

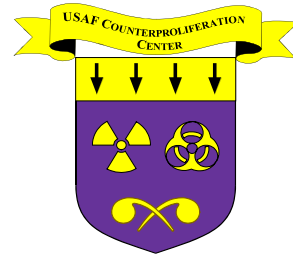
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USAF COUNTERPROLIFERATION CENTER

# CPC OUTREACH JOURNAL

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Air War College  
Maxwell AFB, Alabama*



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Los Angeles Times  
September 3, 2000

## **India Reaffirms Refusal To Sign Nuclear Treaty**

By Associated Press

NEW DELHI--India does not intend to sign a global treaty banning atomic testing in the near future, the country's national security advisor said in comments published Saturday.

Brajesh Mishra's comments on the Comprehensive Test Ban Treaty came just days before Prime Minister Atal Behari Vajpayee's visit to the United States to address the United Nations and meet with President Clinton.

Mishra, who is also the principal secretary to Vajpayee, reiterated India's position that a decision on signing the treaty would be made only after a political consensus was arrived at in India, the United News of India news agency reported.

In an interview with the weekly magazine Outlook, to be published Sept. 11, Mishra said India had no plans to sign the treaty "before or after Mr. Vajpayee's visit." An advance copy of the interview was made available to the news agency.

The United States and other nations imposed sanctions on India and Pakistan and pressed them to join the treaty after the two countries conducted nuclear tests in May 1998. The tests sparked fears of a nuclear confrontation between the South Asian rivals, particularly over the disputed territory of Kashmir.

India has said it does not plan any more tests but will not succumb to pressure to sign a treaty that no nuclear power has ratified.

India and Pakistan have fought two wars over Kashmir, and both nations have laid claim to the territory in its entirety.

Los Angeles Times  
September 3, 2000

## The Nuclear Graveyard Below

By Lloyd J. Dumas

DALLAS, TEXAS--The sinking of the pride of the Russian submarine fleet, the Kursk, is not just another tragic loss of life at sea. It added two more nuclear reactors, and perhaps nuclear warheads, as well, to the more than half-dozen reactors and nearly 50 nuclear warheads already on the bottom of the sea. No one knows just how much ecological damage this nuclear graveyard is generating or when its latent threat to human life will become manifest.

Blaming the deteriorating condition of Russia's military forces for the Kursk tragedy obscures a key point. Similar accidents have happened before, under different conditions. When the U.S. nuclear-powered attack submarine Thresher sank with 129 men and two nuclear-armed SUBROC missiles aboard, it was 1963, and the Cold War was at its height. When a Yankee-class Russian submarine carrying 16 missiles, each armed with two nuclear warheads, sank 600 miles northeast of Bermuda in water three miles deep, it was 1986, in the heady, early days of glasnost and perestroika. Eight years later, Russian scientists told U.S. experts that the sub had broken up. The warheads and missiles, they said, were "badly damaged and scattered on the sea floor" and were surely leaking plutonium and uranium. In 1993, the Russians warned that plutonium from the nuclear submarine Komsomolets, which sank in the Norwegian Sea in 1989 with two nuclear torpedoes on board, was in danger of leaking and poisoning important fishing grounds.

All told, there are two U.S., one French and five Russian submarines in the underwater nuclear graveyard. But that is not the end of the story. The Kola Peninsula, off which the Kursk sank, has become a junkyard for 100 Soviet-era nuclear-powered subs that are rusting away with their nuclear reactors still on board. The 50,000 nuclear-fuel assemblies from the reactors are sitting in storage tanks, some of which are probably leaking, and in open-air bins on military bases and shipyards. At present rates, it will take decades to transport them to permanent storage.

The Kursk tragedy, in which 118 Russian sailors died, is the latest in a long line of nuclear military accidents. During the 45 years before the Kursk was built, there were at least 89 publicly reported military accidents involving nuclear weapons; 59 American, 25 Soviet/Russian, four French and one British. In addition to submarines, the accidents involved fighter planes, bombers, missiles, nuclear-waste storage facilities and surface ships. They occurred despite the best efforts of first-rate designers, careful manufacturers and well-trained crews. What lesson can be drawn from all this?

