

USAF COUNTERPROLIFERATION CENTER CPC OUTREACH JOURNAL



Air University Air War College Maxwell AFB, Alabama

Welcome to the CPC Outreach Journal. As part of USAF Counterproliferation Center's mission to counter weapons of mass destruction through education and research, we're providing our government and civilian community a source for timely counterproliferation information. This information includes articles, papers and other documents addressing issues pertinent to US military response options for dealing with nuclear, biological and chemical threats and attacks. It's our hope this information resource will help enhance your counterproliferation issue awareness.

Established here at the Air War College in 1998, the USAF/CPC provides education and research to present and future leaders of the Air Force, as well as to members of other branches of the armed services and Department of Defense. Our purpose is to help those agencies better prepare to counter the threat from weapons of mass destruction. Please feel free to visit our web site at www.au.af.mil/au/awc/awcgate/awc-cps.htm for in-depth information and specific points of contact. Please direct any questions or comments on CPC Outreach Journal to Lt. Col. Michael W. Ritz, CPC Intelligence/Public Affairs or JoAnn Eddy, CPC Outreach Editor, at (334) 953-7538 or DSN 493-7538.

The following articles, papers or documents do not necessarily reflect official endorsement of the United States Air Force, Department of Defense, or other US government agencies. Reproduction for private use or commercial gain is subject to original copyright restrictions. All rights are reserved

Musharraf Hails Chinese Help With Pakistan's Nuclear Power Plant

ISLAMABAD, Mar 28, 2001 -- (Agence France Presse) Pakistani military ruler General Pervez Musharraf Wednesday lauded Chinese assistance in the design and manufacture of a nuclear power plant in the central province of Punjab, officials said.

Beijing's help in building Chashma Nuclear Power Plant (Chasnupp) was "yet another manifestation of close friendship and cooperation that existed between the two countries in diverse fields," he said.

"This important project will go a long way in meeting our fast growing energy requirements," Musharraf told Chinese Minister for Science and Technology Liu Jibin, who arrived here to participate in the plant's opening ceremony, scheduled for Thursday....

http://www.insidechina.com/news.php3?id=323376§ion=default

Albuquerque Journal March 28, 2001 Pg. 7

'Mininukes' Proposed As Deterrent To Small Aggressors

Sandia Labs Boss Seeks 2-Tier Defense

By John J. Lumpkin, Journal Staff Writer

The United States should develop a class of nuclear weapons geared toward deterring small aggressors with big ideas, Sandia National Laboratories director C. Paul Robinson told weapons experts Tuesday.

Robinson, seeking ways for the nation's nuclear weapons complex to remain relevant in the post-Cold War world, outlined a two-tiered capability he urged the United States to develop. His comments came at the Nuclear Security Decisionmakers' Forum being held this week in Albuquerque.

The first is continuing the capability of the Cold War many long-range nuclear weapons that balance U.S. forces with "the only nation in the world that can threaten the actual existence of the United States" Russia. The second, however, would be new.

Robinson proposed a class of small, relatively low-yield nukes that would be satellite-guided and therefore extremely accurate. Current nuclear weapons avoid satellite guidance and other complex systems, as the electromagnetic pulses in the opening stages of a nuclear war would disable most sensitive electronics on Earth and in orbit.

But these new weapons would be used to deter the Irans, Iraqs and North Koreas of the world, because they would enable the United States to kill those countries' leadership and military without killing a lot of civilians, Robinson said.

These weapons would prevent these countries from using any of their own weapons of mass destruction, including chemical and biological weapons, he said.

"The highest goal is to deter aggression," he said.

Robinson and others have come out in support of "mininukes" before. But earlier pitches had not framed those weapons as a way to prevent war.

In an aside, he said China could conceivably build up its nuclear forces to approach those of Russia and the United States. The U.S. missile defense program, backed by the Bush administration, could incite such a buildup, as China would build more nukes to overcome any defenses, he said.

Robinson had some dissenters at Tuesday's forum, which drew lab officials, contractors and arms-control activists. One speaker told Robinson he didn't believe that any nuclear weapon could be used on underground bunkers without massive collateral damage.

Robinson's comments about the role of nuclear weapons in the emerging world situation struck a sharp contrast to the familiar set of laments pronounced by other speakers at the forum.

Morale at the labs is low; talented, experienced scientists are retiring and being replaced with those who have not taken part in actual nuclear tests; and not enough funding is being put into infrastructure and weapons maintenance, speakers said.

They repeatedly hailed Sen. Pete Domenici, R-N.M., for his efforts to secure \$500 million for infrastructure improvements at the national labs and weapons plants.

Washington Times March 30, 2001

Inside The Ring

By Bill Gertz and Rowan Scarborough

Missile movements

North Korea's military is on the move near the Demilitarized Zone (DMZ) separating the country from South Korea, causing jitters among some Pentagon intelligence officials.

"Something is going on," one official familiar with reports of the activities told us.

According to intelligence reports based on reconnaissance aircraft flights, the most visible activity has been recent movements of SA-2 surface-to-air missile batteries to locations along the DMZ. The missiles are part of the North's air-defense system geared to repulsing U.S. air strikes in a conflict.

The activity is getting more attention than usual because of Pyongyang's reversion to hard-line anti-U.S. rhetoric in its official government radio broadcasts and publications. Earlier this week, the official newspaper Rodong Shinmun stated that "it is the invariable strategy of the U.S. imperialists to stifle [North Korea] by means of war and invade and dominate Asia."

Inside The Air Force March 30, 2001

Pg. 2

CSBA: U.S. Should Mull New Strategic Triad With Less Nuclear Reliance

The Defense Department should consider creating a different triad of capabilities to destroy strategic targets that deemphasizes but does not eliminate nuclear weapons, the Center for Strategic and Budgetary Assessments said this week.

A "residual nuclear strike" capability would be retained as one strategic triad leg, but would be joined by electronic strike and conventional strike as new legs, according to a proposal outlined in the report, "Transformation of Strategic-Strike Operations."

This shift would be a reflection of how the international strategic environment has changed after the Cold War, as well as how domestic attack capabilities have evolved, report co-authors Robert Martinage and Andrew Krepinevich said during a March 28 press conference.

There is already strong international precedent discouraging nuclear weapons use, and this environment may actually reduce the U.S. nuclear arsenal's deterrent capability. According to the authors, enemy leaders may not find it credible that the United States would respond to a chemical, biological, or low-level nuclear attack with a major nuclear retaliation.

However, opposition to the use of nuclear weapons use may ease a shift to a lower level of nuclear weapons, according to the report. This is because the nuclear deterrent factor will exist regardless of how many nuclear weapons the United States retains.

"It seems unlikely that a state possessing a handful of nuclear weapons would view the U.S. nuclear deterrent differently if it comprised 3,500 warheads instead of 7,000; or 1,500 instead of 3,500," the report notes. Strategic forces are generally thought of as nuclear forces, but other capabilities have been used for strategic missions since World War II, Martinage noted. The current strategic triad consists of nuclear bomber, submarine and ICBM fleets.

"New strategic target sets" -- weapons storage facilities, command and control centers and enemy leadership sites, for example -- "are interdependent and vulnerable" to attacks by precision-guided conventional weapons and electronic warfare systems, he said.

Prioritizing these other strategic legs could have serious implications for U.S. nuclear force structure because nuclear forces may have to be cut to fund improvements in the other capabilities. How many nuclear weapons the nation should retain "depends on the yardstick," according to a CSBA briefing, but "a reasonable range would be between 1,500 to 3,000 highly survivable warheads."

The National Academy of Sciences determined in 1997 that 20 nuclear warheads "would be sufficient to destroy Russia's 12 largest cities, killing 25 million people and destroying 25 percent of its industrial capacity," CSBA noted in the report.

