USAF COUNTERPROLIFERATION CENTER

CPC OUTREACH JOURNAL

Air University Air War College Maxwell AFB, Alabama



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

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

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Baton Rouge (LA) State-Times/Morning Advocate September 30, 2000 Pg. 13

Fort Polk Official Says Biological Agent Safe

DeRIDDER - The commanding general of Fort Polk says proposed biological warfare training in the area poses no threat to the public, the environment or to 8,000 soldiers stationed at the Army post.

Brig. Gen. Charles H. Swannack Jr. was responding to people's concerns about the anticipated training exercises. "I would not permit this training if it were not safe to the Fort Polk and local community or environment," Swannack said. "We breathe the same air as you. We are part of this community, and we won't do anything to harm it." Post officials said the agent to be used is a dead form of the bacterium Bacillus subtilis, a nonpathogenic bacterium commonly found in soils, water and decomposing plant residue.

Soldiers will spray the agent on Fort Polk property so others can use detecting equipment to find it. Army scientists have conducted numerous tests on the agent and do not consider it toxic to humans, plants or animals.

A federally mandated environmental assessment has been completed for use of the agent at Fort Polk for training purposes and found there is no significant impact, post officials said.

In addition, there have been no documented health or environmental problems at either of the installations where the simulated agent is being used.

Critics claim they have proof that there are documented medical problems associated with the biological agent and that will come out during public meetings sponsored by the Beauregard-Vernon Chapter of the Gulf War Veterans Association.

When used at Fort Polk, the agent would be released in water in an aerosol spray to allow detection systems in the area to detect it. The only effect it will have will be to trigger a response in the detection system, officials say. Swannack said the training - to be held between four and 12 times per year - will ensure that soldiers in the 7th Chemical Company are ready for biological warfare.

"It is of the highest importance that the soldiers train realistically for this very important mission," Swannack said. "We owe America's sons and daughters the very best and most realistic training experience possible before sending them in harm's way."

Japanese Mission Unearths Abandoned Chemical Weapons in China

HARBIN, China, Oct 2, 2000 -- (BBC Monitoring) Text of report by official Chinese news agency Xinhua (New China News Agency)

A Japanese government team recently unearthed several thousands of shells, including chemical shells, which were abandoned by the Japanese occupation troops in the 1940s in northeast China. According to a source with Chinese Foreign Ministry, at the request of the Chinese side, a Japanese team led by Director of Japanese Abandoned Chemical Weapons Office Suda Akio excavated the buried weapons in Bei'an City of Heilongjiang Province between September 13 and 27.

During the 15-day operation, the Japanese team dug out 2,800-odd artillery shells, including 897 chemical shells, and cleared 2.7 tons of contaminated soil. All these have been packaged and transported to special facilities for storage before eventual destruction.

A Chinese team headed by Ambassador Liu Zhigang, director of Office of the Ministry of Foreign Affairs for Chemical Weapons Abandoned by Japan in China, provided necessary aid for the operation, said the source. The weapons were accidentally discovered by local farmers in 1997 and were soon verified by Chinese experts as chemical weapons abandoned by Japan.

After rounds of diplomatic consultations, Japan sent several teams to conduct on-the-spot investigation on the matter and finally agreed to carry out the excavation.

To handle such a problem left over by the Japanese invasion of China half a century ago, the Chinese and Japanese governments formally signed a memorandum of understanding in July 1999 in which the Japanese side admitted the fact of having abandoned chemical weapons in China and committed to destroying them in line with the obligations provided in the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (CWC).

This is the first time that Japan has carried out such an operation in China after the signing of the memo. Relevant departments from the two countries are discussing specific measures as to how to eventually destroy the abandoned chemical weapons as soon as possible, said the source.

Source: Xinhua news agency, Beijing, in English 1105 GMT 1 Oct 00

02 October 2000

Cohen Cites Russia, China, Weapons of Mass Destruction as Top Foreign Policy and Defense Challenges

Link to discussion of terrorism

Addressing an audience at the Center for Strategic and International Studies (CSIS) October 2, Defense Secretary Cohen said the biggest challenges facing future administrations in terms of foreign policy and defense policy will be

how to deal with Russia, China, and the threat of weapons of mass destruction from "two dozen countries who either have developed or are in the process of developing" such weapons.