We live in an age dominated by the advance of technology. We have vastly more power to affect the physical world than we had even 60 years ago. Yet, humans are no less error-prone. The clash between our growing technological power and our enduring fallibility has laid us open to disaster on an unprecedented scale, by accident or design.

Despite the end of the Cold War, there are still tens of thousands of nuclear weapons around the globe. U.S. nuclear forces remain on high alert. Two more nations, India and Pakistan, have joined the nuclear club within the past two years. Yet, nuclear weapons are not the only technology that threatens us.

Chemical and biological weapons, whether in the hands of hostile governments or terrorists, can kill large numbers of people. Then there are technologies designed for benign purposes but capable of doing enormous damage if things go dramatically wrong. Two of the worst accidents in the 20th century involved such technologies: the Chernobyl nuclear-power-plant meltdown on April 26, 1986, and the release of a cloud of toxic chemicals from a pesticide plant in Bhopal, India on Dec. 3, 1984, which killed 2,000 people and injured 200,000 more.

There is no way to eliminate risk from the world, and we would be foolish to try. But there are less-risky technologies, more forgiving of human fallibility, that are either on the shelf or within reach. One of the most heavily subsidized energy technologies, nuclear power can be replaced by a variety of alternative energy sources, from solar and wind power to biomass conversion. If a concentrated and well-funded effort is necessary to lower

cost and increase efficiency, it is a social investment worth making. For other dangerous technologies, a mix of technological and non-technological alternatives may be more effective.

In the mid-1990s, military figures like Gen. George Lee Butler, the commander in charge of all U.S. strategic nuclear weapons from 1991-94, and Gen. Charles A. Horner, head of the North American Aerospace Defense Command, called for the complete elimination of nuclear weapons. They were joined in late 1996 by nearly 60 retired generals and admirals from the United States, Russia, China, France and Britain, who signed a statement at the United Nations endorsing the idea that nuclear weapons can and should be eliminated. They believe that conventional-weapons technologies are more than adequate for military needs today.

The nuclear reactors and weapons arsenal littering the bottom of the sea are out of our control. As with the Kursk, it is risky to try to retrieve them. That is not an acceptable state of affairs. We cannot blithely assume that all these weapons and reactors will remain stable indefinitely and do no harm. It's important that studies be done on the feasibility and desirability of retrieving them, and equally important that the results of these studies be made public and subjected to open criticism and debate. The Kursk is a good place to begin.

Cold War habits of thinking die hard. But there is no room in this situation for secrecy, arrogance or national pride. When we have found the best approach, whichever nations can most effectively contribute to implementing it must be mobilized in a timely and concerted joint effort. Surely, we have learned that much from the sinking of the Kursk. In a larger sense, the Kursk is only the most recent reminder of our own imperfectability and the limitations of the technological devices we have developed. We must learn to take more seriously the boundaries created by our unavoidable fallibility, or we will surely do ourselves terrible damage some day.

- - - *Lloyd J. Dumas, a professor of political economy at the University of Texas, Dallas, is the author of "Lethal Arrogance: Human Fallibility and Dangerous Technologies."*

## **Panel Will Call for \$3.2 Billion in Biological Defense**

WASHINGTON, Sept. 4 (UPI) - A panel of senior advisors to the Defense Department is urging the Pentagon to create a massive new \$3.2 billion program to protect the country from terrorists armed, not with bombs, but with engineered diseases that could kill thousands or even millions of people before the man-made outbreaks are detected.

The Defense Science Board will recommend in a report to be made public later this month that the Defense Department create a new organization to oversee the development of a data base of biological weapons, a computer chip to automatically diagnose the diseases in patients, and a computer network that will rapidly warn health care centers about man-made outbreaks.

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## **China an Important Supporter of Chemical Weapons Convention**

BEIJING, September 5 (Xinhua)-- John Gee, deputy director-general of the Organization for the Prohibition of Chemical Weapons (OPCW), said here today that China has always been an important supporter of the Chemical Weapons Convention (CWC).

While delivering a speech at Beijing University, Gee said that China holds a seat on the OPCW's Executive Council, which it is likely to occupy on a permanent basis in the foreseeable future. China has also provided professional personnel to the Secretariat as well as a number of other experts, and it is represented on many of the organs and subsidiary bodies of the OPCW.