But this type of "counter-value" targeting -- using nuclear weapons as a threat to punish an adversary -- has not been U.S. policy. The report notes a longstanding U.S. policy of nuclear counterforce targeting, using the weapons to threaten current and future ability to make war. This is an approach that requires more warheads, but does not depend upon the direct threat to civilians as the basis for deterrence.

The report notes that reductions would free considerable resources to spend on other DOD priorities. Reducing current warhead inventories from more than 7,000 to a START II level of about 3,500 warheads "would save some

\$6 billion over the next seven years. Moving below START II levels to 2,000 warheads could save as much as an additional \$2 billion per year through 2010," CSBA notes.

Although START II has not been ratified by the United States, the long-term Pentagon goal is for nuclear forces to be reduced to its levels.

Further cuts, to perhaps 1,500 warheads, could save even more money, but Martinage noted that "it gets hard to stay in the triad business" at that level. According to an "illustrative" breakdown of U.S. nuclear forces at the 1,500-warhead level, intercontinental ballistic missiles would be totally eliminated.

According to the report, "the number of fixed, land-based [ICBMs] such as the Minuteman III, which are arguably the most vulnerable leg of today's triad, might be reduced, perhaps significantly. While there are some advantages to retaining ICBMs, they are more than outweighed by the survivability of [submarine-launched missiles] and the strategic flexibility of the bomber force, which . . . can be recalled or re-tasked while in flight."

ICBM advocates contend the missiles can only be destroyed if an enemy attacks the U.S. homeland, and doing so would be difficult because destroying each missile would require at least one -- and perhaps two -- nuclear weapons. Also, ICBMs provide the option of a small-scale nuclear attack, with perhaps one or two warheads.

But Martinage told Inside the Air Force these advantages offer nothing that the bomber force does not; B-52s and B-2s can be dispersed to various U.S. airbases or scramble into the air with their nuclear weapons.

Drastic cuts in nuclear forces would not be easy, however. In addition to substantial military support for maintaining the triad, nuclear weapons remain the only effective way to attack some targets, including ports, airfields or hardened bunkers.

Therefore, a new triad approach would allow additional assets to be devoted to precision-guided munitions (PGMs) and electronic attack for strategic missions, which would make deterrence more credible, provide greater flexibility, cut the operating and maintenance cost of "retaining a larger than necessary nuclear force," and bolster non- and counterproliferation efforts, CSBA says. Further, "each leg of this new strategic triad would complement the others in a variety of ways" -- for example, by using PGMs to disrupt communications lines, making enemies rely on other methods of communication susceptible to electronic attack.

This shift is not without risks, either, CSBA acknowledges, so "the current Nuclear Posture Review should consider merits of strategic force posture that takes full advantage of conventional and electronic strike capabilities," according to the briefing.

Implications should be further evaluated, including the potential for enemies to pursue small numbers of nuclear weapons for deterrence purposes of their own. Enemies could seek new nuclear capability in response to the increased likelihood that the United States would use its newfound strategic capabilities or a lower number of U.S. nuclear weapons.

Further, the "cost associated with building up a reserve of conventional and electronic strike weapons large enough to supplant part of the existing nuclear arsenal would likely be substantial," the report notes. "It would probably be necessary to procure hundreds of PGMs for every nuclear warhead replaced."

-- Adam J. Hebert

Washington Times March 30, 2001 Pg. 13

New Energy Chief Key To Arms Control?

By Jon Boyle, Reuters News Agency

MOSCOW - Russia's appointment of a new atomic energy minister could be good news for a U.S. administration anxious to keep Iran from obtaining Moscow's nuclear know-how, industry experts said yesterday.

"President Vladimir Putin's decision to fire Atomic Energy Minister Yevengy Adamov is a significant event in the area of nuclear nonproliferation," said Vladimir Orlov, director of the Center for Policy Studies in Russia, in a statement.

Mr. Adamov was replaced Wednesday by Alexander Rumyantsev, the head of the Kurchatov Institute, one of Russia's leading nuclear laboratories. Part of his job will be to ensure that Russia's stocks of fissionable material do not fall into the hands of terrorists or states bent on acquiring nuclear arms.

But he has yet to take a public stance on proliferation issues. Moscow insists it is respecting all its international obligations to prevent the spread of nuclear material and know-how. But critics say Mr. Adamov's bids to sell Russia's civilian nuclear technology abroad undermined this claim.

The outgoing minister was the prime mover behind India's import of nuclear fuel for its Tarapur power plant, a deal that a dismayed U.S. State Department said raised questions about Russia's commitment to nuclear nonproliferation. Mr. Adamov also wanted to sell Tehran three reactors in addition to a nuclear power plant under construction at Bushehr on the Persian Gulf coast, causing further consternation in Washington.

The daily business newspaper Kommersant said Mr. Adamov had been dismissed because the Kremlin was unhappy that he had been "excessively active in reaching nuclear deals with Iran."

"With tensions rising in relations with the United States, Adamov's Iranian projects were inappropriate,"

Kommersant said. Significantly, Mr. Adamov was the only minister not given a new job in Wednesday's reshuffle, it said.

Proliferation issues have been at the heart of a trans-Atlantic war of words between Washington and Moscow since President Bush took office.

U.S. Defense Secretary Donald H. Rumsfeld has accused Moscow of being an "active proliferator" of missile and nuclear technology, which justified the U.S. decision to go ahead with a \$60 billion national missile defense shield. German police foiled at least two bids to sell nuclear material stolen from Russia in the 1990s.

Boston Globe March 30, 2001 Pg. 8 Senators Grill Bush's Pick For Arms Control Post

By John Donnelly, Globe Staff

WASHINGTON - President Bush's nominee to head up US arms control policies came under sharp questioning yesterday from Democratic senators who challenged his track record of attacking past arms treaties, the United Nations, and efforts to ease the standoff on the Korean peninsula.

At a hearing on his appointment as undersecretary of state for arms control and international security, John R. Bolton said he believed the UN could be an effective "policy instrument" of the United States and that

"circumstances may arise" in which the United States could normalize relations with North Korea.

Massachusetts Senator John F. Kerry, a Democrat, said some of Bolton's comments amounted to "what I would politely call a confirmation conversion."

Bolton bristled at the remark later, saying, "I must tell you, Senator, those words sting. And I don't think they are accurate."

If confirmed, Bolton's job would include missile defense, the fate of the 1972 Anti-Ballistic Missile Treaty, negotiations with North Korea on shutting down its ballistic missile program, and aid to dismantle Russian nuclear stockpiles.

Bolton, who served in the Reagan and first Bush administrations and for the last four years was senior vice president for public policy research at the American Enterprise Institute, had strongly criticized many Clinton administration policies, particularly its arms control strategies. He also has been dismissive of the UN.

"There's no such thing as the United Nations," he said on one occasion recorded on videotape. On another he said, "If the UN secretary building in New York lost 10 stories, it wouldn't make a bit of difference."

He characterized supporters of the Comprehensive Test Ban Treaty, which was rejected by the Senate during the Clinton administration, as "misguided individuals following a timid and neo-pacifist line of thought."

On negotiations with North Korea, he said, "A sounder US policy would start by making it clear to the North that we are indifferent to whether we ever have `normal' diplomatic relations with it, and that achieving that goal is entirely in their interests, not ours."

In a coincidence that underscored the sensitivity of Bolton's post, about a mile away from the hearings former US senator Sam Nunn was speaking to the National Press Club, saying, "The most significant clear and present danger to the national security of the United States is the threat posed by nuclear as well as other weapons of mass destruction."

Just hours before, President Bush had confirmed that the administration is reviewing whether to continue the \$760 million US effort to prevent Russia's stocks of nuclear, biological, and chemical weapons from being smuggled overseas.

