

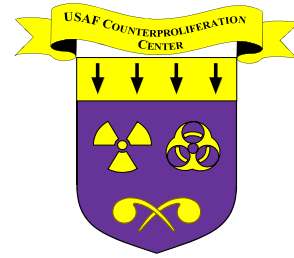
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CPC OUTREACH JOURNAL

*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.

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United States General Accounting Office
Report to Congressional Requesters

STATE DEPARTMENT

Serious Problems in the Anthrax Vaccine Immunization Program

GAO-01-21, December 2000

<http://www.gao.gov/cgi-bin/getrpt?rptno=gao-01-21>

Draft

A Report Card on the Department of Energy's Nonproliferation Programs with Russia

January 10, 2000

Howard Baker, Lloyd Cutler, Co-Chairs, Russia Task Force

<http://www.hr.doe.gov/seab/rpt.pdf>

CNN.com

January 12, 2001

Laser-Equipped 747 Designed To Blast Ballistic Missiles

Air Force plans new role for workhorse aircraft

By Rick Lockridge, CNN Technology Correspondent

WICHITA, Kansas -- With its unmistakably equine nose and giant wingspan, the Boeing 747 is a worldwide symbol of a workhorse that has been bearing people and cargo around the globe for three decades.

The new millennium could give the old plane a newer, meaner image.

Engineers are making plans to change the gentle giant into a hot-blooded killer with a swiveling nose-cone laser beam theoretically capable of destroying enemy missiles hundreds of miles away.

That's the idea behind the U.S. Air Force's Airborne Laser program, or ABL, a \$1.6 billion project now under way primarily at the Boeing Co.'s maintenance and modification center here.

In a 1 million-square-foot hangar, illuminated by brilliant orange and blue spotlights, surrounded by scaffolding and swathed in protective plastic, is the first of what the Air Force hopes will eventually become a fleet of seven 747s capable of knocking missiles out of the sky.

"The Airborne Laser program is the culmination of about 20 years of research," said Col. Ellen Pawlikowski, the program's director. "It is the Air Force's first directed energy weapon, and we will use it to shoot down Scud missiles and other enemy missiles in the air to protect our troops in the field."

Whether the ABL fleet becomes a reality will in large part depend on how well the aircraft in Wichita performs in future flight and live-fire tests. If it flies, literally and figuratively, future ABL 747s could give the U.S. military a "first-shot" anti-missile weapon that would plug a hole in current national defenses.

And it will usher the world into a new era of warfare, where light itself is used as a weapon.

"To have a program that can go out and touch someone at hundreds of miles instantly at the speed of light is something that I think is going to change warfare now and in the future," said Maj. Pedro S. Oms. "We are doing something that is potentially revolutionary, and (are) proud to be part of it."

Record modifications

When it finally emerges from the Wichita hangar sometime in 2002, the revamped 747-400F will have undergone more than 1.2 million man hours of "mods," or modifications.

That's more mods than any aircraft in Boeing history, said Boeing's Brad Gorsuch.

That includes the number of custom changes made on the twin 747s that make up Air Force One, the U.S. presidential aircraft. "And, believe me, a tremendous amount of mods were performed on those planes," said Boeing's Dick Richter.

Critics play wait and see

Because the program is expensive and technologically challenging and has yet to be fully tested, critics and Pentagon watchdog groups are taking a wait-and-see approach before passing judgment.

"If we give the Air Force enough money and enough time, the Airborne Laser will probably achieve many of its goals," said John Pike, director of [globalsecurity.org](http://www.globalsecurity.org) and formerly of the Federation of American Scientists. He considers the project probably a very good investment.

But engineers cannot control every aspect of its development, cautioned Pike, who oversees an organization that promotes shifting the United States from conventional defenses to newer, state-of-the-art military readiness.

What happens if it is faced with an adversary outside of its design capabilities? he asked. What about cloudy conditions that would impede the ability of the laser to find and track the target?

"As with every other weapon, there is no reason to hope that it is going to work perfectly all of the time," Pike said.

Old, new technology

The megawatt-plus laser to be installed aboard the laser-outfitted 747 is actually some of the oldest technology the plane will carry. (The exact wattage is classified, but the Air Force says it uses more than 1 million watts.)

Developed by the U.S. Air Force in 1977, the laser relies on a chemical reaction between chlorine, hydrogen peroxide and iodine to create an actual explosion of light. That light is funneled down a long mirrored tube and exits the aircraft through a flexible lens in the nose cone.

Air Force engineers hope to create laser blasts capable of exceeding seven minutes, with planes able to fire off 20 to 30 shots before landing.

The reinforced nose cone, by comparison, is a recent innovation. Boeing engineers had to remove the prototype's original nose, substituting a seven-ton turret to channel and direct the laser. It had to be precise, in spite of its position on the very tip of the plane.

"That swiveling nose cone has been quite an engineering challenge for us," said Boeing's Gorsuch.

That wasn't the only change to the ABL 747. The chemical reaction that produces the lethal laser is a violent event, capable of killing anyone nearby, so the revised aircraft's fuselage will be bisected by a solid wall amidships. It's called a "1,000 bulkhead," located 1,000 inches, or roughly 80 feet, from the aircraft's front tip, and will isolate the two pilots and four weapons specialists who make up the crew.

No trigger man

No human finger will actually pull a trigger. Onboard computers will decide when to fire the beam.

Machinery will be programmed to fire because human beings may not be fast enough to determine whether a situation warrants the laser's use, said Col. Lynn Wills of U.S. Air Force Air Combat Command, who is to oversee the battle management suite.

"This all has to happen much too fast," Wills said. "We will give the computer its rules of engagement before the mission, and it will have orders to fire when the conditions call for it."

The laser has about only an 18-second "kill window" in which to lock on and destroy a rising missile, said Wills.

"We not only have to be fast, we have to be very careful about where we shoot," said Wills, who noted that the firing system will have a manual override. "The last thing we want to do is lose an F-22 (fighter jet)."

The laser doesn't have to melt through an enemy missile's metal skin to kill it. The beam only has to weaken the missile's exterior, the Air Force believes; the projectile's speed and pressure exerted on it should finish the job.

"What we're out to accomplish is ... weakening the metal," said Capt. Eric Moomey of the U.S. Air Force Research Laboratory. "We intend to cause a rupture from within the rocket."

The technology works in fact as well as theory. The Air Force has used a test laser on two simulated missile tanks -- one made of metal, the other made of a thick polymer mesh -- at a testing facility at Kirtland Air Force Base in Albuquerque, New Mexico. Their gaping holes bear silent proof that the proposal is more than blue-sky wishing. "Everything we have has all been based on good solid science development over the last 20 years," said Pawlikowski.