Gee is in Beijing for a five-day symposium on the implementation of the CWC, co-sponsored by the Chinese government and the OPCW. More than 80 participants from more than 20 countries are expected to exchange views for promoting an overall and effective implementation of the CWC.

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New York Times  
September 6, 2000

## World War III? Now?

By Geoffrey E. Forden

CAMBRIDGE Mass. -- Now that decisions on deploying a missile defense system will be put off until at least early next year, it's time to deal with a less sweeping but more immediate life-and-death issue: the crumbling of satellites that can prevent accidental launches of Russia's nuclear weapons.

For a picture of what these satellites are intended to do, consider a famous near-disaster on the American side in 1979. A training tape simulating a massive Soviet nuclear attack was accidentally run on the computers of the North American Aerospace Defense Command. Everyone thought it was real, and crews prepared to launch American missiles in retaliation. What stopped them were our early-warning satellites, which showed there were no Soviet missiles in the air.

On at least two other occasions, once each in the United States and Russia, space-based sensors played the same lifesaving role after other systems sent mistaken warnings.

Russia and the United States still have thousands of missiles ready to launch at each other on a few minutes' notice. American leaders still have satellite warning systems to prevent accidental launches when other systems give false warnings. But most of Russia's early-warning satellites have stopped functioning or wandered out of their assigned orbits.

In 1995, when the Russian system was still in good repair, some Russian military people misinterpreted a NASA research rocket as an attack designed to blind their radars to incoming American missiles. Fortunately, their satellite warning system, still providing 24-hour space-based surveillance of American missile fields, showed them they were wrong.

Satellites and sensing devices are expensive and technically complex, and they need regular maintenance and replacement. Russian factories that produced the parts have closed, and scientists who know how to work with the systems have been forced to seek other jobs. Clearly, it's in the American interest to step in.

The United States should immediately spend about \$160 million to get five Russian early-warning satellites — ready to go but languishing on the ground — into space. Next, we should make a firm commitment to financing joint research with Russia into new, less costly satellite missile sensors that Russia could more easily afford. The Clinton administration has tied its backing to demands for Russian concessions on missile defense.

Getting Russian satellites functioning would be far more effective than a joint early-warning center in Moscow that was also proposed by the Clinton administration. At this center, American and Russian military personnel would sit side by side, looking at computer screens displaying the data from their own early-warning systems but free to look over each other's shoulders. If Russia suspected the United States was launching a missile attack, would its leaders really believe American computer screens that did not show it?

Regardless of whether a missile defense is eventually approved, the relatively inexpensive safety systems needed to prevent a mistaken attack from Russia's still powerful missile force cannot be allowed to fail.

*Geoffrey Forden is senior fellow at the Center for International Studies at the Massachusetts Institute of Technology and former national security analyst at the Congressional Budget Office.*

Washington Times  
September 8, 2000

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## Iran Set For Another Flight Test Of Missile

By Bill Gertz, The Washington Times

Iran is set to conduct another flight test of its new Shahab-3 missile soon after delaying a launch last week to avoid embarrassing its president during his visit to New York, The Washington Times has learned.

According to U.S. intelligence officials, the Iranians are expected to conduct the test of the new truck-mounted missile later this month. An earlier test was performed in July.

The launch preparations — setting up and taking down the missile and support components — were photographed by a U.S. spy satellite in the late stages of preparation, said officials who spoke on the condition of anonymity.

However, Iranian military officials scrapped the test late last week to avoid causing diplomatic complications for Iranian President Mohammed Khatami during his visit to the United Nations' Millennium Summit meeting this week.

"They are expected to conduct the test later," said one official who has seen reports on the test preparations. The flight test is expected later this month, the officials said.

A CIA spokesman declined to comment.

Disclosure of the Iranian missile-test preparations follows the announcement last week by President Clinton that he would not authorize deployment of a national missile defense system. The president said developmental problems and opposition from foreign governments were the reason for holding up deployment plans.

The intelligence officials said Mr. Khatami was scheduled to attend a meeting during the U.N. summit hosted by Chinese President Jiang Zemin that President Clinton would attend. The White House said yesterday, however, that the president would not be at any meetings with the Iranian leader.