Under intensive questioning from Florida Senator Bill Nelson, Bolton said he favors continuing funding efforts to keep controls over Russia's nuclear stockpile.

Bolton deflected many questions by saying he had not yet participated in policy reviews, and suggested that comments he made while at the think tank often were designed to spark debate.

He said while he did not support some of the aspects of the Agreed Framework that governs talks with North Korea, "I will adhere to that policy."

Asked whether the ABM treaty that outlaws national missile defense programs was still valid since it was signed with a government, the Soviet Union, that no longer exists, Bolton said he would have to study the issue.

Senator Jesse Helms of North Carolina, chairman of the Foreign Relations Committee and a friend of Bolton's, said he hoped confirmation would be speedy. He said Bolton was "the kind of man with whom I would want to stand at Armageddon, for what the Bible describes as the final battle between good and evil in this world."

Helms came to Bolton's defense several times. He objected to Kerry's manner of questioning, saying it seemed like a "cross-examination."

Inside The Air Force March 30, 2001 Pg. 1

ACC To Consolidate Homeland Defense Command And Control Mission

The growing threat to North America posed by chemical and biological weapons, ballistic missiles and cyberwarfare has inspired Air Combat Command to consolidate the homeland defense command and control mission to defend against attacks on the United States, Inside the Air Force has learned.

Homeland defense, defined as protecting the U.S. and Canada, is currently spread among numerous Air Force systems. The United States will be tested by "the increasing capabilities of 'states of concern' and non-state actors employing asymmetric strategies. With a superior conventional warfighting capability and an effective nuclear deterrent, it is not likely potential adversaries will engage . . . in force-on-force combat," ACC documents state. A draft "Concept of Operations for North American Homeland Defense Command and Control," obtained by ITAF, lays out a plan to create a "coherent picture of the operating environment," by making information dispersed across several systems quickly available to commanders performing homeland defense missions.

"Homeland defense is not a 'manufactured' mission without substance," the CONOPS states. "This threat covers the full spectrum of nuclear to cyber."

According to the CONOPS, growing threats are numerous and diverse. Ballistic missiles are "proliferating due to low production costs and market availability." Sophisticated aircraft and cruise missiles are difficult for radar systems to detect, and can carry chemical and biological weapons. The countries formerly known as rogue nations are actively seeking weapons of mass destruction, and many already possess them. And cyber warfare "may be a very attractive, inexpensive option to disrupt military deployments and operations."

The largest threat comes from these types of asymmetric warfare, according to the CONOPS, because "the United States will continue to be stronger than any other state or combination of states in the foreseeable future. American influence will continue to be embraced and resented . . . 'threats' will be more diffuse, harder to anticipate, and more difficult to neutralize than ever before."

Currently, "no one military commander has [been] assigned responsibility for all the available assets to counter these threats," according to the ACC document.

"Should a coordinated cyber, aerospace or terrorist attack be launched against the U.S. or North America, individual combat commanders and their forces would be subjected to an extremely stressed C2 operating environment," documents state, and "it is assumed that the attack/threat can occur with little or no warning; it is fast-breaking and requires accelerated decisions."

Consequently, ACC intends to take the lead in providing the needed C2 information to commanders. As the CONOPS notes, the "Air Force has the operations, maintenance, and modernization responsibility for a majority of the [command, control, intelligence, surveillance and reconnaissance] capabilities. For this reason it is incumbent upon the Air Force . . . to lead the effort to advocate a robust command and control capability for homeland defense operations."

The Aerospace Command and Control and Intelligence, Surveillance and Reconnaissance Center at Langley AFB, VA, is responsible for implementing the planned CONOPS, and AC2ISRC commander Maj. Gen. Gerald Perryman has signed off on the CONOPS, documents show.

ACC commander Gen. John Jumper must approve the CONOPS in its final form, and the document is still subject to revision and "considerable coordination," said AC2ISRC spokesman Capt. Todd Fleming, who added, "There are likely to be a lot of changes." Through Fleming, ACC officials declined comment on the CONOPS, citing its "for official use only" designation.

"The CONOPS presents the concept that a coherent picture of the operating environment . . . will give commanders the ability to synchronize their operations to defend North America. The CONOPS provides a foundation for an investment road map from which the AC2ISRC can coordinate" funding, Jumper wrote in a draft memo outlining the CONOPS.

The plan is to synchronize six operational functions -- space operations; aerospace control; North American ballistic missile defense; information operations; strategic response; and consequence operations -- into a "homeland defense framework," according to the Feb. 9 draft CONOPS.

The service is largely responsible for these missions already, and has several "nodes" that can be linked together to improve homeland defense. The CONOPS notes there are a large "number and magnitude of . . . organizations and C2 functions" independently involved with homeland defense.

The U.S. Strategic Command headquarters, NORAD, regional air operations centers, the U.S. Space Command space operations and missile warning centers, the National Airborne Operations Center and the Joint Task Force for Computer Network Defense are some of the organizations that must be coordinated, according to ACC.

The document states DOD has five separate warfighting commanders-in-chief who are "the primary military players in HLD." The CONOPS adds, "There are also several civilian agencies such as the Federal Emergency Management Agency, Federal Aviation Administration, and [FBI] that play a significant role in homeland defense."

Last week, Rep. Mac Thornberry (R-TX), a member of the House Appropriations Committee, proposed a "National Homeland Security Agency Act," that would create a new HLD agency by pulling together the civil agencies that deal with the threat. The bill is based on some of the recommendations presented by the Commission on National Security/21st Century led by former Sens. Gary Hart (D-CO) and Warren Rudman (R-NH).

In an interview with ITAF this week, Thornberry said the threat to the homeland is now much broader than the Cold War threat of major nuclear war with the Soviet Union.

Thornberry's legislation would rename the FEMA the National Homeland Security Agency and bring the Coast Guard, Customs Service and Boarder Patrol into the organization, creating a unified, civil-sector homeland defense response agency.

Thornberry said he chose not to include changes to DOD homeland defense in his legislation because he wanted to tackle the problem one step at a time. The proposed legislation "is not the complete answer," he said, and a separate bill addressing concerns with DOD would come later.

As for the ACC initiative, Thornberry was not familiar with it's specifics, but said "if they are working on something that is more seamless, faster," he supports the idea. Thornberry added he would not be opposed to approving additional funds to support the homeland defense mission, if necessary.

The congressman was not surprised by the service initiative, noting "If you see one trend in the next year in the area of national security, it will be greater emphasis on homeland security... if you don't defend our homeland, the American people are not going to be very excited" about defending other U.S. interests overseas.

The CONOPS states that "deterrence will continue to be at the forefront of our strategy to protect the North American population and infrastructure," and the CONOPS will directly contribute to deterrence.

"Our C2 structure must provide commanders the ability to convince potential adversaries, at all levels, that we can decisively defeat all threats in all situations . . . our C2 structure, which gives commanders the information and decision tools to operate inside an adversary's decision loop, will become that single biggest influence on human behavior. In fact, command and control centers potentially will become a weapon of choice for North American forces."

In the draft memo, Jumper requested a response to the draft CONOPS from other Air Force offices by April 6, in order to begin planning for changes in future service budgets.

-- Adam J. Hebert

New York Times March 31, 2001

Effective Nuclear Disarmament

Among the most cost-effective defense dollars America spends are those that pay for reducing Russia's arsenal of leftover cold-war weapons. The Bush administration began a review of these "threat reduction" programs this week, saying it wanted to make them more efficient. But there are troubling signs that Mr. Bush is planning to reconsider his campaign promise to increase overall funding for these valuable programs and cut them instead. That would be a serious mistake.