Striking fears in the enemy

If the modifications to the laser-equipped 747 continue on schedule (work is on time and on budget at present, say Air Force and Boeing officials), the first flight tests will take place early next year. Assessing the plane's flying capabilities, plus calibrating its weaponry, will take more than a year.

If that goes according to plans, the ABL 747 in September 2003 will take to the air for its greatest challenge: shooting down a number of simulated Scud missiles.

If those first tests go well, the ABL program is set to move into full-scale production, with six aircraft to be delivered and in service by 2009. The prototype aircraft will also become part of the fleet.

And just in time, said Wills, who can rattle off the names of nations that have missiles capable of dumping toxins or even detonating a nuclear warhead on enemy countries.

"We think we are really going to need those aircraft," he said. "I want our enemies thinking, 'Uh-oh, I've got something out there that I'm coming up against that I can't defeat.'"

Threats To U.S. Homeland Loom Larger

Terror Attacks, Emergencies Test Pentagon, Civil Response

By Robert Holzer, Defense News Staff Writer

WASHINGTON — A major national security issue facing the incoming administration of President-elect George W. Bush is how to restructure the U.S. government to more effectively address, manage and fund the burgeoning issue of homeland security.

The new administration must move quickly to devise its strategy and recommend changes in how the government is structured to handle this important but increasingly complex and highly challenging security issue, experts said.

"I think it is an important issue, and the new administration has a narrow window to work on this before you get tied up in the bureaucracy," said Paul Bremer, a former State Department official and member of an advisory panel that provides an annual assessment to the president and Congress on the terrorist threat to the United States.

Whether the new national security team being pieced together by the Bush administration fully comprehends the entire spectrum of threats contained in the definition of homeland security is unclear.

Defense Secretary nominee Ronald Rumsfeld, during his Jan. 11 testimony before the U.S. Senate Armed Services Committee, referred to homeland defense in terms of defending against missile attacks and defeating clandestine cyber-attacks against military computer networks.

Homeland security, however, is an evolving term that incorporates a vast array of non-traditional security challenges under the umbrella of threats to the continental United States. Threats as diverse as disruptions of commercial computer networks to terrorism, to use of weapons of mass destruction, and a variety of public-health responses, are all included within the homeland security concept.

"Too often the debate is cast as either-or, when it is both," said Frank Cilluffo, a senior policy analyst at the Center for Strategic and International Studies here, and a principal author of a new report on the issue. "I don't think [the Bush administration] is going to look at this just through the missile defense lens."

At least three high-level commissions and a broad overview of future international trends by the CIA during the last month have concluded that the United States homeland faces a serious risk of attack in coming years.

The congressionally mandated commission on combating terrorism, led by Gov. James Gilmore, R-Va., said in its mid-December report, "The potential for terrorist attacks inside the borders of the United States is a serious emerging threat."

The commission came to "the stark realization that a terrorist attack on some level within our borders is inevitable and the United States must be ready."

In addition to the Gilmore commission report, other reports released or expected to be unveiled soon are: the third and final report of the United States Commission on National Security/21st Century; a report on homeland defense from the Center for Strategic and International Studies here; and the CIA's report on global trends in 2015. While all highlight the growing severity of the threat posed to the United States, the reports differ on proposed solutions. The reports recommend to the incoming president a variety of steps to reallocate national resources and encourage greater coordination among the overlapping federal organizations involved with homeland defense issues.

Homeland defense is a complex issue in part because it is not solely a military problem. The reports call for a defensive scheme that would involve broad coordination among more than several dozen federal departments, agencies and bureaus, in addition to hundreds of different state and local governmental structures.

"Interagency cooperation will be essential to understanding transnational threats ... [which] requires close coordination among a host of U.S. government agencies, U.S. state and municipal governments, the military, the medical community and the media," concludes the December CIA report, "Global Trends 2015."

Today, this structure functions in a tangled and inefficient manner with no central leader who possesses the authority and controls funding to make required changes, virtually all of the reports conclude. The measures required to untangle this interagency morass already are sparking debate among experts.

The boldest proposal, still being fleshed out, is to create a new National Homeland Security Agency, stated in a draft proposal by the United States Commission on National Security/21st Century, according to sources familiar with the presentations.

Established by current Defense Secretary William Cohen, the commission was given a broad charter to assess and recommend changes to the national security decision-making structure. The commission's report is scheduled for release in early February, defense sources said.

This new agency would take the present Federal Emergency Management Agency, which responds to national disasters, and combine it with the Coast Guard, Border Patrol and the Customs Service to fashion a more comprehensive approach to homeland security, defense sources said.

Other functions now performed by the FBI and the Commerce Department, such as various types of critical infrastructure protection including national electrical grids, also would be transferred to this new agency, defense sources said.

Retired Air Force Gen. Chuck Boyd, executive director of the commission, did not return phone calls seeking comment on the homeland security issue.

The Gilmore commission recommends establishing a new office for combating terrorism, while the Center for Strategic and International Studies favors creating a special assistant for homeland issues on the staff of the vice president.

"I favor starting a new office, at cabinet level, with the political authority and resources," said Bremer. "That is the right approach."

Each of the reports and studies is playing a valuable role in generating debate and attracting the attention of senior officials throughout the government to the complex issue of homeland defense, Cilluffo said.

"This is an issue that is going to be on ... everyone's radar screen, whether they like it or not," he said.

San Francisco Chronicle

January 16, 2001

Pg. 1

U.N. Sanctions Keep Iraqis Poor, Hopeless

New Threats: War With Chemical, Biological Arms

By Keay Davidson, Chronicle Science Writer

In the 10 years since high-tech weapons dazzled the world in the Persian Gulf War, military technology has advanced in new directions.

But the world has changed, too. Old enemies have vanished or have been vanquished, to be replaced by new ones with different munitions and motivations.

And, experts fear, the "smart" weapons of Gulf War glory may not be ideal for fighting the likely foes of tomorrow - small, shadowy bands of terrorists who fight for their ideals not with bombers and troops but with computer keyboards and bottle-sprayed microbes.

The super-weapons of the Gulf War were products of Cold War science, a titanic enterprise that cost U.S. taxpayers hundreds of billions of dollars and that generated lethal gizmos worthy of James Bond: "smart" bombs that allegedly zipped down chimneys, unpiloted "drone" aircraft that transmitted TV images of enemy movements, infrared scanners on space satellites that detected heat from the engines of enemy trucks rumbling through the desert night.

The Gulf War "was really the first (time) anyone talked about all these 'smart' weapons as a way to fight a war, rather than with the nuclear weapons of the Cold War," says Jim Tegnalia, vice president of Defense Department programs at Sandia National Laboratories in Albuquerque.

Today, the cutting edge of military technology aims at empowering individual soldiers in the field. One device could do for biowarfare what cell phones did for communication: The handheld gadget detects deadly biological agents.