He said the United States must deal with Russia "as a major power to contend with; not necessarily as a superpower, but as a country of great size, of great natural resources, that covers 11 time zones," and decide "how we manage that relationship with them and what we will do in terms of continuing our relationship to reduce the level of nuclear weapons."

http://www.usinfo.state.gov/topical/pol/terror/00100302.htm

Washington Post October 3, 2000 Pg. 23

Up In Arms

Defense Department

By Roberto Suro, Washington Post Staff Writer

Anthrax Hearing

Rep. Dan Burton (R-Ind.) will zero in today on one of the sorest subjects at the Pentagon with a hearing on the anthrax vaccine program. To warm things up, two of the most outspoken congressional critics of the program--Sen. Tim Hutchinson (R-Ark.) and Rep. Jack Metcalf (R-Wash.)--will testify before Burton's Committee on Government Reform. Then eight "affected persons" who claim that either they or a family member has suffered as a result of the program will be on stage. Some have stories of illness while others are among the service members who have faced court-martial rather than take the injections. Then Pentagon officials will get a chance to defend the program. Since July, the military has slowed the inoculation program because of a shortage of vaccine. Nonetheless, the shots are still given to about 17,500 troops a month who are headed for the Persian Gulf or Korea. Unless the Pentagon can find a new supplier who can pass muster with the Food and Drug Administration, it will run out of its supply in March at the current rate.

Complicating what has long been a public relations disaster is the death of a worker at the Michigan plant where the Pentagon's supply of the vaccine was manufactured. A local pathologist said the death of Richard Dunn in July was related to the vaccine, but those autopsy results have been disputed and are now under investigation by the Pentagon and other authorities. Dunn's wife, Barbara, will testify at today's hearing.

InsideDefense.com October 3, 2000

Cohen Stresses The Need For Homeland Defense

Defense Secretary William Cohen said the United States must begin to map a strategy to guard against the threat of a terrorist or cyber attack, stressing no comprehensive policy to protect the country currently exists and hinting the Pentagon should spearhead the effort.

With only a few months left in his tenure as defense secretary, Cohen last night discussed what he believed will be the greatest national security challenges the country may face in the 21st century.

The Defense Department is the only institution in the country that has the "organizational" and "logistic" capability to respond to such an attack, he said.

Cohen spoke at the Center for Strategic and International Studies, an independent think tank in Washington, DC. "We have yet to begin the debate on homeland defense. . . . I believe that we as a democratic society have yet to come to grips with the tension that exists between constitutional protection of the right to privacy [and] the demand that we made . . . to protect us," Cohen said. "That is one reason why the Joint Chiefs started to talk about a [commander-in-chief] for homeland defense. Because if you think about it in terms of terrorism coming to U.S. soil, the prospects are that you will see multiple attacks that will occur nearly simultaneously."

Congress has set up a program that makes local officials the first responders, but Cohen stressed that may not be enough nor the best strategy.

"If you start to have multiple attacks with mass casualties then I think it would be very logical and probably imperative that you have to turn to the Defense Department for that assistance," he said. "We need to work this out in advance, so we don't have the kind of constitutional challenge or confusion taking place in those times of crises." Cohen noted that by 2020, between 60 and 70 percent of the world's population will live in cities, with seven out of 10 of those cities lying along coastlines. This will ultimately change the nature of warfare and conflict, he said. As part of the homeland defense mission, the country must determine means to protect its critical infrastructure and guard against cyber-attacks, Cohen added. The country's financial computer infrastructure is one example of the type of critical infrastructure that has to be protected from outside attack, he said. Cohen pointed out that there are a number of countries in the world that are using computer experts, not hackers, to design cyber-attack plans. Cohen did not identify any countries as examples.

-- Gail Kaufman

Honolulu Advertiser October 4, 2000

Military Ridding Atoll Of Last Chemical Arms

By Jan TenBruggencate, Advertiser Science Writer

The Army has started the disposal of the last batch of chemical weapons stored on Johnston Atoll, and will soon start the daunting task of cleaning up an island contaminated with a range of industrial and radioactive waste. The Johnston Atoll Chemical Agent Disposal System plant, on a manmade island within an isolated lagoon 700 miles southwest of Honolulu, has destroyed nearly 400,000 pounds of bombs, mortars, rockets and bulk chemical containers to date.

Last Friday, it started working on the last of the munitions, 13,302 land mines filled with the nerve agent VX. The last of the mines is expected to be destroyed by January.

Johnston was the first site where the U.S. military began destroying its chemical weapons, and the 10-year-old facility has served as a prototype for similar efforts on the Mainland.