During the cold war Washington spent trillions of dollars defending against Russian nuclear, biological and chemical weapons. Over the past decade, for a little less than \$6 billion, America has financed, among other things, the deactivation of more than 5,000 Soviet-era nuclear warheads, conversion of more than 110 metric tons of bombgrade uranium into commercial reactor fuel and safe storage of plutonium removed from Russian weapons. It has also helped underwrite new jobs for Russian nuclear scientists who might otherwise sell their talents to Iraq, Iran or Libya.

Last year Congress appropriated nearly \$900 million for threat reduction programs in Russia and other former Soviet republics. In the presidential campaign, Mr. Bush expressed strong support for these efforts and promised a substantial increase in their funding. Earlier this year a bipartisan task force headed by former Senator Howard Baker called for spending up to \$30 billion on them over the next decade. But yesterday The Wall Street Journal reported that the administration's budget makers were instead preparing to impose substantial cuts.

Not all the programs in Russia have been equally effective. Finding commercial projects to keep nuclear scientists employed has been difficult, and efforts to dispose of Russian and American bomb-grade plutonium have been slow in getting started. But one of the programs now in line for big reductions is the highly successful effort to keep track of and secure nuclear material at Russian bomb sites before it is removed and rendered harmless.

The administration should conduct a careful review, identifying those programs that need to be strengthened or have their funding shifted to more effective efforts. But overall spending in this area should be increased, not decreased. It would be a dangerously false economy to slow the dismantling of Russian weapons.

Chicago Tribune March 31, 2001 Russia's Record On Prolifer

Russia's Record On Proliferation

The Bush administration's decision to re-examine U.S. programs with Russia to stop the spread of nuclear, biological and chemical weapons is welcome news. Any program sending U.S. aid money to today's Russia, worthy as it may be, ought to be thoroughly monitored and reviewed.

The goal here, which has bipartisan support, is to make sure U.S. funding is spent effectively on programs designed to stop the proliferation of weapons of mass destruction, or the defection of the scientists who run them, to rogue nations who could threaten U.S. interests. This remains arguably our No. 1 strategic concern: Russia's aging nuclear arsenal.

Bush had it right when he declared, "We fully intend to continue to cooperate with the Russians. It's in our nation's best interest to work with Russia to dismantle its nuclear arsenal."

At the start of the second decade since the Cold War ended, the former superpower remains on the edge of political and economic chaos, yet it possesses some 10,500 nuclear weapons that are still operational and a comparable number in reserve or under dismantlement.

Since 1992, the U.S. has spent nearly \$6 billion on cooperative nuclear threat reduction programs to try to deal with the proliferation menace from Russia and the nuclear states of the former Soviet Union.

This builds on the Nunn-Lugar program to dismantle nuclear weapons such as missiles and strategic bombers in Russia. Bush noted last week that his review of the programs has the support of former Sen. Sam Nunn, a Democrat from Georgia who now co-chairs the Threat Reduction Initiative, a private foundation.

But Nunn rightly warned that recent budget cuts contemplated by the Bush adminstration for some threat reduction programs with Russia, such as the disposal of weapons grade plutonium, would amount to "heading backward."

The administration review will be completed by July, and at that time, any adjustments in the budget for nuclear programs can be contemplated. If they are underfunded, a supplemental appropriation could deal with any serious shortfall.

As Nunn observed last week, "The most significant clear and present danger to the national security of the United States is the threat posed by nuclear and other weapons of mass destruction. Nothing else comes close." Doubtless it's important to keep commitments to Russia, especially given the recent chill in relations over spy scandals, the Bush administration's pursuit of a national missile defense and Bush's concerns about Russia's proliferation of technology and weapons to states such as Iran. All the more reason to make sure those commitments

are effective. The review would look at programs such as those dealing with nuclear materials and safety; implementing plans to destroy 50 tons of plutonium that could be made into thousands of weapons; adding to efforts to make Russian fissionable material secure from theft or loss; putting 8,000 Russian scientists to work in the civilian research sector; tightening export controls in Russia, and helping Russia convert from chemical and biological weapons.

At home, there will be competition for those dollars, including a backlog of maintenance deferred at U.S. nuclear weapons facilities of the Department of Energy. Those programs also are important, but Russia's nukes are the greater threat.

It is in the U.S. national security interest to help dismantle Russian nuclear weapons. It is in the national interest to make sure that the dollars committed to achieve that goal are well spent on effective efforts.

Birmingham (AL) News April 1, 2001

Army Says New Patriot Missile Test On Mark

By Kent Faulk, News staff writer

HUNTSVILLE - The Army is a step closer to getting the latest version of its Patriot missile into the hands of soldiers after continuing a string of successful tests Saturday.

In the test at the White Sands Missile Range in New Mexico, two Patriot Advanced Capability-3 (PAC-3) missiles were launched in succession to knock down a target missile. The target was designed to mimic a Scud missile, which gained notoriety as the missile fired by Iraq against coalition troops during the Gulf War.

Based on preliminary information, the first PAC-3 hit and destroyed its target, said Col. Tom Newberry, manager of the Army's Lower Tier Air and Missile Defense Project Office in Huntsville, which oversees the Patriot program. Newberry was in New Mexico for the test. He said the second PAC-3 destructed automatically after the first missile destroyed the target.

During combat, two PAC-3 missiles would be fired at one enemy missile to ensure that it is knocked out before it can rain down weapons of mass destruction - such as a nuclear warhead.

Other tests

Also during Saturday's test, a PAC-2 missile successfully destroyed another Patriot missile that was designed to maneuver like a Russian SS-21 short-range missile.

Demonstrating the ability to simultaneously defend against multiple shortand medium range missiles with PAC-3 and PAC-2 missiles was one of the primary objectives of Saturday's test. The test cost between \$15 million and \$20 million.

All nine flight tests of the PAC-3 have been successful, including seven that involved hitting targets.

Saturday's test also ends the developmental testing phase of PAC-3, said Newberry and PAC 3 product manager, Lt. Col. Ed Mullin. There will be two more tests before soldiers participate in four tests. A decision on full rate production of the PAC-3 is to be made in the next fiscal year.

The Army wants to buy 1,100 PAC-3 missiles to mix with its arsenal of PAC-2 missiles.

The PAC-3 is designed to destroy shortand medium-range ballistic missiles, cruise missiles and airplanes. It destroys its targets by hitting them directly - sometimes referred to as hitting a bullet with a bullet. Earlier versions of the Patriot missile relied on explosive warheads detonated near the target to destroy the enemy missile.

Lockheed Martin Missiles and Fire Control in Dallas, Texas, is the prime contractor on the PAC-3 missile. The Boeing Co. makes the target seeker portion of the missile in Huntsville. Development of the target missile used in Saturday's PAC-3 test is also managed by the Army's Space and Missile Defense Command in Huntsville.

Washington Times April 2, 2001 Pg. 1

Military Blueprint To Set Big Changes

By Rowan Scarborough, The Washington Times

An emerging blueprint for future U.S. military strategy will call on the armed forces to field more unmanned aircraft and longer-range cruise missiles to perform pilot-warplane missions, according to Pentagon officials and outside advisers.

These sources said President Bush's "top-to-bottom" review will call on "unmanned combat air vehicles" (UCAV) to drop ordnance that destroys early warning radar and anti-aircraft weapons. Cruise missiles capable of traveling thousands, instead of hundreds, of miles would be used against command and communication installations. The strategy's major impact would be to decrease reliance on manned fighter-bombers, paving the way for potential cuts in two major programs under review: the tri-service Joint Strike Fighter (JSF) and the Air Force's F-22 Raptor stealth fighter.

Defense sources said development of futuristic UCAVs and longer-range missiles are two clear themes emerging from a 6-week-old Pentagon review. The extensive, secretive exercise is challenging long-held defense thinking, such as the need for large Army divisions and Navy battle groups built around huge aircraft carriers. The review may produce the most revolutionary strategy for the 1.37 million armed forces since the Cold War ended more than a decade ago.