On Wednesday, Mr. Khatami met with Russian President Vladimir Putin and discussed strategic cooperation between the two countries. Moscow has been a major source of technology and materials for Iran's missiles, despite years of U.S. protests over the assistance.

The officials said the preparations for the latest Shahab-3 flight test followed the successful test launch July 15.

Pentagon officials said that test showed Iran is stepping up efforts to develop long-range missiles.

The Shahab-3 has an estimated range of about 800 miles, enough to hit most nations in the region, including Israel and areas where U.S. military forces are based, such as Turkey and Saudi Arabia.

Washington Times

September 8, 2000

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## Inside The Ring

By Bill Gertz and Rowan Scarborough

### Ambassador talk

Joseph Prueher, U.S. ambassador to China, is under fire again.

The retired four-star admiral was in town this week and met with members of Congress. According to congressional aides, Adm. Prueher told lawmakers that he has been working in Beijing to convince Chinese leaders to pull back the mobile short-range missiles being deployed in large numbers opposite Taiwan, in Fujian province.

Our sources say the ambassador has been telling the Chinese the removal of the missiles "would make the people in the United States feel like they were actually backing off the Taiwan issue."

Adm. Prueher, the aides say, also suggested to the Chinese how they could carry out a bit of threat-reduction-by-deception: "And besides, if anything happened, the missiles could always be moved back quickly," he was quoted as saying.

The ambassador provided another curious explanation for urging the Chinese to move their missiles: "It would undercut American hard-liners who think China is a threat," he was quoted as telling lawmakers.

The remarks raised eyebrows from several aides who called Adm. Prueher a "panda hugger" -- critics' term for pro-China officials and their acolytes in academia. The corresponding label for the anti-Beijing crowd from the huggers: "alarmists."

Asked about the remarks, a State Department spokesman said Adm. Prueher "didn't think it was appropriate to discuss his private conversations with folks on the Hill."

The Chinese in the past have rejected U.S. appeals to pull back the missiles. The Defense Intelligence Agency warns in secret reports that the missiles could reach most of Taiwan's major military bases with little or no warning.

Adm. Prueher had his nomination held up temporarily last year by Sen. Robert C. Smith, New Hampshire Republican, over questionable contacts with the Chinese military. And in April, he was criticized for hosting a dinner at his Beijing residence with three U.S. satellite makers and Chinese satellite companies who were under federal investigation for improperly sharing missile technology.

## Tactical Nuclear Weapons Losing Prominence In Air Force Planning

Tactical nuclear weapons, established yet secretive staples of the U.S. nuclear arsenal, are gradually losing prominence in the Air Force as long-range plans indicate the ability to drop the weapons from tactical aircraft may retire when F-15, F-16 and F-117 fighters do.

Further, no significant modifications to the weapons are scheduled, meaning existing capabilities likely will remain in place until the bomb's carriers are phased out of service.

Although many existing fighters will remain in the inventory for at least 25 years and maintain the ability to drop the B61 tactical gravity bomb, there are no plans to integrate tactical nuclear weapons aboard the next-generation F-22, officials tell Inside the Air Force. Joint Strike Fighter nuclear requirements are classified, but as recently as 1998, documents show, there were no plans to add the capability to that program either.

A lack of tactical nuclear capability aboard the future fighters would be the latest in a succession of moves that have greatly reduced the role of so-called "battlefield nukes" since 1991. The B61 bomb is now the only tactical nuke actively deployed by the Defense Department, and it is available exclusively to the Air Force, experts say.

In recent years, the Army has completely moved out of the tactical nuke business, while the Navy retains tactical Tomahawk cruise missiles. Those, however, are stored at U.S. facilities and not carried aboard Navy vessels. The Navy has also eliminated tactical nuclear weapons, including the B61, from the F/A-18 fighter's repertoire.

This leaves the Air Force as the sole user of deployed tactical nukes, and although officials and documents say there are no major changes planned for the stockpile, a downward trend of numbers and weapon availability continues.

Without providing details, a Pentagon official said the tactical nuclear weapon dropped by the F-15 and F-16 is not usable by any Air Force bombers.