U.S. chemical weaponry stored at Johnston included the nerve agents VX and GB, or Sarin, and the blister agent HD, also known as mustard gas.

"The Army's final munitions campaign will be a great accomplishment, and leads up to what will become the Army's highest achievement in the chemical stockpile disposal project yet: the closure of its first chemical weapons disposal facility," said project manager Gary McCloskey.

Johnston Atoll was the site of nuclear weapons testing in the early 1960s, which left about 25 acres its largest island, Johnston Island, contaminated with radioactive plutonium and americium. The island also has had several chemical spills that remain to be cleaned up.

The Army began storing chemical weapons there with the transport of munitions from Okinawa in 1971, followed by transfers from Germany in 1990 and the Solomon Islands in 1991.

Johnston also is a national wildlife refuge, the nesting site for millions of seabirds.

The Army is required to clean up the island before it turns it over to civilian agencies. The service says it has formed partnerships with several federal oversight agencies to plan the closing and cleanup.

For more information on the program, see the project Web site at www.pmcd.apgea.army.mil.

Omaha World-Herald October 4, 2000

FDA: No Link Between Ills, Anthrax Shots

Washington (AP) - Despite more than 1,500 reports of adverse reactions, "no clear patterns" have emerged in any illness said to be related to the anthrax vaccine being given to the military, the Food and Drug Administration told Congress on Tuesday.

Mark Elengold, the FDA's deputy director, made that statement at a congressional hearing after a string of witnesses blamed the vaccine for a variety of diseases or the deaths of loved ones.

"I took the anthrax shot (while) healthy and am now ill," said Thomas Colosimo, a senior airman. He chronicled a series of reactions to four shots, including severe weight loss and losses of consciousness.

Another witness, Nancy Rugo of Spokane, Wash., blamed the vaccine for the death of her sister, Sgt. Sandra Larson. Barbara Dunn of Ionia, Mich., widow of a civilian employee of the only manufacturer of the vaccine, blamed the serum for husband Richard Dunn's death in July. David Ponder, a Navy seaman based on Okinawa, declared his right to refuse the vaccine.

Elengold acknowledged that the squalene molecule linked in a recent Tulane University report to Gulf War illnesses has been found in the anthrax vaccine, but he said it was in quantities no greater than might occur naturally in the body.

At the Pentagon, spokesman Kenneth Bacon said the FDA assured the Pentagon that squalene was not added to the anthrax vaccine but was present as a naturally occurring substance.

"We don't know if those lots were administered to the troops," he said.

Pentagon witnesses at the hearing reiterated the decision to continue requiring anthrax inoculations for all soldiers in the Persian Gulf area and Korea, despite vaccine shortages. Previously, all military personnel were required to get the shots, and some face court-martial for refusing.

Elengold said the government-run Vaccine Adverse Event Reporting System has received 1,561 reports of health problems after anthrax shots since 1990, including 76 serious cases.

About 2 million doses have been administered, including more than 1.9 million to military personnel since the Pentagon's mandatory program started. A full course to guard against anthrax requires six shots.

"There are no clear patterns emerging at this time," Elengold said.

Reading a joint statement, Charles Cragin, the principal deputy defense undersecretary, said one or more doses have been administered to 447,000 service members, with 442 refusing to obey a direct order to take the vaccine.

Dallas Morning News October 4, 2000

Cleaning Hazardous Materials Gives Troops Practical Experience

By Ed Timms, The Dallas Morning News

MATAGORDA ISLAND – Dozens of hard hats are washed up on the shore, along with shoes and sandals, medical waste, industrial light bulbs, a television set, a computer terminal – and more mundane household trash.

More worrisome objects are found in the broad ribbon of debris: 55-gallon drums and smaller containers of unknown chemicals. Some may contain hazardous substances.

And that's why a highly trained group of National Guard soldiers and airmen known as the "6th Weapons of Mass Destruction Civil Support Team" were sent this week to this barrier island near Port O'Connor.

For team members, it's practical experience for what can be a very hazardous occupation.

In response to a growing concern that terrorists will target the United States with chemical, biological or nuclear weapons, 10 teams were formed in 1998. In January, Secretary of Defense William Cohen announced that 17 more would be formed.

The teams are located throughout the United States. One of the first teams was formed in Texas. Based in Austin, it's also one of the first teams to be fully trained and equipped and is awaiting formal certification.