There are at least 10 study panels at work in newly carved-out Pentagon office space. Their membership, for the most part, is composed of outside civilian analysts and retired officers, some known for unconventional thinking. Absent are current senior military officers, whose role is limited to making presentations to the various groups. Panel members will then write final recommendations to Defense Secretary Donald H. Rumsfeld.

Defense sources say Mr. Rumsfeld wants to avoid the mistakes made in the last major review, the 1997 Quadrennial Defense Review (QDR). Then, parochial service desires dominated the review. The Defense Department produced a status-quo strategy and force structure that critics say kept Congress and the defense industry happy, but failed to address new threats facing America in the next 10 to 20 years.

"Clearly, Rumsfeld is determined to conduct this review from the outside in," said a senior congressional defense aide. "Rumsfeld's own knowledge of the Pentagon has convinced him that the fix was in in 1997 so he's resorted to a very small coterie of internal advisers and outside panels."

Mr. Bush's desire for a comprehensive review of the military has led to a resurrection, of sorts, for one of the Pentagon's oldest policy makers — 79-year-old Andrew Marshall.

Mr. Marshall, who directs the Pentagon's futuristic Office of Net Assessment, has spent much of the past 50 years spouting unconventional ideas on how the military should plan for war. Repeatedly, generals and admirals have shunned any of his insights.

After a long career of proposing change, much of it done in secret reports, Mr. Marshall finally finds himself in the driver's seat.

By luck, an old Marshall admirer, Mr. Rumsfeld, was tapped by Mr. Bush to lead the Defense Department. Mr. Rumsfeld had liked Mr. Marshall's ideas during his first, brief stint as defense secretary under President Ford more than 25 years ago.

When he returned to the Pentagon, Mr. Rumsfeld quickly installed Mr. Marshall as lead agent for the "top-tobottom" review's all-important strategy study group. The post is key because Mr. Bush has stated frequently that his defense budgets will be driven by the emerging military strategy, not the other way around. This means Mr. Marshall's ideas carry the potential to shape how the armed forces will be structured, what weapons are bought and where they deploy overseas.

And that is what is making the Joint Chiefs of Staff nervous.

Mr. Marshall questions the Navy's need for new, huge carriers, arguing they are too vulnerable to foreign arsenals of anti-ship cruise missiles. He also questions the Air Force's need to buy 339 F-22s costing \$62 billion.

Ex-Navy carrier pilots have detected the latest bureaucratic attacks on their beloved flattops and are starting to counterattack.

To retired Rear Adm. Jeremy Taylor, a career strike pilot, the debate reminds him of his last years in the Pentagon. The year was 1990. The Cold War had just ended. The department was shrinking the armed forces. And the Air Force was waging a frontal assault on the necessity of large aircraft carriers, arguing a fleet of B-2 stealth bombers could unleash the ordnance of two such ships.

But when the infighting ended, the Navy surfaced victorious.

"The Air Force got 20 B-2s, and we still have our large carriers," said the former two-star admiral, who served as the Navy's director for aviation plans and requirements.

"Anybody who thinks the small carrier is comparable to a large carrier has to have their heads in the sand," Adm. Taylor said. "The fact of the matter is we've been down this road and made this argument a million times. This Mr. Marshall in the Pentagon, along with Rumsfeld and President Bush, are being poorly advised and are going down the wrong road."

"The Marshall crowd has always preached 'little' carriers to avoid missile attack," Adm. Taylor added. "My question is, what missile attack? When did one get hit? Who is going to target it? It's a moving platform. It has layers of defenses all around it. This is not a sitting duck. It is a fortress."

"When you invest in a platform that can give you the versatility, the mobility and flexibility to participate across the spectrum of warfare you'd be foolish to get rid of it. The reason carriers continue to be built is this argument wins every time. The problem isn't our enemies. It is our friends who propose to change what works with something they're not sure will work," he said.

However, if the Joint Chiefs have complaints about the possible revolutionary nature of the "top-to-bottom" review, they can blame the commander in chief himself. In fact, Mr. Bush while a presidential candidate was remarkably frank about his intentions in a 1999 speech announcing his plans for serious and sweeping defense reform.

"I intend to force new thinking and hard choices," Mr. Bush said then. He sent a warning to the Army, Air Force, Navy and Marine Corps by saying, "When our comprehensive review is complete, I will expect the military's budget priorities to match our strategic vision — not the particular visions of the services, but a joint vision for change." In particular, he highlighted a few major weapon systems: stealth ships able to fire missiles "great distances," unmanned aircraft and long-range bombers. He did not mention Navy carriers as being central to the military's new strategy for the 21st century.

The fact that Mr. Rumsfeld has stocked his defense study groups with some unorthodox thinkers does not mean the death of carriers or big cuts in jet fighter production. The defense secretary must first approve such

recommendations, at which point the service chiefs will have their chance to change his mind. And even if Mr. Bush goes along, carriers and new jet fighters enjoy significant constituencies in Congress, which the Constitution grants broad powers in overseeing the armed forces.

Senate Armed Services Committee Chairman John W. Warner, Virginia Republican, already has sent the White House a warning he will oppose a shift from giant carriers to smaller platforms. His state is home to Newport News Shipbuilding Inc., which builds the current Nimitz-class super carriers.

"Carriers have been, are and will be for the foreseeable future an absolute essential part of our deterrence force, and, if required, our offensive first-strike force," Mr. Warner said.

Mr. Bush has proposed a relatively lean \$310 billion defense budget for fiscal 2002. Defense sources say he will augment that number in late spring based on early study group recommendations. The sources expect these proposals to center on improving quality of life in the armed forces and setting new parameters for a national missile defense system.

Big programmatic changes, such as whether to eliminate major weapon systems and redesign Navy ships, will likely wait for the 2003 budget presented to Congress in February.

Defense Week April 2, 2001 Pg. 1

U.S. Missile-Defense Costs To Exceed \$100 Billion

By John M. Donnelly

Building and maintaining all the major U.S. missile-defense programs will cost far in excess of \$100 billion, according to the latest Pentagon figures, which were provided to Defense Week.

Developing and producing just the eight highest-profile anti-missile systems will cost about \$80 billion, most of it by 2010, the Ballistic Missile Defense Organization says. In some cases, though, that acquisition cost is incomplete: It covers only research, not production; or it includes only a part of a planned purchase.

Moreover, when the "life cycle cost" of operating and supporting—not just buying—those systems is added, the figure balloons to roughly \$115 billion. But that too is far from complete, because the missile-defense agency couldn't state the support costs for half its top systems. So the total cost is undoubtedly billions of dollars more than \$115 billion.

Despite keen international interest in these programs, the Pentagon's estimated price for its top strategic and tactical missile defense efforts has not previously been published, experts say.

The new BMDO figures are still not a complete answer. But they present the fullest sense yet of the hole that missile defense, whatever its merits, could leave in the military's wallet. Supporters of missile defense say \$10 billion a year or so is just a fraction of the Pentagon's annual \$300 billion budget.

Besides, advocates say, the missile-defense programs are needed to deter or intercept real threats to U.S. citizens. While the numerous anti-missile efforts may seem like overkill, the most effective protection has several tiers, they add.

"We need a layered defense, and they [the systems] are expensive," said Pamelia Bain, a BMDO spokeswoman. Others respond that the Pentagon, even in an age of record projected budget surpluses, cannot afford to pay for the bevy of missile defense programs and at the same time address other military priorities.

"The high demand for missile-defense funds will be a clear competition for military housing, health care, readiness and the transformation of the armed forces," said John Isaacs, an analyst with the Council for a Livable World, an arms-control advocacy group.