The secrecy surrounding the weapons is pervasive but not uniform. Service officials confirm the F-15 and F-16 have tactical nuclear weapons available to them, and that the F-22 will not, but JSF requirements are closely held -- alternately called both internal and classified.

"We're giving you a lot of non-answers," one official said. "I'm sorry but that's the nature of the business -- it's a very guarded business."

A 1998 National Defense University report, "U.S. Nuclear Policy in the 21st Century," notes that "The United States has no current plans to ensure dual capability in the next generation of tactical aircraft, and there is no planning for a next-generation sea-based nuclear land-attack missile. A decision to preserve these important capabilities will be required in the near term if the United States is to maintain the requisite nuclear-specific infrastructure to field these delivery capabilities in the future."

As for the weapons themselves, officials would not discuss their capabilities or even whether they are still deployed in Europe, even though NATO documents show they are.

"NATO's only nuclear weapons remaining in Europe for land-based, sub-strategic forces are bombs for dual-capable aircraft," states the 1999 NATO handbook published for the organization's 50th anniversary summit, held last year in Washington, DC. "These weapons have also been substantially reduced in number and are stored in a smaller number of bases under highly secure conditions. The nuclear readiness status of the aircraft has been progressively reduced as increased emphasis has been given to their conventional roles."

NATO states that the "overall stockpile of sub-strategic nuclear weapons in Europe" has been reduced to about one-fifth its size in 1990, and no further changes in posture or policy are planned.

Actual numbers are classified, but the Natural Resources Defense Council estimates that 150 tactical nukes are deployed at 10 bases in seven European nations and are usable by U.S. fighters and NATO Tornado aircraft. About 1,200 more B61s are kept at Air Force storage facilities in Nevada and Utah, NRDC believes.

Tactical stockpiles will persevere in their present form, officials say. "As we look out the next 20 years and beyond, [tactical nuclear capability] remains basically the same," a Pentagon official recently told ITAF.

"We do not see any drawdown. We foresee keeping the same amount of weapons on-line, ready to go. As with any nuclear weapon, they do have aging components, and we need to replace them," he added. However, no plans are in place to do so. Refurbishment of the weapons falls under the domain of the Energy Department Stockpile Stewardship Program, which addresses every nuclear weapon's safety and reliability.

Modifications, if they are pursued, will be difficult, according to government officials. "Given current and projected scientific capabilities, it is difficult or impossible to confidently field a new, highly optimized, nuclear weapon

warhead design without nuclear testing," according to Stephen Younger, associate director of Los Alamos National Laboratory for nuclear weapons.

In a paper issued this summer, Younger said that "For this and other reasons, the United States intends to maintain its existing nuclear designs into the indefinite future."

A Pentagon official noted that the B61s used by the F-15, the F-16 and -- presumably -- the F-117 stealth fighter are straightforward delivery systems, but integrating them on other, future platforms would be no small matter.

"They are certified on the F-15 and F-16," the official said, but "they are not certified on any of the bombers. Some of them are gravity bombs. Therefore, one could, if we wanted, put them on [other aircraft], but we'd have to certify the aircraft," and this involves much more than signing documents, he said.

"It's a very extensive certification process. Software has to be certified, connections have to be certified, crews have to be certified," he said, and this would involve nearly every individual who comes in contact with a nuclear weapon. "It's a massive certification process. It is not something you can snap a finger and do. When you're talking certification for nuclear, you're talking a string of events that have to occur that take a period of time to occur. Certification is not just a matter of 'yes, a plane is capable of carrying it.'"

Approval is "very difficult to obtain," the official said, "by the nature of the word nuclear."

As for operational deployment, "We will not tell you where they are," he said, but the B61s are "ready to go right now" if needed.

Further, a Pentagon official said, "We do not show a drawdown of those weapons over the next 25 years. That does not speak to the requirements for the JSF or the F-22, but for the stockpile sense, they will be around" for possible integration at a later date. Current plans show the arsenal remaining essentially unchanged until 2025, the end of the long-range plan for weapons, officials said.

Younger also sees value in the status quo. In his paper, "Nuclear Weapons in the Twenty-First Century," he notes that "current plans call for [existing weapons] to be retained essentially indefinitely." While he notes "several good reasons for this," such as tested reliability of the existing weapons, he also states that the "cost of maintaining these weapons is high for both DOD and DOE."

