freeze resolution to let the president seek a build-down of U.S. and Soviet forces to much lower and equal levels, before freezing.

Trusted Interlocutor

McFarlane won high praise from leading members of the MX-for-arms-control congressional group, who viewed other administration officials involved in arms control policy with suspicion — for their supposed hostility to arms control — or contempt — for their supposed ignorance.

According to members and aides privy to the discussions, McFarlane was a tough but honest negotiator who defended administration arms control positions, but with enough political realism to sense the limits of congressional tolerance. Moreover, they say McFarlane had the political stature within the administration to press for accommodation with congressional skeptics on some points and — once accommodations were agreed to — to state their case to opponents within the administration, particularly those in the Pentagon.

In addition to his impatience with the prospect of delay on the build-down proposal, Pressler lamented the departure of a trusted point of contact with the administration for the arms control moderates: "I don't know who we're going to talk to now," he said.

Albert Gore Jr., D-Tenn., a leader of the House moderate bloc, was one of many others to echo Pressler's concern.

"One person doesn't make or break policy," Gore cautioned, but McFarlane's importance to the White House-Congress negotiations was "hard to overstate," he said.

With so few administration officials trusted by the swing group of congressional moderates, Gore said, former White House national security assistant Brent Scowcroft and the bipartisan nuclear arms advisory panel that he chairs will have to become "a lot more active than they have been" in shaping administration policy, Gore said, or the adminsitration's arms control posture could be "in great jeopardy."

"You have got nine minutes to decide whether or not the third world war has already begun," said Moynihan. "It is in effect letting a machine decide."

The only other possible outcome of deploying MX in vulnerable silos would be eventual abrogation of the ABM treaty in an effort to protect the missiles, the critics warned.

that Moscow might fear a U.S. attack.

"I wish the opponents of our ICBM modernization were as concerned about the instability associated with the Soviet . . . first strike capability as they are about our efforts to redress it," he complained.

MX would not make the U.S. missile force more dependent on a

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MX SURVIVES...CONTINUED

Tower and his allies insisted that the planned MX deployment was neither as threatening to the Russians nor as vulnerable as the critics said.

The planned deployment of 100 MXs, each with 10 warheads, would be too small to mount an effective first strike against the Russians, Tower said. And he dismissed the prospect "launch-on-warning" policy, Tower argued, because it would take years before the Soviet nuclear force is technically capable of simultaneously attacking U.S. ICBMs and bombers.

On the other hand, MX's extreme accuracy — superior to the current Minuteman missiles — would strengthen deterrence, according to Henry M. Jackson, D-Wash.

"By restoring our ability to retaliate promptly against hardened targets, such as the Soviet command and control centers," Jackson said, MX would "make it clear that a nuclear attack would never pay off."

House Floor Action

House passage of HR 2969 came on the eighth day of a debate that sprawled over two months, largely because of delays occasioned by the politics of MX.

In the hectic final hours of debate on the bill, late in the evening of July 26, the House adopted an amendment that would add $350 million to the total fiscal 1984 defense budget. By a standing vote of 112-90, it moved forward by three months (to Jan. 1, 1984) the effective date of the 4 percent pay raise for military personnel mandated by the bill. (Since the military payroll is not covered by the authorization bill, this did not increase the amount authorized by the bill.)

Supporters insisted that the amendment by Dennis M. Hertel, D-Mich., was consistent with the first budget resolution.

Another amendment, by G. William Whitehurst, R-Va., that would have similarly extended from six months to nine months the 4 percent pay hike for civilian Pentagon employees, was rejected by voice vote.

Retired Pay. The House shouted down an amendment by Stan Parris, R-Va., that would have repealed:

- the six-month delay on the effective date of the next cost-of-living increase for military retirees, and
- the cap on future cost-of-living increases for military retirees less than 62 years of age.

Parris represents a suburban Washington district that includes a large military retired population.

Apart from the MX issue, the House took the following actions during July 21, 22 and 26. *(Earlier House action, Weekly Report p. 1198)*

Arms Control Issues

Pershing II. An amendment by Ronald V. Dellums, D-Calif., to delay until Dec. 31, 1984, any deployment of Pershing II missiles in Europe was rejected 101-320. *(Vote 259, p. 1584)*

Deployment in West Germany of the first nine Pershing IIs is scheduled for December 1983, despite strong German opposition. They are the first of a planned U.S. force of 108 Pershings and 464 ground-launched cruise missiles (GLCMs), all of which would be able to hit Soviet territory from launchers in Western Europe. NATO agreed in December 1979 to deploy the U.S. missiles to counter Moscow's force of some 300 triple-warhead SS-20 ballistic missiles, which are able to strike any target in Europe.