Eight top programs

At issue are eight programs, not only the National Missile Defense (NMD) program, but also the Space Based Infrared System-Low—the missile-warning and tracking satellites that will be the missile shield's vital eyes. Also included are the Navy's two programs—Navy Area and Navy Theater Wide; the Army's Theater High Altitude Area Defense (THAAD) and Patriot PAC-3 programs; and two laser efforts: the Space Based Laser and Airborne Laser.

The cost figures are conservative for other reasons. They do not include several Army programs, including the U.S. contribution to the Israeli Arrow program; the anti-rocket laser the Army built for Israel, the Tactical High Energy Laser; nor the Medium Extended Air Defense, a mobile protection for troops. Nor is a multibillion-dollar constellation of missile-warning satellites called SBIRS-High included; nor networks like the Cooperative Engagement Capability, a Navy air and missile defense battle-management network; nor sundry research efforts with application to anti-missile programs—to name a few.

The NMD program is the missile-defense establishment's most controversial effort. The Pentagon is developing a ground-based system that would defend the United States with interceptors, radars and battle-management computers based in Alaska and elsewhere.

The initial system would comprise 100 interceptors. Developing and building it would cost \$20 billion, BMDO says, but the Pentagon's independent cost crunchers, the Cost Analysis Improvement Group, say \$24 billion. When support costs are added, the total grows to \$43 billion, BMDO said. Support costs are usually reckoned over 20 years.

The Pentagon discusses no official cost estimates for its "objective"—read, planned—NMD system of 250 interceptors, because the program as budgeted is for just 100 interceptors. If, as some believe, the Bush administration expands that system—by going beyond 100 interceptors on land, or including U.S. allies under the shield or deploying a network at sea or in space—then the price could rise considerably.

The SBIRS-Low satellites would cost \$8.2 billion to acquire, but that figure only includes research and development, according to a recent report to Congress. And its support costs add \$2.4 billion to the total, BMDO told Defense Week.

The acquisition cost of Navy Area is \$7.3 billion, while acquiring the other short-range battlefield defense, the Army PAC-3, costs \$10.1 billion, BMDO says. The Navy Theater Wide program, a longer range interceptor system, costs \$5.5 billion to develop and test, but that doesn't include procurement, which hasn't yet been budgeted.

The Space Based Laser acquisition cost is \$3 billion, BMDO says, but that's only for a current demonstration effort—nothing near the cost to deploy a constellation. The 747-borne Airborne Laser would cost \$6.4 billion to buy, but taxpayers can add almost \$5 billion to the bill in support costs for the Scud-busting laser planes. The long-range THAAD system's acquisition price tag is \$17 billion, but it requires another \$8 billion to operate.

Significantly, BMDO could not provide support costs for the two Navy programs, PAC-3 or for the Space Based Laser—in other words, for half its major programs. That, even though new defense programs are supposed to be designed now with life cycle cost reductions as an objective.

Steve Hildreth, an analyst with the non-partisan Congressional Research Service, said the budget choices for the administration and Congress will be difficult if the missile-defense costs remain as projected. Referring to the new figures, he said: "If true, it seems likely it's going to force the administration and the Defense Department to make trade-offs as to what procurement items to acquire."

The information used to make defense decisions is not always complete, accurate or in a useable format. For example, the missile-defense cost figures provided to Congress in the quarterly Selected Acquisition Report and the top tester's annual report are already out of date, incomplete or improperly mix acquisition costs with life cycle costs.

Pentagon Missile-Defense Cost Estimates

NMD: Acquisition Cost -- \$24.4 billion, Life Cycle Cost -- \$43.2 billion SBIRS-Low: Acquisition Cost -- \$8.2 billion, Life Cycle Cost -- \$10.6 billion Navy Area: Acquisition Cost -- \$7.3 billion, Life Cycle Cost -- \$?? Navy Theater Wide: Acquisition Cost -- \$5.5 billion, Life Cycle Cost -- \$?? PAC-3: Acquisition Cost -- \$10.1 billion, Life Cycle Cost -- \$?? THAAD: Acquisition Cost -- \$16.8 billion, Life Cycle Cost -- \$23 billion ABL: Acquisition Cost -- \$6.4 billion, Life Cycle Cost -- \$11 billion SBL: Acquisition Cost -- \$3 billion, Life Cycle Cost -- \$?? Total: Acquisition Cost -- \$81.7 billion, Life Cycle Cost -- \$??

Defense Week April 2, 2001 Pg. 1

Navy Offers Fast, If Fragile, NMD Fix

By Ann Roosevelt

In what is probably the cheapest, fastest solution yet proposed as a National Missile Defense option, top Navy officers are quietly pitching a proposal to use existing Japan-based Aegis destroyers to intercept a potential North Korean ICBM launch, a defense official said. Dubbed Enhanced Air Defense, the officers say the system could be deployed in 12 to 18 months and would cost from \$150 million to \$200 million, said the official, who is familiar with the briefing and declined to be identified. The option's capability is limited and it's geared only to the threat of North Korea launching a missile from a known coastal launch site.

The Navy is advocating the system directly in briefings to top administration officials and lawmakers. The stakes couldn't be higher for the Navy, as the Pentagon is in the throes of a review of its missions, systems and resources—with NMD near the top of the issues list.

The NMD system that the Pentagon has been developing over the last eight years is ground-based. But many conservative missile-defense advocates, some of whom work in or influence the Bush administration, have long pushed for doing the job from the ocean. Several observers say the Bush team may want to deploy some sort of NMD system, however imperfect, in its first term. The Navy's Extended Air Defense proposal purports to do just that.

Existing capabilities

Even the most optimistic fans of sea-based NMD have discussed a system that could be deployed in four years for a few billion dollars—much more time and money than the Navy is now proposing, though the capability now under discussion is also greatly reduced.

Specifically, the Enhanced Air Defense plan would use two existing Arleigh Burke-class (DDG 51) destroyers, the USS John S. McCain (DDG 56) and USS Curtis Wilbur (DDG 54), both homeported at Yokosuka, Japan, the defense official said. The option posits using current Standard Missile 2 Block IV air-defense missiles and battle management.

If deemed necessary, the two ships would break off from normal duties and close to 12 miles to 30 miles off the North Korean coast. If the North Koreans launched a ballistic missile, the ships' Spy-1 radars would detect it,

something they have done on numerous occasions in witnessing from offshore other nations' missile tests, for example.

"The Aegis system was designed to shoot things that are seagull size in cross-section," the official said. "An ICBM is about the size of several greyhound buses when its boosting."

The Raytheon-built Standard Missile 2 Block IV has a blast-fragmentation warhead that detonates near its target and can propel high energy fragments into a rocket during boost phase, when it has not yet reached maximum velocity, blowing it up while its materials are under maximum stress, the official said. The Navy is confident this option could be 70 percent effective using one shot, rising to 85 percent taking two shots, the official said.

The option would count on an Aegis Linebacker battle-management program now being tested for theater missile defense. Neither the radar nor the vertical launch system would need modifications. Still, the existing Standard Missile-2 Block IV missile would need adjustment to shift from shooting down high-velocity cruise missiles and manned aircraft with small radar cross sections to intercepting larger ballistic missiles that are relatively slow in boost phase but accelerating.

The Extended Air Defense option is the nearest-term of four options the Navy is presenting to senior officials. The second and third options are upgrades to the Navy Theater Wide missile defense program. The final option is a more comprehensive approach.

The middle two concepts would expand the Navy Theater Wide, or NTW, system—which has begun flight testing, but has not yet attempted an intercept—to prove that the Navy can hit a target in space. The second idea, Enhanced Theater Wide, could be deployed in four to five years for between \$1.4 billion and \$1.8 billion, the official said. The system would use two Aegis cruisers with 50 Standard Missile 3s—the interceptor proposed for the NTW effort—with a prototype "Block 1" capability, the initial version of the system, the official said. However, the interceptor could be built to go faster and further than the current NTW model if development was unconstrained by ABM treaty considerations, the official added. Unlike the near term option, the second system would intercept an ICBM in space. Another difference would be the destruction mechanism: kinetic energy, not a blast fragmentation warhead.