The Council for a Livable World estimates that DOD alone spent \$1 billion on "tactical nuclear and dual capable forces" in fiscal year 1998, not counting shares of command, control and maintenance accounts applied to the stockpile in general. Expenses for the much-larger strategic nuclear force were estimated by CDI to be \$7.5 billion in the same year.

Officials with the F-22 system program office confirmed this week that the Raptor has no requirement to carry tactical nuclear weapons, and is therefore not being designed to do so, unlike the F-15 Eagle the F-22 will replace. A service spokeswoman, however, noted that nothing would prevent the Air Force from adding the requirement and the capability to the F-22 at a later date.

There is precedent for the Air Force to defer plans to add capabilities to the F-22. For example, testing of the F-22's ability to carry weapons externally has been deferred until after the Raptor's engineering and manufacturing development phase -- a practice Air Force deputy acquisition executive Darleen Druyun defended at a congressional hearing last year (ITAF, March 19, 1999, p1). Druyun said movements to add and test new capabilities after EMD only involve "non-essential combat capability."

At the hearing, Pentagon testing director Phil Coyle said that although the F-22 team may have agreed to deferring testing in this manner, his office had not. Coyle questioned whether F-22 testing cuts were implemented to further program efficiency or simply to save money under the spending caps Congress has placed on the Raptor EMD and production programs.

-- *Adam J. Hebert*

Defense News  
September 11, 2000  
Pg. 1

## **U.S. Would Keep Tight Rein On Missile Sold To Bahrain**

### ***Proposal Offered To Assuage Congressional Concerns***

By Gopal Ratnam and Amy Svitak, Defense News Staff Writers

WASHINGTON — The administration of U.S. President Bill Clinton is proposing extensive security measures for the Army Tactical Missile System (ATACMS) intended to help reduce the political barriers to a controversial sale of the weapon to Bahrain, according to U.S. military and congressional sources.

The safeguards, which would give the United States significant control over missile storage facilities and launch code access, are part of an effort to alleviate congressional fears about the spread of ballistic and cruise missiles. For example, Bahraini military personnel would not have access to the codes needed to launch the missile, according to a U.S. military source.

In addition, the ATACMS storage compound in the Persian Gulf country would be placed under 24-hour video surveillance by U.S. Central Command, U.S. and Persian Gulf military sources here confirmed.

"There is a joint [U.S.-Bahraini] effort to protect the technology classification," a Persian Gulf source here told Defense News Aug. 29. "It's not protecting it from Bahrain, but from external sources. Both Bahrain and [the United States] will jointly guard it from an outsider, a terrorist or other organization."

However, accepting such restrictions would violate Bahrain's sovereignty, said Mounzer Sleiman, a Persian Gulf military analyst here.

"I would be extremely surprised if the Bahraini government will accept any conditions that would violate their ability to defend themselves," Sleiman said. "This weapon is primarily meant for self defense."

Sleiman said second-class treatment of the Persian Gulf countries by the United States has to end.

"There is a tendency to treat some countries, [especially] the Arab gulf countries, in a patronizing way, which is unacceptable," he said. "It is about time the United States treated gulf countries on equal footing, as equal partners in terms of security of the region and stop patronizing."

Similarly, the sale of 80 F-16 aircraft to the United Arab Emirates (UAE) worth \$6.4 billion was delayed by U.S. concerns about allowing the UAE Air Force access to the plane's electronic warfare system. The deal was consummated in March only after the United States relented and allowed this access.

The extent of the proposed security measures for ATACMS resembles the unprecedented steps taken earlier this year when the U.S. government allowed sales of the Advanced Medium Range Air-to-Air Missile to Singapore and Taiwan, defense experts said.

Those deals required that any missiles purchased remain in the United States until another country obtains a comparable capability.

The U.S. Central Command backs the proposed safeguards, a command spokesman said. The command oversees U.S. military operations from Egypt to Pakistan, including Persian Gulf countries like Bahrain.