NATO allies are committed — evidently with varying degrees of enthusiasm — to establish a rough parity with the Soviet Union in the category of long-range, land-based nuclear missiles in Europe. Accordingly, it appears that at least some part of the planned deployment will proceed unless the SS-20s are abolished by U.S.-Soviet arms reduction talks in Geneva.

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MX SURVIVES...CONTINUED

Dellums' central argument against Pershing II echoed a major argument against MX: that the missile is so accurate, and could strike its target in so little time, that it would arouse Soviet fears of a NATO first strike. Under those circumstances, he warned, Soviet weapons would be put on a "hair-trigger" status, and world peace would depend on the reliability of Soviet computers.

But Dellums was deserted on the issue by some members who seemed to share his concern about the destabilizing aspect of MX. For example, Dan Glickman, D-Kan., concurred with Dellums that the Pershing posed a very serious threat to Soviet targets. But that very fact makes the missile a useful prod in the Geneva negotiations to limit such weapons, Glickman said.

Anti-satellite Testing. By nearly a 2-1 vote the House also rejected an amendment by John F. Seiberling, D-Ohio, that would have barred flight tests of an anti-satellite missile (ASAT) unless authorized in separate legislation. *(Vote 250, Weekly Report p. 1518)*

During earlier House action on HR 2969, an amendment was rejected that would have deleted funds to purchase components to begin building the ASAT. *(Weekly Report p. 1198)*

Liberal arms control advocates have warned that once ASAT is tested, it will be very difficult to negotiate a U.S.-Soviet ban on anti-satellite weapons. This is because the U.S. weapon — a 20-foot-long missile fired in midair from an F-15 fighter plane — is so small that, once it was tested, Soviet reconnaissance satellites could not verify that it had not been deployed.

According to the Pentagon, Moscow has a crude anti-satellite weapon already deployed on large ballistic missiles. But proponents of an ASAT ban insist that dismantling of so bulky a weapon could be verified by U.S. intelligence methods.

The basic argument against the test ban was that the Soviet Union would not agree to negotiate an ASAT ban unless confronted with a threat to its own space satellites.

Procurement Reforms

Evidently unwilling to make very substantial cuts in Reagan's weapons procurement request, the House added to the bill two amendments intended to attack widely publicized instances of mismanagement in Pentagon weapons procurement.

Test Oversight. By voice vote, and with the consent of Armed Services Committee leaders, the House agreed to an amendment by Jim Courter, R-N.J., establishing an independent Pentagon office to supervise the so-called operational tests of new weapons.

Operational tests are intended to establish whether new weapons can meet their design specificiations in realistic combatlike conditions when operated by military personnel rather than laboratory technicians.

In recent months, allegations have abounded that the operational tests of several major weapons — including the Maverick, air-launched anti-tank missile and the Divad anti-aircraft tank — have been designed to show the equipment in a good light, rather than realistically to test its suitability for combat.

Pentagon officials contend that creation of a new test oversight office would simply add to the already impacted layers of bureaucracy that prolong the gestation period of new U.S. military equipment. But that contention has carried little weight against much more widespread fears that inadequate testing might endanger U.S. troops by equipping them with unworkable weapons.

Supporters of Reagan's defense buildup — Courter among them — have cited an additional reason for trying to tighten up the testing process: a fear that public perceptions of

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MX SURVIVES...CONTINUED

Pentagon incompetence will undermine support for further defense spending increases.

Courter's amendment would create the position of director of operational testing, to be filled by a civilian presidential appointee. No major weapon could be put into full production until the director reported directly to the secretary of defense and to the congressional Armed Services and Appropriations committees on the weapon's performance in its operational tests and on the adequacy of the test program.

Spare Parts. The House also agreed by voice vote to an amendment by Bill Nichols, D-Ala., requiring the Pentagon to report by June 1, 1984, on the status of various proposed reforms in the procurement of spare parts.

Troops in Europe

An amendment adopted by voice vote expressed the sense of Congress that Japan, Canada and the European NATO members should shoulder a heavier share of the burden of alliance defense, lest they "endanger the vitality, effectiveness and cohesiveness" of their alliances with the United States. The extent to which some allies contributed to mutual defense is "not commensurate with their economic resources," according to the provision.

By a 329-82 vote that language, proposed by Ike Skelton, D-Mo., was substituted for language by Patricia Schroeder, D-Colo., that would have required a 29,000-person reduction in the number of U.S. troops stationed abroad. *(Vote 255, p. 1584)*

Targeting Unemployment

Members from districts with high unemployment — mostly from Northeastern and Midwestern states — this time won an annual battle over whether to increase the total value of defense contracts that can be earmarked for areas of high unemployment, a policy widely believed to benefit the Frost Belt.