However, the Pentagon's testing office says this system couldn't be fielded in the time period under discussion because of technical issues involved the radar, missile and warhead. In a March report to Congress, the testers said they don't consider "a near term—within five years—upgrade of NTW to be a viable national missile defense option."

The third concept, Enhanced Theater Wide Tactical, would further build on the NTW program. It would require six years to get to the first shipboard flight tests, would employ 60 Standard Missile 3s and cost from \$3.5 billion to \$4.5 billion, the official said. It would look at more sophisticated radars, including adding an X-band radar. The third option would leverage technology being jointly developed by the United States and Japan for the NTW Block II, a more advanced version of the NTW system. This option could take on more sophisticated threats, have some boost phase capability and defend a wider area, the official said.

Blank paper

The fourth and final concept is called Navy Regional Defense. It would not be at sea until 2010-2012 and would cost \$8 billion to \$12 billion just for the missile-defense technology, plus up to \$1.6 billion for each ship needed for a dedicated NMD fleet. The number of ships needed is not defined.

The Navy does not recommend this option if the only threat is North Korea and a solution is needed quickly. In a recent report to Congress, BMDO considered a concept similar to Navy Regional Defense as a supplement to a landbased system in the same time frame as the Navy option. For six dedicated ships, the total ship construction and NMD system costs would be \$14 billion to \$18 billion, the BMDO report said.

By sharp contrast, two arms-control groups say the costs will be much higher. A more likely price tag for such a capability is between \$30 billion to \$43 billion, and it will probably take up to 20 years to do, say the Council For A Liveable World Education Fund and the Coalition to Reduce Nuclear Dangers. On the other end of the spectrum, the Heritage Foundation, a conservative think tank in Washington, says sea-based NMD systems built on NTW could be at sea in under four years for less than \$2 billion.

Aviation Week & Space Technology April 2, 2001 Washington Outlook

Cheap Missile Defense

The shortest, cheapest route to missile defense is installation of destruct packages on American and Russian strategic nuclear missiles, so that they could be blown up en route if they were accidentally launched, former Sen. Sam Nunn said last week.

"We have these destruct devices on test missiles, why not put them on nuclear missiles?" the Georgia Democrat suggested in a National Press Club speech. A veteran of nonproliferation initiatives against nuclear, biological and chemical weapons of mass destruction (WMD), Nunn voiced optimism that the Administration would continue to fund cooperative denuclearization initiatives with Russia.

Despite the threat of budget cuts, he welcomed the White House efficiency review of nonproliferation programs, saying the deeper the Bush team or anyone else digs into the concept of cooperative threat reduction, the more irresistible its logic becomes. As for his latest WMD threat estimate, Nunn declared, "Nothing else comes close." To date, Nunn-Lugar funds have financed the destruction of literally thousands of Russian nuclear warheads, hundreds of strategic missiles and hardened silos, 18 nuclear submarines and more than 80 bombers. "But there is a long, long way to go," the ex-senator admonished, including thousands upon thousands of unaccounted-for Russian tactical nuclear weapons.

Washington Times April 2, 2001 Getting India Right

By Richard D. Fisher Jr.

America is entering a geopolitical moment: It now has the opportunity to forge a beneficial relationship with arising "good" superpower in a manner that provides a strong but positive balance to the rising "bad" superpower. First things first. India is the "good" rising superpower. For more than 50 years, India has been a vibrant democracy. Just ask former Defense Minister George Fernandez, who recently resigned his portfolio because his underlings were caught taking bribes. Indians will be the first to admit their democracy is ponderous. But which one isn't? And it is the law that ultimately prevails in India.

China is the "bad" rising superpower. For more than 50 years, China has been ruled by the men who lead its Communist Party. Real democracy is forbidden and any other seemingly organized opposition is brutally crushed. Nor do the ruling communists seem to tolerate other Chinese democracies. Just ask Taiwan, or even Hong Kong's increasingly stifled democrats.

Both India and China are developing nations that have sectors of technological brilliance that contrast with areas of stark underdevelopment. The challenge for both is how to best throw off the shackles of socialism, which restrict opportunity and impede economic growth. Today foreign money bets on China, but the long-term edge may be with India. In India, successful entrepreneurs benefit from a legal system and are more likely to keep their rewards. In China, entrepreneurs must navigate a maze of corruption, and they can lose it all, and their lives, if they run afoul of the party.

Both India and China are now building nuclear missiles. One can question whether India started its nuclear missile race with Pakistan, but it now clearly behind, and cannot begin to match China's arsenal. China's expanding missile forces are pointed at its democratic neighbors Taiwan in particular. China sold Pakistan the means to build nuclear weapons and its new Shaheen solid-fueled missiles. At the same time, China is leading a global propaganda barrage against American missile defense plans. Some serious Indian defense experts suggest that cooperating with the U.S. in missile defense would benefit Indian security.

India and China are also competitors for future influence in South and East Asia. China wants to become the region's hegemon. So far, it is China that arms the states on India's borders, not the other way around. Though successive U.S. administrations say they will prevent the rise of such a hegemon, Asians are hedging their bets. Asian states from Singapore to Japan are quietly looking for ways to increase their strategic cooperation with India. So should Washington, if it wants to continue its positive influence in the same region. Unfortunately, India and the United States have been at cross-purposes for most of the last 50 years, be it the Cold War divide, North vs. South politics, and socialism vs. capitalism. So lacking in overarching mutual interests, U.S. relations with the world's

largest democracy have been driven by a train of important but secondary issues: conflict with Pakistan; conflict over Kashmir; and India's nuclear program.

Former Presidents Ronald Reagan and George Bush Sr. tried to break out of this pattern by initiating a defense dialogue with India that was no doubt helped by the collapse of the Soviet Union. By the end of the Bush administration, the U.S. was even selling defense technology to India, like advanced engines for its Light Combat Aircraft program.

But this good beginning was cut down as the new Clinton administration sought to meddle in the Kashmir dispute. Any hope for improved defense ties were blown away by U.S. sanctions imposed following India's 1998 nuclear tests. Most galling to Indians was the Clinton administration's willingness to echo Chinese demands that India abandon its nuclear program while doing nothing to stop China's nuclear traffic with Pakistan. It was simply shameful that CIA Director George Tenet could not publicly state that China was responsible for the sale of technology that enabled Pakistan's new sold-fuel missiles until after Bill Clinton left town. Today more than 150 Indian entities are under U.S. nuclear-related sanction compared to less than a handful of Chinese entities. It is time for the U.S. to break this pattern and seek strategic cooperative ties with India that demonstrate a U.S. recognition that India's emergence as a future democratic superpower can benefit American security. For starters, the new Bush team would do well to state that the U.S. and India have an interest in preventing China's nuclear and missile proliferation and its quest to be a regional hegemon. Washington should also end nuclear-related sanctions that prevent the resumption of a defense dialogue, that at a minimum, should take up where the previous Bush administration left off.

Ultimately, both the U.S. and India would benefit from helping forces in China that would move it toward democracy. For each the levers to do so are few, but one stands out: By helping a billion Indians develop a democratic superpower in this century the U.S. can help prove to a billion Chinese that they can have prosperity together with the freedom they now lack.

Richard D. Fisher Jr. is a senior fellow with the Jamestown Foundation.

Washington Post April 3, 2001 Pg. 12

Russia's Skeletal Missile Plan

Outline of European Shield Brings Little Response From West

By Peter Baker, Washington Post Foreign Service

MOSCOW -- For months, it has been Russia's answer to U.S. missile defense plans: a limited anti-missile system that would protect European countries left out of Washington's vision. With a flourish, President Vladimir Putin finally presented a written proposal at a Kremlin ceremony in February.