Its inventors at Lawrence Livermore National Laboratory have dubbed it HANAA, for Hand-Held Advanced Nucleic Acid Analyzer. They claim it can distinguish an Ebola virus from a cold germ within 15 minutes.

Killer microbes are exactly the threat dreaded by many military analysts, now that the traditional U.S. foe -- the former Soviet Union, with its bulging arsenal of nuclear weapons -- has become our debtor and almost our pal.

Biological and chemical agents are called "the poor man's nuclear weapons." When used against civilian populations, their shock value would more than compensate for their tactical inefficiency on the battlefield.

If an enemy force sprayed killer germs on U.S. troops, soldiers could use HANAA to quickly identify the microbes and take an antidote.

For example, if troops inhaled a toxic cloud containing pulmonary anthrax, they could die within days. Before HANAA, experts might have needed weeks to identify the killer and protect soldiers.

With the device, the microbes could be identified within "about 15 minutes, although we have done it as fast as seven," says Ron Koopman, a physicist who is special projects manager for the "Chem/Bio" National Security Program at Livermore.

Decades ago, Americans feared death from the sky -- a murderous rain of inter-continental ballistic missiles fitted with Soviet nuclear warheads.

But nowadays, "the biggest thing we have to worry about are Ryder rental trucks," says Sunnyvale's Chuck Hansen, creator of the acclaimed CD-ROM "Swords of Armageddon," a rich mine of documents on Cold War nuclear weapons.

He was alluding to the truck carrying explosive agents that right-wing terrorists used to destroy a federal office building in Oklahoma City in 1995.

"Look at that whacked-out cult in Japan that spread (nerve gas) in the subway system," Hansen adds.

Politicians talk about guarding against terrorists armed with biowarfare agents, but Hansen is pessimistic: "The border's just too porous, both the Mexican and Canadian borders. We'd probably have to become a police state to stop it."

In his view, the era after the Gulf War is one in which America's enemies are defined by comparatively small, fierce nations like Iraq and affiliated terrorist groups, not by geopolitical octopi like the old Soviet Union. Less than a year after the Gulf War, the bankrupt Soviet Union -- which was humiliated by its inability to intervene on behalf of its Iraqi ally -- vanished into history.

"The nature of the threat has certainly changed," says Hansen, who is preparing a new edition of his CD-ROM.

"Great big nuclear-bombing tank battles on the plains of Germany probably aren't going to happen now. Instead, the kinds of threats we face will be the kind we faced in the last 10 to 15 years -- small conflicts in faraway places."

"Take the Cole incident," he says, referring to the October bomb attack on a U.S. destroyer in Yemen. "Trying to protect against that, the military is faced with almost the same kind of threat they faced with the (suicide dive-bombing) kamikazes at the end of World War II.

"If somebody really wants to get through to you and is willing to sacrifice their lives to do it, they can probably get through to you."

In interviews, military experts cited other post-Gulf War trends in weaponry:

-- Improved radar for use in bad weather and difficult terrain. The high-tech weapons of the Gulf War functioned unusually well at least partly because they were used in a region with relatively simple weather and terrain -- in other words, sunny skies and largely flat desert terrain.

The limits of "smart" weaponry became clear when the United States and its allies intervened in the Bosnian war and in Kosovo, Tegnalia says. The tree-covered Balkan terrain and sometimes difficult weather made it harder to spot enemy troop movements.

Hence the recent trend toward "smarter" radar able to see through fog, rain and trees. Scientists at Sandia Labs are developing very small, portable radar systems that can see objects otherwise veiled by weather or terrain features.

-- Improved cruise missiles. During the Gulf War, cruise missiles were confused by the relatively flat terrain of the desert, which lacked features easily recognizable by the missile's on-board radar and computers.

So now, cruise missiles navigate using the same system trusted by many hikers and campers: the GPS (Global Positioning System) satellite network.

"GPS is much more accurate," says Hansen. "In the case of the Gulf War, some of these missiles had to cross very large, featureless terrain where there were no landmarks for the radar to latch onto."

-- Robots. "Drone" aircraft are just the beginning of the roboticization of warfare, which may eventually replace many troops with machines, according to some military visionaries. Eventually, some say, robots could all but eliminate human casualties in warfare.

Although Tegnalia works for one of the nation's preeminent military labs, and welcomes roboticization as a way to lessen U.S. casualties, he isn't sure that the ultimate dream -- "risk-free" wars -- would be a total blessing.

Is the United States, he asks, prepared to risk the global revulsion that might result, should this nation be capable of exerting its military might anywhere with impunity -- and whether or not the use of force is justified?

"If you can go to war without risk, is that a morally good position to be in?" he asks. "The concept of risk-free warfare is kind of a frightening thing."

Weapons Of War

Some weapons that played a key role during the Gulf War:

Patriot -- Land-based anti-aircraft weapon used against surface-to-surface guided missiles, especially Scuds.

Scud -- NATO's name for Soviet-made SS-1, surface-to-surface ballistic missile able to carry warheads with varying accuracy to targets up to 560 miles away.

Tomahawk -- \$1 million cruise missile launched from ships, submarines or B-52 bombers. They can be guided to targets 800 miles away by onboard computer.

Apache -- U.S. Army's super-advanced AH-64 attack helicopter, designed to fight at close range night or day.

Abrams -- M1A1 Tank Main U.S. battle tank that gained reputation as the world's best heavy tank.

Stealth F-117 Nighthawk -- The world's first operational "stealth" attack plane, skimmed undetected through Iraq's radar and air defenses.

Black Hawk -- Successor to Vietnam-era UH-1 Huey as the Army's main workhorse helicopter.

Warthog -- U.S. Air Force's A-10 is nicknamed for its ungainly appearance. Designed for close support of ground troops, it carries guns, missiles and smart bombs.

B-52 Stratofortress -- History's most durable bomber, this eight-engined B-52, with its 40-foot shark-fin tail and drooping wings, was upgraded to use missiles.

Bradley -- Speedy, tracked troop carrier with powerful 25-mm "Bushmaster" chain gun.

The Moscow Times

Wednesday, January 17, 2001

Russia Building 2nd Iran Reactor

By Alla Startseva

Staff Writer

Nuclear Power Minister Yevgeny Adamov on Tuesday dismissed as "all politics" staunch U.S. opposition to Russia building a nuclear reactor in Iran and announced that work on a second one was already under way.

"There is not a single piece of evidence that we are helping or might help Iran strengthen nuclear weapons potential," Adamov said at a press conference.

He said that construction of the first 1,000-megawatt reactor at the Persian Gulf port city of Bushehr, which began in 1995, is 90 percent completed.