At issue was the yearly effort to enact a limited waiver of the so-called Maybank amendment, which forbids the award of defense contracts to other than the lowest bidder to relieve "economic dislocation."

This year's Maybank waiver amendment, offered by Hertel, was agreed to 218-201. It would allow targeting to high-unemployment areas of contracts for the purchase of routine supplies with a total value of up to $7 biliion. *(Vote 260, p. 1586)* ■

BOEING NEWS 1 September 1983 Pg. 8

Generally good support, but not quite enough

A last-minute pep talk to the MX Peacekeeper team at the championship pull of the Boeing Employees Good Neighbor Fund tug-of-war competition last week was delivered by Brig. Gen. Gordon E. Fornell, the U.S. Air Force special assistant for Peacekeeper matters. Fornell was in Seattle for discussions of Boeing Aerospace Company ballistic systems activities. Despite his strong moral support, the Peacekeeper team succumbed to the powerhouse team from BAC Facilities.

—photo by Ryan Kuehn

AF Gen. Fornell optimistic about Peacekeeper

by Don Brannon

The man responsible for U.S. Air Force congressional liaison regarding the MX Peacekeeper program is optimistic, but acknowledges there are still tough obstacles ahead. Brig. Gen. Gordon E. Fornell, the Air Force special assistant for Peacekeeper matters, talked about the program and its future while he was in Seattle last week for discussions concerning Boeing Aerospace Company's Ballistic Systems Division projects.

"Considering the Peacekeeper program's cyclical history, progress has been exceptional," he said. "It is a measure of the program's vitality that we are still with the 1986 initial deployment goal.

"We have the technology, and we're on schedule," he said. Fornell noted that the first missile test flight last June was "nearly perfect," and that the second is planned for this fall. He pointed out that the pressure is on Boeing to develop and prepare a test silo at Vandenberg Air Force Base for a flight in mid-1985.

"There is very little slack in that schedule, but I'm confident that you can do it," he said.

Peacekeeper's most difficult problem is neither technical nor schedule, but

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GEN. FORNELL...CONTINUED

rather political, Fornell said. Authorization of program continuation recently passed congress by a narrow margin, and the forthcoming debate on the money appropriations bill will be "every bit as tough," he said. But he is optimistic:

"We built up momentum during the authorization debate. We have a successful first flight behind us, and we are making good progress in basing design and development. So more and more we are able to answer the questions needed by congressional members as they prepare to vote."

Gen. Fornell gave much credit for Peacekeeper support to the Scowcroft Commission, which earlier this year conducted an in-depth review of the nation's strategic situation, and made a number of recommendations that the Reagan administration is now moving to accomplish.

"The commission did a brilliant job in assessing the United States' strategic requirements and in designing a comprehensive package that considers both defense needs and political realities," the general said.

Part of that package includes basing 100 Peacekeeper missiles in silos now containing Minuteman missiles at Warren Air Force Base near Cheyenne, Wyo. BAC activities are directed toward design and development of the hardware needed to accomplish the basing.

Fornell, who began active duty with the Air Force in 1958, said working with the citizens and officials of Wyoming and Cheyenne has been one of the most gratifying experiences of his career. The Air Force and civic leaders are cooperating to prepare for the expected increase in construction and operational activities associated with Peacekeeper deployment in the Cheyenne area.

Boeing will establish a work force there in 1985.

Regarding the future of the nation's defenses, Fornell is confident. He noted that voluntary recruiting is up, more people are proud to be in uniform, leadership is experienced and the public is becoming increasingly aware of the need for a strong defense.

"The future looks good," he said.

WYOMING STATE TRIBUNE 29 August 1983 Pg. 4

A Revealing Poll

One of the intriguing findings of the Wyoming Heritage Foundation poll conducted early in August on the attitude of Wyoming residents' toward the MX deployment in this state is not the general overall sentiment. That shows that 57 percent of Wyoming residents favor putting the MX in Wyoming, 36 percent were opposed and 7 percent were undecided.

But aside from that, the really interesting fact is that in southeastern Wyoming, there is much greater favorable sentiment toward the MX. Of the 104 residents surveyed in this part of the state, 66 percent favored the MX deployment, 29 percent opposed it and 5 percent had no opinion.

This contrasts with the next most favorable area, southwestern Wyoming, where 59 percent favored, 38 percent opposed and 3 percent had no opinion; northwestern Wyoming where 57 percent favored, 36 percent opposed and 7 percent were undecided; and northeastern Wyoming, where 53 percent favored, 35 percent opposed it and 12 percent were undecided.

For reasons best known to itself, the polling organization, Research Services Inc. of Denver, ran a separate survey on Natrona County which showed only 44 percent favored the MX deployment there, 45 percent opposed it and 11 percent were undecided.