NATO Secretary General George Robertson politely accepted the plan and promised to study it, but back in the West, the Russian proposal has been greeted by puzzled looks and head-scratching. For all the buildup, the plan turns out to be just four pages plus a diagram.

A copy, not released publicly at the time but provided by the Defense Ministry in response to a request last week, reveals a plan long on generalities and short on specifics. It offers little technical evaluation and no cost estimates, development timetables or organizational structures. Instead, it provides a theoretical framework for how a mobile European-based system might be developed using Russian technology.

In the nearly six weeks since receiving it, NATO has not even bothered to schedule the briefings Putin offered. The plan is "a constructive approach to a problem that Russia and NATO have in common," a NATO spokesman said diplomatically. But he added, "The proposal was very much lacking in detail."

Russian officials said the document was intended to be a starting point and expressed frustration that the West Europeans have not called. "I don't know why," said Vice Adm. Valentin Kuznetsov, the chief treaty negotiator for the Defense Ministry. "Either they're afraid or they haven't worked out their own attitude toward the document. We are ready to go to Brussels at any moment."

Missile defense has become a central issue dividing Russia and the United States, especially since President Bush took office in January vowing to move forward with an even more ambitious program than President Bill Clinton

had considered. The Robert P. Hanssen spy scandal and a subsequent back-and-forth round of diplomatic expulsions has exacerbated the tension between the two countries.

But several analysts said they believe the West is missing out on an opportunity to engage Russia, arguing that Putin's missile defense plan, however inadequate, represents an opportunity to defuse the international conflict, at least somewhat.

The counterproposal, they said, amounts to more than a political ploy to appeal to skeptical U.S. allies in Western Europe; it could be a face-saving attempt by Putin to become part of a joint solution instead of simply an opponent. "It's a very clumsy attempt to find a compromise, and not very successful in my view," said Pavel Podvig, a military analyst at the Moscow-based Center for Arms Control, Energy and Environmental Studies. "But still, it is very clear that this is part of the message that Putin is sending: 'We do want to be together with the West, with NATO and even with the United States.'"

If the Russians were part of a Europe-wide missile defense plan, they would be less hostile to a U.S.-based system, said Nikolai Sokov, a former Russian arms control negotiator, especially because development of such a program could mean money for the Russian military-industrial complex.

"Let's be frank: To a large extent, this is a matter of money," said Sokov, now a scholar at the Center for Nonproliferation Studies at the Monterey Institute of International Studies in California. "If the Russian defense industry is on board with contracts, they will be able to suppress more traditional, straightforward security concerns expressed by the military."

The Russian document given to NATO on Feb. 20 states that its aim "is to ensure the strategic and regional stability in Europe by concentrating efforts to create an all-European system of defense from non-strategic ballistic missiles." Unlike the U.S. plan, it targets short- and medium-range missiles instead of intercontinental weapons.

The concept rests on a three-step process: evaluating any missile threats against European states; developing a missile defense concept; and determining deployment of antimissile units. The Russians suggest mobile batteries that can be shifted to protect particular regions when they come under threat.

The proposal envisions creating a single database with the characteristics of all known non-strategic ballistic missiles, opening a joint center with the Europeans to share information from launch warning systems similar to one envisioned earlier with the United States, and testing new equipment using existing Russian facilities. Ground radar would be used at first, but satellite detection systems could be developed in the future.

A diagram included with the plan suggests a multi-layered shield, with one type of system targeting missiles at a height of 90 miles and smaller batteries within the larger umbrella aimed at enemy missiles at a height of 18 miles. Analysts say the Russians have in mind as a model their own air defense systems, the S-300 and the soon-to-be-completed S-400, essentially Moscow's equivalent of the U.S. Patriot system that was used in the Persian Gulf War against Iraqi Scud missiles. However, those systems were designed to be more effective against enemy aircraft than missiles.

International Herald Tribune April 4, 2001

How We Can Escape The Missile Defense Paradox

By Mark W. Davis

WASHINGTON -- The return to the Pentagon of Donald Rumsfeld, a man whose commitment to missile defenses no one can doubt, will soon force us all to confront a paradox. The West must build a missile defense system to protect itself. Yet building that system could provoke the very dangers the West seeks to avoid.

Why must such a system be built? The global window of vulnerability will soon be as wide as all Asia, with that continent girdled by nuclear powers from Israel (skipping over Jordan) to Iraq, Iran, Pakistan, India, China and North Korea.

The threat to Europe is dire. Germany's Federal Intelligence Service believes that Iraq will be able to threaten European cities with nuclear-tipped ballistic missiles by 2005. In the United States, a bipartisan commission of defense experts headed by Mr. Rumsfeld reviewed highly classified data several years ago and concluded that a country as impoverished as North Korea could project a strategic threat deep into the American heartland within five years.

On the whole, it has been U.S. Republicans who have thought through the consequences of living in such a shaky world bristling with weapons. It is President George W. Bush who has challenged the blithe willingness of liberals

to trust the survival of America's cities to the goodwill or sanity of leaders in Baghdad, Tehran and Pyongyang. Bush obviously worries that American families will lose Franklin Roosevelt's "fourth freedom" - the freedom from fear.

However, U.S. liberals and European leaders have a better grasp of the other half of the paradox. They realize that the very act of building such a system would provoke Moscow, Beijing and other governments into developing new ways to deliver lethal blows to Western cities.

Like all paradoxes, this one can only be resolved by questioning our fundamental assumptions. The time has come for a radical reorientation of our way of thinking about defenses. A new approach, one free from past ideological battles, could open a historic opportunity for Mr. Bush. He could combine the best ideas of both supporters and critics of missile defenses.

Until now, missile defenses have been seen as the antithesis of arms control, a Lone Ranger approach that would sever America's defensive ties with its allies, while making U.S. capabilities seem more threatening. All that would change, however, if Mr. Bush were to make the sharing of missile defense technology the centerpiece of his foreign policy. He could cite some precedent for this idea. President Bill Clinton floated the idea of sharing defensive technology with Moscow. Many conservatives forget that President Ronald Reagan went even farther, willing to repudiate deterrence itself in careful stages.

Such a deal could ease Moscow's paranoia as budgetary pressures force it to radically reduce its strategic rocket forces. It would offer China a path to security without having to engage in a dangerous and costly arms race with the United States.

It is likely that both Russia and China would initially respond to such an offer with threats and bluster. In the face of such strong opposition, along with the world-weary skepticism of our allies, U.S. leaders would need to be united and steadfast, using the power of the strategic defense concept to prod nations to the table.

The critical question: In time, would non-Western powers eventually buy in? Mr. Bush should remember that the mere threat of a strategic defense forced the Soviet Union to the negotiating table in the 1980s.

In the end, the relentless quest for security would probably force other major powers to accept a shared defense. Those that did not accept would soon become increasingly irrelevant to the protected powers and vulnerable to one another. Those that came in from the cold would enjoy security equal to that of the United States and its allies.

The next president might extend the strategic defense concept well beyond missile defense, to the sharing of intelligence, early warning assets, the technology of border defense and customs searches, as well as cooperation in anti-terrorism efforts.

Such security cooperation could even allow humanity to contemplate the ultimate vision of liberal diplomacy, the global control and perhaps the eventual elimination of weapons of mass destruction.

There is only one way out of the missile defense paradox. Mr. Bush should marry the hard-nosed with the idealistic, the coercive incentives of defensive technology with the highest ideals of American internationalism.

The writer, a former speechwriter for President George H. W. Bush, works with the White House Writers Group, a public issues company. He contributed this comment to the International Herald Tribune.