The reactor is expected to be fully operational by 2003, when Iran is due to pay Russia \$800 million, according to the agreement.

Iran already has two small research reactors of its own, but the Bushehr reactor would be Iran's first powerful enough to produce weapons-grade plutonium -- the reason the United States says it opposes the project.

In the past, both Iran and Russia have insisted that the plant will be used only for civilian purposes. And Adamov reiterated that position again Tuesday.

The Nuclear Power Ministry is building six reactors outside Russia -- the two in Iran, plus two in India and two in China.

"Not a single foreign corporation has that many orders for constructing nuclear power plants in a foreign country," said Adamov.

Alexander Pikayev, editor of the Moscow Carnegie Center's magazine Nuclear Non-Alignment, said that although Russia's reactor deal in Iran is "absolutely legal," the United States continues to oppose it -- a position that may become more resolute under U.S. President-elect George Bush.

Pikayev said that the United States has expressed little concern for Russia's projects in India and China. But that, too, could change under Bush, he said. The United States is also building reactors in China and is competing with Russia to help meet China's swelling energy demand.

Back at home, Adamov said his ministry is planning to double domestic nuclear energy capacity over the next 20 years.

Last year the ministry spent 4 billion rubles (\$140 million) on nuclear industrial science development, and 1.5 billion rubles on upgrading production. As a result the nation's nuclear power plants produced a total of 130 billion kilowatt hours of electricity -- up about 8 percent from 1999 and 30 percent from 1998.

The growth from 1998 is the equivalent of adding five new reactors and saved 10 billion square meters of gas, said Adamov.

He also said nuclear fuel was removed from 17 nuclear submarines in 2000, compared with just two to four in previous years.

"The year 2000 was very successful," he said.

Washington Times
January 17, 2001

Baltics' Bid To Join NATO Gets Touchy

By David R. Sands, The Washington Times

The furor over reports that Russia has stored nuclear weapons in its Baltic enclave of Kaliningrad provides a foretaste of the looming diplomatic fight over whether three Baltic nations will be invited to join NATO next year. The Kaliningrad revelations, first reported this month by The Washington Times, have again put a spotlight on the NATO desires of Lithuania, Latvia and Estonia. The three hope to be invited to join the 19-nation military alliance late next year, despite the fierce opposition of Moscow.

Ambassadors for the three Baltic countries, speaking yesterday at a forum organized by Radio Free Europe/Radio Liberty, said the Kaliningrad revelations only confirmed their governments' desire to see at least one Baltic nation in the group of central and East European nations expected to receive invitations to join NATO next year.

"We would be very happy to see all three nations invited in," said Ambassador Stasys Sakalauskas of Lithuania, "but at least one Baltic country on the list is essential from our point of view."

Estonian Ambassador Sven Jurgenson said the campaign in the three Baltic countries to qualify for NATO membership had improved their security and military efficiency, but he predicted problems at home if the effort is seen as a "round tunnel" with no reward at the other end.

"If the next round of NATO enlargement happens without a Baltic dimension, that would be a disaster, and I think people should recognize that," Mr. Jurgenson said.

Moscow, which has denied having moved nuclear arms into Kaliningrad, is opposed to NATO membership for the three countries which were just 10 years ago integral parts of the Soviet Union.

"The expansion of NATO behind the former Soviet borders would create a completely new situation for Russia and Europe," Russian President Vladimir Putin warned last year. "It would have extremely serious consequences for the whole security system of the continent."

Kaliningrad's status is intricately linked to the looming NATO controversy.

The naval base, Russia's westernmost territory and a vital ice-free port, was obtained from Germany by the Soviet Union immediately after World War II. Sharing a border with Poland and separated from the rest of Russia by Lithuania and Latvia, the Maryland-sized enclave could find itself surrounded by NATO members.

Moscow in 1992 agreed to keep nuclear weapons out of the Baltics, but Russian military officials in 1998 warned they would consider going back on that pledge if NATO expanded into the Baltics.

"As with Kosovo in the Balkans, Kaliningrad will be the touchstone for the new European security order in the region," according to a study last year by the Scottish Center for International Security. "Its fate is inextricably linked to regional security."

John Hulsman, a European policy analyst at the Heritage Foundation, said yesterday that managing the issue of NATO and the Baltics will provide a tough, early test for the incoming Bush administration.

"The Baltics are where the rubber really hits the road," Mr. Hulsman said.

"On the one hand, you can't let the Russians have a veto over who joins the alliance, but you also don't want to rush to let people in merely to annoy the Russians."

Without committing himself to a date, Mr. Bush during the campaign said he supported NATO expansion in general and into the Baltics in particular.

And Senate Foreign Relations Committee Chairman Jesse Helms, North Carolina Republican, said in a speech last week he was a strong champion of the Baltic nations' NATO hopes, despite the Russian opposition.

"In looking at the current Russian government, one gets the distinct impression that the Russian leadership considers Baltic independence to be a temporary phenomenon," Mr. Helms said. "That is an impression that the Russians cannot be allowed to long entertain."

India Tests Nuclear-Capable Agni II Missile

Story Filed: Wednesday, January 17, 2001 6:56 AM EST

NEW DELHI (Reuters) - India successfully test-fired a longer-range version of its intermediate-range Agni ballistic missile from its eastern coast Wednesday, the defense ministry said.

It was the second test of the upgraded version of the original Agni, a two-stage all-solid motor missile with a 2,000 km (1,250 miles) range, which a defense analyst said indicated substantial progress in the indigenous missile development project.

The first test was held in April 1999, prompting tests within days by Pakistan of its medium-range Ghauri II missile.

Agni, named after a Hindu fire god, is seen as a potential deterrent to India's nuclear-armed neighbor China. It is part of a wide-ranging missile development program.

Defense experts say the missile can carry nuclear warheads and strike targets deep within China as well as Pakistan.

India carried out nuclear tests in 1998 and declared itself a nuclear weapons state. Since then, it has said it will build a minimum credible nuclear deterrent.

The Indian government said other countries, including neighboring China and Pakistan, were given advance notice of the Agni test, which was conducted hours before China's second most powerful leader Li Peng left for home after a nine-day visit.

"I can confirm that the Russian Federation, United States, U.K., People's Republic of China, Germany, Japan, Pakistan were informed in advance," foreign ministry spokesman Raminder Singh Jassal said.

DECLINED COMMENT

The spokesman, however, declined to comment when asked if any of the world powers had urged New Delhi to drop the plan to conduct the missile test.

The U.S. ambassador to India, Richard Celeste, told Reuters that Washington had been given notice of the test, but declined to comment further.

The United States, which engaged India in marathon arms control talks after its 1998 nuclear tests, has repeatedly asked New Delhi to restrain its missile and nuclear programs.