That latter may be the reason why we are beginning to see news stories emanating from Casper instead of Cheyenne about anti-MX organizational activity; recently the Casper Star-Tribune, which has been in the forefront of anti-MX editorializing in this state, featured a story about Cheyenne's Catholic nun, Sister Frances Russell, speaking at an anti-MX meeting there. She, of course, was a leader in the Tri-State MX Coalition which for over the past year has centered its activities in southeastern Wyoming, especially the Cheyenne area.

We are also treated to a report in the Sunday paper that something called the Wyoming Nuclear Freeze Coalition which apparently has succeeded to the mantle of opposition to the MX, has announced that it is not ready to give up the fight agaoinst the MX. A leader of this group identified in the news story as one Jeff Zacharakis-Jutz says a campaign of "education and awareness" is being planned by the group and it is going to stage "walkathons" and fundraising events to support its campaign.

We seem to have heard all this before. Where? Right here in Cheyenne by the Anti-MX Coalition.

But the Heritage Foundaiton poll suggests that with all of the fulminations that have been delivered against the

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REVEALING POLL...CONTINUED

MX by this group and church leaders such as the Roman Catholic and Episcopal Church bishops, the campaign to turn Wyoming people against the MX has notably failed, and particularly in the part of the state that is apt to be the most affected by its presence. Local residents have not been scared or impressed by the "ground zero" tactics of the anti-MXers.

Precisely why Natrona County shows a preponderance of opposition to the MX is a mystery. But whatever the case, the poll does show that most Wyoming people support the missile deployment and most importantly those in the part of the state most to be affected are strongest in their support of it.

NEW YORK NEWS 25 August 1983

Keeping the peace

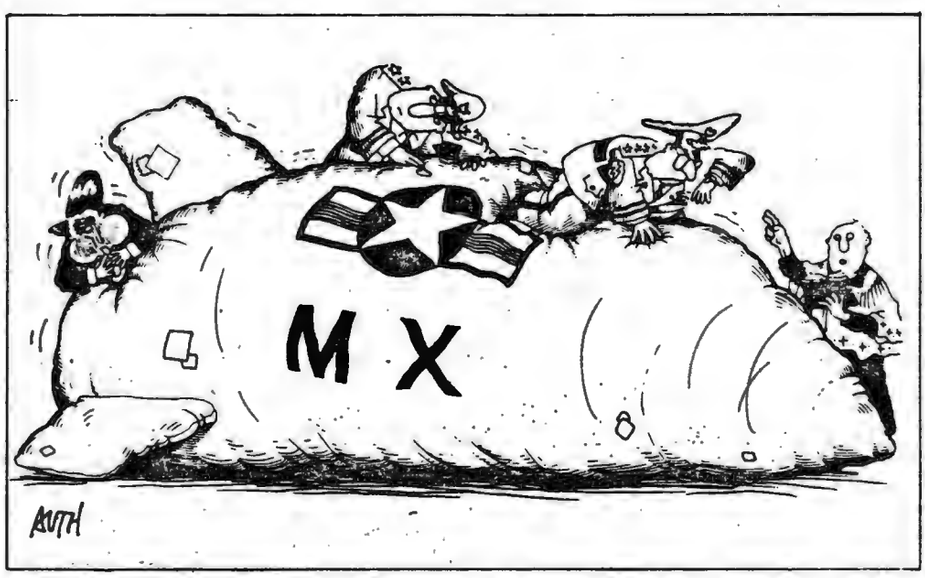
President Reagan said some sensible things to the American Legion in Seattle Tuesday, showing that he understands the importance of the peace issue. It'll be one of the main topics in next year's election, and Reagan fired off another salvo in the direction of his opponents by denouncing what he called their campaign of "modern hype and theatrics."

He said, "We have no intention of becoming policeman to the world, but we have a responsibility to help our friends." We agree heartily with that: The U.S. has just pulled its AWACS and F-15s out of Egypt, where they were keeping an eye on Libya's invasion of Chad. It's a war that has nothing to do with us, and can safely be left to French gendarmes.

Reagan reminded his audience that the best way to keep the peace is to prepare for war. Appeasement doesn't work. He also said that peace was an objective, not a policy. In fact, it's a condition that has survived since 1945 in Europe, North America and Japan, thanks to the nuclear deterrent and constant diplomacy. Peace is not an automatic consequence of all those missiles and ships.

We certainly need strong defenses, but we don't need the MX, Tridents, B-1s, battleships and poison gas all together. We don't need to speed up the arms race. Above all, we need serious negotiations with the Soviets on nuclear disarmament. Reagan claims they show "encouraging movement." We haven't noticed it. There's going to be a serious diplomatic confrontation with the Soviets in Europe this fall and Reagan seems sadly unprepared for it.

LOS ANGELES TIMES 22 September 1983 Pg. 5B



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