"We [U.S. Central Command] are aware of and support those safeguards," said Army Lt. Col. Rick Thomas, spokesman for the Central Command, Tampa, Fla. "We look forward to working with Bahrain and assisting them in adding this weapon system to their arsenal once congressional notification and the [Foreign Military Sales] process is complete."

Congressional staff members were briefed Aug. 28 by the State Department on the proposed security measures, a State Department official told Defense News.

Officials in Bahrain could not be reached for comment.

The State Department currently is reviewing Bahrain's request for the ATACMS weapon system, a State Department official told Defense News Aug. 29.

Manufactured by Lockheed Martin Missiles and Fire Control, Dallas, ATACMS is designed to hit high-value targets, such as missile batteries and tank formations, using short-range ballistic missiles fired from a multiple-rocket launcher carried on a tracked vehicle. The system was used against Iraqi troop concentrations during the 1991 Persian Gulf War.

Arms control proponents, while admonishing the Pentagon for releasing U.S. missile technology to the Persian Gulf states, applauded the security controls proposed in the ATACMS.

"That sort of security is uncommon in most missile transfers," said Theresa Hitchens, head of the Washington office of the British American Security Information Council, an arms control group. "But I would like to see more creative measures of this nature used for missile exports in the future."

The Clinton administration hopes the security precautions will help move the estimated \$50 million deal through Congress by the end of the session Sept. 30, a Pentagon source familiar with the deal told Defense News Aug. 28.

The pressing need for Bahrain's government to expend its ATACMS budget prior to the end of its fiscal year is another factor expediting the sale.

In August, the administration asked Congress to waive the informal 20-day pre-notification period in an effort to push the deal through before session's end. The request was denied due to lack of sufficient information to justify a hasty sale of sensitive U.S. technology to the Persian Gulf, a congressional aide told Defense News Aug. 29.

A congressional aide confirmed strong safeguards would be critical for approval of the ATACMS sale.

Pending the outcome of a Sept. 7 State Department briefing to Senate staff members, the sale of 30 ATACMS to the Persian Gulf state could be finalized before the end of the year, a congressional source said.



The sale to Bahrain, initiated in December 1998, has been held up for months due to congressional fears it would violate the Missile Technology Control Regime (MTCR). The MTCR is a voluntary agreement among 32 nations, including the United States, intended to curb the spread of ballistic and cruise missiles. Bahrain is not a member of the MTCR.

The MTCR mandates a missile range limit of 300 kilometers, combined with a payload limit of 500 kilograms. According to Lockheed Martin spokesman Craig Vanbebber, the company makes three versions of the ATACMS missile:

\*The Block-1 has a range of 165 kilometers and uses 950 M74 type bomblets.

\*Block-1A has a range of about 300 kilometers. For guidance, it receives signals from the Global Positioning System satellite navigation network. It carries the same kind of ammunition as Block-1.

\*Block-2 has a range of 300 kilometers with a guidance system similar to Block 1A, but carries multiple, autonomously-homing antiarmor submunitions.

If the deal goes through, Bahrain will purchase the ATACMS Block-1 variant, which does not violate the MTCR. Block-I is the only ATACMS variant that has been approved by the State Department for export. Turkey, Greece and South Korea are the only countries to have bought ATACMS from the United States.

Bahrain already has nine multiple rocket launchers, according to *The Middle East Military Balance, 1999-2000*, published by the Jaffee Center for Strategic Studies, Tel Aviv.

After several months of inactivity, the ATACMS deal was revived July 30 when a memorandum of understanding was signed between the two countries, allowing the United States to proceed with the sale in principle.

The memorandum of understanding was signed by Johnny Young, U.S. ambassador to Bahrain, and Sheik Khalifa bin Ahmed al-Khalifa, Bahrain's defense minister. It means the United States has "in principle agreed to proceed," with the supply of ATACMS to Bahrain, Thomas, the Central Command spokesman, told Defense News Aug. 9.

The Pentagon also received a formal request from the Bahraini government for ATACMS, Marine Corps Lt. Col. David Lapan, a Pentagon spokesman, said Aug. 10.

Bahrain intends to use the ATACMS to support the land forces of the Gulf Cooperation Council, which includes Bahrain, Saudi Arabia, Kuwait, Oman, Qatar and the United Arab Emirates.