The Indian defense ministry said the Agni, which could carry a one-ton warhead, had been fired from a mobile launcher in its "final operational configuration."

"The second test flight of Agni II, surface-to-surface missile was conducted today at 1001 hours from the interim test range, Chandipur, Orissa in its final operational configuration" the ministry in a statement.

It quoted Agni program director R.N. Agarwal as saying that test results showed all mission objectives had been achieved.

"The test in operational configuration indicates substantive progress, although we are still a long way from actual deployment," said retired air commodore Jasjit Singh, who heads the government-funded Institute of Defense Studies and Analyses.

The test flight was witnessed by Defense Minister George Fernandes, his scientific adviser, the air force chief and the vice-chief of the army staff.

The ministry said that Fernandes, complimenting the scientists and engineers of the Defense Research and Development Organization, had "highlighted the role and relevance of Agni II in meeting our national security interests."

BWC Ad Hoc Group Meets; Chairman's Talks Continue

Seth Brugger

The Ad Hoc Group of states party to the Biological Weapons Convention (BWC) held its last negotiating session for the year from November 20 to December 8. Although the talks did not make any overt headway on major controversial issues, according to a senior U.S. official it appears that they could soon head into the endgame. "There is a feeling that one could foresee the right mix of solutions" to outstanding problems, another senior diplomat involved in the negotiations remarked. The session "proved to many delegations" that meeting the goal of concluding the negotiations by the next BWC review conference, scheduled to begin in November 2001, is "doable," the diplomat said....

<http://www.armscontrol.org/ACT/janfeb01/bwcjanfeb01.html>

Chicago Tribune

January 18, 2001

New Arms Inspectors Sit, Wait As UN-Iraq Standoff Persists

By Patrick Cole, Tribune Staff Writer

NEW YORK -- Ten years after allied troops defeated Iraqi forces in Operation Desert Storm, one of the major concerns of the war, the existence of Iraqi chemical and biological weapons, remains unresolved.

A defiant President Saddam Hussein has succeeded in keeping UN inspectors out of his weapons facilities since he threw them out two years ago.

And since 1998, there has been little dialogue between the United Nations and Iraqi diplomats on the issue of weapons inspections, UN officials say.

But Iraqi officials are scheduled to meet UN Secretary General Kofi Annan next month to talk about a solution to the impasse.

Progress also has been stalled because of uncertainty over how the incoming Bush administration will deal with Iraq. Many of President-elect George W. Bush's top advisers, including Colin Powell and Dick Cheney, were architects of the Persian Gulf war and have indicated that the Bush administration may adopt a tougher line against Iraq.

Since September, a new team of inspectors has been preparing to resume inspections, but they aren't sure when their work will begin, said Hans Blix, head of the United Nations Monitoring and Verification and Inspection Commission that will oversee the process.

"If the Iraqis [approved] the inspection today, we would be ready to send in people," said Blix, the former head of the International Atomic Energy Agency, who came out of retirement to head the new UN commission, UNMOVIC. At the crux of the controversy is a 1999 UN resolution specifying that sanctions against Iraq would be suspended once Iraq proved it had dismantled its chemical and biological weapons-making abilities. Iraq rejected that condition, saying sanctions must be lifted before it again admitted UN inspectors.

"Iraq has been subjected to unprecedented injustice by the Security Council," former Iraqi UN envoy Saeed Hasan said last year. "Nobody now can challenge the fact that comprehensive sanctions is tantamount to genocide." Hasan maintained that if the UN tried to send its inspectors to Baghdad, "we will not let them in. We will not give them visas. It's as simple as that."

Meanwhile, hundreds of facilities in Iraq have not been inspected since December 1998, when Iraq ordered the former weapons inspection team--called UNSCOM--to leave the country amid allegations it was spying for the CIA.

Blix declined to speculate on whether Hussein has rebuilt his weapons program since the hiatus.

"We know that Saddam had been making anthrax and many other unpleasant chemicals," Blix said.

Anthony Cordesman, a strategic affairs expert at the Washington-based Center for Strategic and International Studies, said Iraq likely has begun rebuilding its arsenal in the last decade.

Hussein on Wednesday pronounced the gulf war a great moment in Iraq's history--failing to mention his crushing military defeat and the country's withered economy.

"On a day like this day 10 years ago, evil and all those who made Satan their protector lined up in one place, facing those who represented the will to defend what is right," Hussein said in Baghdad. Iraq's enemies were "stamped with disgrace and shame that will never disappear until doomsday."

The war threatened Hussein's rule, but when the United States and its allies chose not to push for his ouster, the Iraqi leader systematically eliminated his domestic opposition. Iraq, which has endured two ruinous wars and a decade of sanctions since Hussein became president 22 years ago, has been isolated internationally and has seen its prosperous economy vanish.

The Iraqi leader made no direct mention of the economic and social turmoil or the day to day problems faced by Iraq's 23 million people.

Many experts think the stalemate over the weapons inspection issue will continue indefinitely.

"I see no easy resolution to this," said Gary Sick, acting director of Columbia University's Middle East Institute.

"Obviously, the Iraqis are trying to use the inspection regime as a bargaining chip and say, 'We'll let the inspectors in at least in principal if the sanctions are lifted.' I'm not at all optimistic that a bargain can be struck."

The UN has been mired in a tug of war with Iraq since the end of the gulf war. Although UNSCOM, formed in 1991, succeeded in finding and destroying Iraqi missiles and facilities, Hussein was able to hide the full extent of its weapons-making operations.

That led to a near confrontation in early 1998 when Iraq denied UN inspectors access to several facilities. U.S. military airplanes were poised to strike targets in Iraq until Annan intervened to work out a compromise.

The inspection process collapsed again in December 1998 when then-UNSCOM executive director Richard Butler submitted findings to the Security Council showing that the Iraq had concealed the truth about its weapons.

Iraq charged then that the CIA had used UNSCOM as a cover to spy on military installations after press reports surfaced, quoting former UNSCOM head Scott Ritter. Butler denied any knowledge of espionage attempts while he led UNSCOM.

Iraq expelled all UNSCOM inspectors from the country and President Clinton ordered U.S. planes to bomb targets in the country in retaliation. While bombing missions have continued intermittently, there have been no more inspections.

"The biggest problem is that the UN does not trust Iraq, and Iraq does not trust the UN," said a Western diplomat familiar with the issue. "People say the Iraqis cheated the system, and so [Hussein] has to be very hard in his position. But the UN tried to cheat. With a lack of trust, it's difficult to see how this collaboration can work."

Blix said the new weapons inspection team is composed of scientists from around the world, including South America, Thailand, Bangladesh and Eastern Europe. Many have taken a four-week training course that covers the historical and cultural background of Iraq and the legal and political aspects of weapons inspection. They also receive specialized training on ballistic missiles and biological and chemical weapons.

"We are trying to place ourselves as far out on the launching pad as we can without making a huge financial commitment," Blix said.

Once the new team of inspectors gets the nod to go to Iraq, the main challenge it faces is surveying more than 300 sites throughout the country for weapons, Blix said. The major areas to be searched include Baghdad, the capital, and the northern city of Mosul, he said.

Tribune news services contributed to this report.

International Herald Tribune

January 19, 2001

India And Pakistan Warned By China

By Reuters

BEIJING -- China warned India and Pakistan on Thursday against entering into an arms race, but avoided direct criticism of New Delhi's latest test of its intermediate-range Agni ballistic missile.

"China, like most members of the international community, hopes that South Asia can maintain peace and stability and does not wish to see any form of arms race in the region," said a Foreign Ministry spokesman, Zhu Bangzao. Asked about India's test on Wednesday of a missile that experts said could carry nuclear warheads and strike China and Pakistan, he said China had taken note.

International Herald Tribune
January 19, 2001

Rules For Living With North Korea

By Han Sung Joo

SEOUL -- As the administration of George W. Bush formulates its Korea policies, there are three key areas to consider. The first is whether to support the "sunshine policy" of South Korea's President Kim Dae Jung in seeking better relations with North Korea. The second is what to do about the North's nuclear and missile threats. Finally, Washington has to gauge how fast and how extensively it should improve relations with Pyongyang.

There have been expressions of concern from Seoul that the sunshine policy could be impeded by the change in U.S. administrations. But there is no reason why Washington should not continue to support a South Korean policy seeking greater openness and reconciliation with the North.

The only legitimate concern for America, given its role in safeguarding the Korean Peninsula, is that the operational capability of its military forces should not be compromised as a result of exaggerated South Korean expectations from the reconciliation efforts.

The Bush administration's agenda on the North Korean nuclear issue may not be identical to South Korea's. Many of those joining the new administration, for example, have been critical of the Korean Peninsula Energy Development Organization. It was established to provide two light-water reactors for generating electricity in exchange for a halt to North Korea's nuclear weapons program.

The critics may even be tempted to seek a revision of the 1994 Geneva Agreed Framework that sealed the deal between Washington and Pyongyang. But this would risk not only precipitating a new crisis but also resumption of North Korea's nuclear activities. In the absence of a new formula and the means to apply it, sticking with the existing agreement serves the interests of both the United States and South Korea.

The missile issue presents a different dilemma. In missiles, North Korea is bound by neither an international regime, such as the Nuclear Nonproliferation Treaty, nor an agreement such as the Geneva Agreed Framework for nuclear weapons. And any accord on this subject will require North Korea to refrain from further development of missiles and to cut back its present arsenal. The Clinton administration appeared to be making some headway in its negotiations with Pyongyang. The Bush administration should pick up in earnest where its predecessor left off. Left untended, North Korean missiles will pose a military threat to other countries and chill the process of easing tensions on the peninsula. And Pyongyang's missile program could precipitate an arms race in Northeast Asia and spread such weapons globally. The Bush administration should deal with the missile issue regardless of whether it decides to proceed with deployment of a missile defense shield.

The United States should be able to negotiate on missiles with North Korea without necessarily hastening diplomatic normalization. If a visit by Bill Clinton and subsequent normalization were Pyongyang's price for a missile deal, as seemed to be the case, such a deal could not have been serious or lasting. For any agreement to last, North Korea would need a continuing interest to implement it.

This is not to say that Washington should abandon "engagement" with Pyongyang, a policy of ending enmity and expanding relations. It is in the U.S. interest to make North Korea increasingly more dependent on the outside world for its development and even survival. So the Bush administration should take advantage of the situation when North Korea, at least for the moment, appears eager to expand external relationships and seek assistance from the outside world.

In making its North Korea policy, the administration should use deliberate speed and do it in full and close consultation with its allies, particularly South Korea and Japan. There is no need to rush into a major policy shift. Despite the end of the Cold War and the opening of inter Korean dialogue, U.S. strategic goals on the peninsula remain unchanged. U.S. interests include maintaining peace and stability on the peninsula, preventing further proliferation of weapons of mass destruction and their means of delivery, removing any possible threat to America and its allies, and providing checks and balances among the major powers.

The success of the Bush administration's policy will depend on how well it can keep North Korea engaged even while keeping its threatening behavior in check.

The writer, a professor of political science at Korea University and a former foreign minister, contributed this comment to the International Herald Tribune.

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Going Nuclear

What you don't know about nuclear weapons could kill you.

*From 1945 to 1997, the United States and the Soviet Union conducted 1,745 nuclear test firings—an average of 34 explosions each year. America's tests alone are responsible for more than 100 million cubic meters of nuclear waste, according to the Department of Energy.

*The shock waves caused by a five-megaton bomb detonated deep underground at a test site in Alaska on November 6, 1971, crushed the skulls of nearly 1,000 nearby sea otters, killing them instantly.

*Nuclear fallout from Nevada testing has been detected as far east as New York, according to a 1997 study by the National Cancer Institute.

*On January 24, 1961, a B-52 bomber carrying two 24-megaton nukes broke up midair over Goldsboro, North Carolina. One bomb went down with the plane into waterlogged farmland. Despite an extensive search through the wreckage, some of the uranium was never found. The second bomb parachuted to earth and lodged in a tree. Only one of the bomb's six safety features held, narrowly preventing an explosion 1,800 times the size of the Hiroshima bomb.

*Eleven U.S. nuclear weapons have been lost in accidents and not recovered, according to the Department of Defense. Most of the bombs were destroyed in the mishaps, but at least four intact warheads are still unaccounted for, including two carried by a B-47 bomber that disappeared without a trace over the Mediterranean in 1956.

*When the U.S. nuclear arsenal was at its peak by 1960, it had 20,491 megatons locked and cocked—the equivalent of six tons of TNT per person on the planet at the time.

*The Russian submarine Kursk that sank last August has company at the bottom of the sea. According to a 1989 report by the environmental group Greenpeace, the Russians have lost five nuclear subs since WWII. At least 43 nuclear weapons and six reactors went down with the subs, where they're decaying today.

-- *Alec O'Meara*

New York Times

January 22, 2001

Pg. 1

Iraq Rebuilt Bombed Arms Plants, Officials Say

By Steven Lee Myers and Eric Schmitt

WASHINGTON, Jan. 21 — Iraq has rebuilt a series of factories that the United States has long suspected of producing chemical and biological weapons, according to senior government officials. The new intelligence estimate could confront President Bush with an early test of his pledge to take a tougher stance against President Saddam Hussein than the Clinton administration did.

The factories — in an industrial complex in Falluja, west of Baghdad — include two that were bombed and badly damaged by American and British air raids in December 1998 to punish Mr. Hussein for his refusal to cooperate with United Nations weapons inspectors, the government officials said.

The new intelligence estimates were mentioned, but without any such specific details, in a report on weapons threats released on Jan. 10 by the outgoing secretary of defense, William S. Cohen. It warned that Iraq had rebuilt at least its weapons infrastructure and may have begun covertly producing some chemical or biological agents.

Last week, the officials provided details on what they said was the reconstruction of the two factories, and the resumption of the production of chlorine at a third in the same complex.

The factories have ostensibly commercial purposes, but all three were previously involved in producing chemical or biological agents and were among those closely monitored by the United Nations inspectors, the officials said. One of the rebuilt factories, for example, is making castor oil used in brake fluid, the Iraqis say, but the mash from castor beans contains a deadly biological toxin called ricin, the officials said.

Since the air strikes in 1998, Mr. Hussein's government has refused to allow a new team of international weapons inspectors to begin work in Iraq. Officials said that without on-the-spot inspections, the United States did not yet have firm evidence the factories are now producing chemical or biological agents. "There's no smoking gun," one said.

But a senior military officer who closely follows Iraq and its president, Saddam Hussein, said, "We don't know for sure, but given his past known behavior, there's probably a pretty fair chance that's what's happening."

Throughout the campaign and transition, Mr. Bush and his national security advisers pledged to confront Mr.

Hussein more aggressively than Mr. Clinton had. Some of the same men — particularly Gen. Colin L. Powell, the new secretary of state, and Vice President Dick Cheney — helped President Bush's father lead the international coalition that ousted Iraqi forces from Kuwait a decade ago.

But Mr. Hussein remains in place, and poses a problem that is in many ways more complex now, with arms inspections blocked and many of America's allies questioning the sanctions that remain in place against Iraq.

"The Iraq problem has changed a lot since the last Bush administration left office," said a government official who will continue to work in the new Bush administration and has been involved in preliminary briefings on Iraq. "It's become a lot more complex. That's beginning to dawn on them."

In his inaugural address on Saturday, Mr. Bush did not mention Iraq specifically but vowed to "confront weapons of mass destruction, so that a new century is spared new horrors." In an interview before taking office, he suggested that his administration would not tolerate an Iraq rearmed with nuclear, chemical or biological weapons.

"Saddam Hussein must understand that this nation is very serious about preventing him from the development of weapons of mass destruction and any thought in his mind that he should use them against our friends and allies in the Middle East," Mr. Bush said.

Condoleezza Rice, Mr. Bush's national security adviser, was receiving intelligence briefings at the White House today and did not return a call requesting comment.

Since the election, neither Mr. Bush nor his aides have detailed how they intend to change Mr. Clinton's diplomatic and military strategy against Iraq.

Some advisers, including Mr. Cheney and the new secretary of defense, Donald H. Rumsfeld, have previously advocated a more hawkish approach. But even some of Mr. Bush's advisers acknowledge that containing Mr. Hussein, much less isolating him, will be increasingly difficult.

American and British planes continue to patrol the "no-flight" zones over northern and southern Iraq. Such patrols are routinely fired upon; indeed, Iraq launched a surface-to-air missile at one only hours before Mr. Bush took office on Saturday, prompting American jets to respond by striking antiaircraft batteries and a radar site.

Such strikes help ratchet up Iraqi anger at the United States; today, the Iraqis said the American strikes killed six civilians in Samawa, an assertion that American military officials did not immediately dispute, while noting that they had not intended to strike civilian targets.

The sanctions imposed against Iraq after it occupied Kuwait in August 1990 are gradually losing international support, with even some American allies exploring ways to end them. Diplomats and businessmen from countries as varied as Russia, Turkey and Italy have defied the ban on commercial flights into Iraq's capital, Baghdad.

The rising price of oil has also allowed Iraq to raise billions in revenues, significantly easing the strains placed on its economy after the Persian Gulf war. While most of that revenue is strictly controlled by the United Nations, intelligence reports suggest that Mr. Hussein has been able to divert \$500 million to \$1 billion a year and raise another \$1 billion to \$2 billion in illicit smuggling.

Iraq's military remains a shadow of the force that invaded Kuwait in 1990, but American intelligence officials strongly suspect that Mr. Hussein is using at least some of that money to rebuild parts of his military, which has been in steady decline since the Gulf war, as well as his weapons programs.

Two government officials said Iraq has successfully created front companies that are now being used to purchase and smuggle into Iraq equipment, weaponry and spare parts that are prohibited under the sanctions, including tires

for Iraqi jets and transmissions for its tanks. One official said those companies were also helping to procure illicit items used in nuclear, chemical and biological programs.

Mr. Hussein's government has also asked the United Nations to approve purchases for equipment or material — including things needed to produce chlorine — that American officials suspect are being diverted to prohibited weapons programs.

As a condition for ending the Persian Gulf war, Mr. Hussein's government agreed to destroy its nuclear, biological and chemical weapons programs, as well as production of long-range missiles able to launch such weapons.

Despite years of cat-and-mouse games with the Iraqis, the previous team of United Nations inspectors succeeded in destroying large quantities of weapons and discovering covert programs to create chemical and biological weapons. For more than two and a half years, however, there have been no meaningful inspections inside Iraq. After the air raids in 1998, Pentagon officials estimated that they had set back Iraq's weapons programs by a year or two — a period that has now elapsed.

President Clinton vowed that the United States would resort to military force if Iraq resumed work on its nuclear, chemical or biological weapons, but until the end officials in the administration and the intelligence agencies had conflicting views on whether the Iraqis had done so.

One senior defense official who will continue to serve under Mr. Bush said that there was "lots of circumstantial evidence," including the reconstruction of the factories, the resumption of production at chemical-warfare plants that had been closed and efforts to import components needed for chemical or biological weapons production.

Another official who is also staying on said he did not believe that Mr. Hussein had begun producing prohibited weapons in mass quantities. He argued that Mr. Hussein, sensing an erosion of support for the American position, would not want to give the United States a justification for renewed strikes.

Nevertheless, the factories in Falluja — whose reconstruction has been detected in satellite photographs — have raised alarms, the officials agreed.

Besides the factory making castor oil, the second rebuilt factory is believed to be producing pesticides and herbicides. "You don't know what they're doing in there," the official said. "They could be making pesticides or they could be making something more nefarious than pesticides."

While officials have previously disclosed that Iraq had rebuilt missile plants destroyed in the 1998 strikes, the Jan. 10 report released by Mr. Cohen was the first public acknowledgment of the resumption of work at suspected chemical and biological plants.

"Some of Iraq's facilities could be converted fairly quickly to production of chemical weapons," the report said at one point. It went on to warn, "Iraq retains the expertise, once a decision is made, to resume chemical agent production within a few weeks or months, depending on the type of agent."

Defense News
January 22, 2001
Pg. 1

Missile Defense On Budget Battlefield

Differing Priorities Presage Clash Between Pentagon Agency, Bush Administration

By Robert Holzer and Gopal Ratnam, Defense News Staff Writers

WASHINGTON — The Pentagon's Ballistic Missile Defense Organization (BMDO) plans to boost funding for lower-tier missile defense programs in the 2002 budget by diverting money from the National Missile Defense and U.S. Navy's Theater Wide programs, according to budget documents obtained by Defense News.

The Pentagon's Program Budget Decision 224, which details missile defense programs, proposes adding a total of \$232.1 million in 2002 and 2003 for the Army's Patriot Advanced Capability (PAC-3) program. The additional money would come out of the National Missile Defense program's procurement budget for the same years.

The document also proposes adding a total of \$121.1 million in 2002 and 2003 to the Navy Area Defense program by diverting funds from the Navy Theater Wide program.

The budget document cites "high priority to field lower-tier missile systems" as a rationale for this approach, adding that shifting of money will not jeopardize any program.

However, congressional observers said President George W. Bush's new administration and Defense Secretary-designate Donald Rumsfeld may not buy the idea of shifting money between programs.

Bush and Rumsfeld have indicated their support for an expanded National Missile Defense architecture. The Program Budget Decision is a pre-budget document prepared for each of the Pentagon's major weapon groups, which, when approved, become part of the president's budget request to Congress. The president has to present his budget for the next year to the legislature on the first Monday in February.

The transfer of money out of the Navy Theater Wide program is possible because of savings available in the program identified in an August study by Navy and Pentagon officials. It recommended skipping the Block-1 configuration and going directly to Block-2.

In the Block-1 version, the Standard Missile-3 would be integrated into the Aegis radar on the Navy's fleet of cruisers in addition to software improvements to achieve a basic capability. The Block-2 version is expected to be a more advanced system capable of handling sophisticated threats.

The Navy Area program is designed to provide short-range defense from ballistic missiles. Navy Theater Wide is designed to intercept longer-range missiles in the outer atmosphere using a kinetic kill vehicle. Both programs use variations of the Navy's Standard missile.

The budget document also proposes buying 274 more PAC-3 missiles by 2007 to meet the Army's acquisition objective of acquiring 1,200 missiles by 2010. The additional funding for PAC-3 would go toward research and development and expanding the production line, the document says.

Army officials have said buying more missiles early would reduce the cost per missile to about \$2 million from the current \$5 million per missile. The United States has promised Germany and Italy that the missile would cost them less than \$2 million apiece. The two countries are program partners with the United States in the Medium Extended Air Defense System, which uses the PAC-3 system's missile.

PAC-3 is a mobile ground-based missile defense system designed to shoot down short- to medium-range ballistic missiles and helicopters within the atmosphere.

BMDO officials declined to comment on the budget document.

"The [budget document] is predecisional and, as a matter of policy, we do not comment on [future] year budgets until they are signed by the president and [it] becomes an official document," said Air Force Lt. Col. Coennie Woods, spokeswoman for the agency.

Congressional observers said the Pentagon proposal may not reflect the missile defense priorities of the new administration led by George W. Bush.

"Don't forget that these decisions are being made by the previous administration," said one staff member of the House Armed Services Committee.

Though current intelligence estimates point to a more immediate threat from short-range missiles, so-called homeland or domestic defense would be a higher priority for the new administration, the staff member said. Homeland defense has been the focus of several think-tank studies, while the final report of the United States Commission on National Security/21st Century is expected to call for the creation of a new National Homeland Security Agency.

Limitations on overall budget growth, which may have forced the Pentagon to divert money from one program to another, may vanish when the new administration takes office, said one congressional observer.

Both Congress and the new administration "may like the lower-tier programs, but they also want the upper-tier programs and the National Missile Defense, and may not shift money from one to another," said Robert Shuey, missile defense analyst at the Congressional Research Service, the research arm of Congress.

Limitations on overall budget growth itself may be lifted by the new administration, he said.

Bush repeatedly has called for building a robust missile defense system to protect the continental United States. As currently planned, the NMD system consists of ground-based missile interceptors carrying kinetic kill vehicles to shoot down enemy missiles in space.

The National Missile Defense program gained momentum only after a report by a congressionally mandated commission led by Rumsfeld identified a more immediate threat to the United States from long-range ballistic missiles than previously assumed.

San Francisco Chronicle
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Pg. D7

Iraq Demands U.N. Toxicity Study

Letter blames increases in cancer on depleted uranium munitions from Gulf War

By Associated Press

Baghdad -- Iraq demanded the United Nations open an immediate investigation into the effects of depleted uranium on Iraq during the Gulf War, in a letter sent late last week to the U.N. secretary-general.

Iraq has insisted for years there exists a link between the depleted uranium used in armor-piercing bullets and missile warheads and the increase in the number of Iraqis suffering from leukemia and other kinds of cancer. Recent international attention to the health risks of depleted uranium left over from NATO airstrikes in Kosovo prompted Iraq to raise the issue again.

"Iraq urges you to order a prompt inquiry, to be conducted by reliable medical and scientific authorities in cooperation with the relevant Iraqi scientific bodies, into the use of depleted uranium against Iraq and to expose such use as a direct cause of injury to hundreds of thousands of Iraqi civilians," Foreign Minister Mohammed Saeed al-Sahhaf said in a letter to U.N. Secretary-General Kofi Annan obtained by the Associated Press.

Iraq's Health Ministry says the number of cancer cases nationwide rose from 6,555 in 1989 to 10,931 in 1997, particularly in areas heavily bombed by allied forces during the 1991 Gulf War. The ministry was unable to provide more recent figures.

"Iraq reserves the right to demand fair compensation for the casualties and damages caused from the use of these weapons," the Foreign Ministry said.

Depleted uranium, a heavy metal used in munitions to pierce armor, is a byproduct of natural uranium and about 40 percent as radioactive.

U.S. and British tanks and warplanes first used ammunition containing depleted uranium in combat during the Gulf War, and more than 300 tons still litter battlefields in Iraq, according to U.N. officials.

Numerous studies into the effects of depleted uranium have not revealed any connection between the metal and cancer. Still, children are feared to be at risk if they inhale uranium dust or put hands soiled with the toxic metal in their mouths.

Meanwhile, a report published by the Health Ministry reported an increase in mortality rates during the month of December 2000.

The report said 11,421 people died in December from different illnesses "caused by sanctions imposed on Iraq." The ministry reported 10,132 deaths the month before. In December 1989, 850 deaths were reported.