In the event of a terrorist attack using a weapon of mass destruction, the teams' primary purpose will be to help identify the threat and assist the civilian authorities responding to it. The goal is to be able to reach 90 percent of the nation's population within four hours.

"A big federal machine is going to come in when there's a big terrorist incident," said Maj. David Pacheco, the Texas team's deputy commander. "But it takes about 24 hours for that machine to gear up."

In the meantime, he said, local authorities may well be overwhelmed. The civil response teams are supposed to make sure that when help arrives, it's what's needed – and not more than what's needed.

Maj. Foy Watson, who commands the Texas team, cited the 1995 bombing of the federal courthouse in Oklahoma City as an example. "They needed all the help they could get in the first 24 to 48 hours," he said. "After that, they had more than they could deal with."

The teams are equipped with specialized equipment.

Staff Sgt. Mickey Summers operates a \$2 million vehicle that can maintain phone, radio and satellite communications under the most dire conditions. In a disaster, he said, phone lines and cell networks frequently can't handle the traffic.

1st. Lt. Stephanie Brewer, who has a doctorate in entomology, is the unit's science officer. She works from a mobile lab that can quickly identify biological and chemical threats. In the past, she said, it might take emergency personnel a day or more to identify a potentially hazardous substance.

Responding to terrorism involving weapons of mass destruction is the teams' foremost mission. But they can assist in other emergencies.

"A lot of the skills that these folks have are applicable in natural disasters as well," Maj. Watson said.

Instead of "make-believe training for something we hope never happens," he said, the clean-up on Matagorda Island is real experience and helps the state.

Team members on all-terrain vehicles began scouting the beach on Monday.

Suspicious containers are cautiously examined. A handheld monitor is used to get a rough idea of the contents. If needed, the team members have protective "moon suits" on hand.

Workers with Boots and Coots Special Services hazardous materials contractor dispose of the containers.

A recent survey of the 38-mile-long barrier island found 28 55-gallons drums and 40 5-gallon containers on the beach.

"We have to treat each one of these as a toxic inhalation hazard, and we have to identify the contents," said Jeff Lewellin, emergency response coordinator for 14 counties in the Coastal Bend area for the Texas Natural Resource Conservation Commission.

Since 1995, about 4,750 containers have been found on the island and roughly 600 of those contained either hydrocarbons or hazardous materials including corrosive chemicals, solvents and pesticides.

Jennifer Sanchez, refuge manager for the Matagorda Island National Wildlife Refuge, said that if the contents are hazardous chemicals, the consequences could be dire.

"For wildlife, the beach is a concentrated area, particularly for shore birds," Ms. Sanchez said. "There are several endangered or threatened species."

Mr. Lewellin said that converging currents concentrate debris on Matagorda Island. Drums and containers probably wash up on Coastal Bend beaches more than in any other region of the state, he said.

"Basically I can't tell you exactly where each container has come from," he said. "We can look at potential sources, which include shipping from all over the world, fishing vessels, crew and work boats, oil and gas exploration and production, some from shore-based industries along rivers."

Trying to identify the owner, he added, "is like looking for a needle in a haystack most of the time."

In addition to intentional dumping, some containers may end up in the Gulf by accident. Mr. Lewellin said he wants people to be more aware of the problem.

In addition to the threat to humans and wildlife, he said, "A beach shouldn't look like a landfill."

05 October 2000

Text: U.S. Non-Proliferation Chief Sees Positive Steps Taken by Russia

(Russia has improved its controls over products to Iran, says Einhorn)(4360)

"Impeding Iran's WMD and missile delivery systems will remain at the top of the U.S. national security agenda for some time to come," said Robert J. Einhorn, Assistant Secretary of State for Nonproliferation, at a Senate Foreign Relations Committee hearing on October 5. The hearing was intended to look at Russia's assistance in developing Iran's WMD and conventional arms programs.

"We have no alternative but to continue an active strategy of seeking to thwart Iranian efforts to procure the material and technologies they need for the non-conventional programs," said Einhorn. http://usinfo.state.gov/cgi-

bin/washfile/display.pl?p=/products/washfile/topic/intrel&f=00100502.npo&t=/products/washfile/newsitem.shtml

Text: Iran Is Still Seeking WMD Capabilities

(CIA expert describes Iran's ballistic missile program) (1700) A CIA expert on proliferation issues told a U.S. Senate committee

October 5 that Iran is continuing work to develop nuclear, chemical, and biological weapons with help from Russian companies.

John A. Lauder, the director of the DCI Nonproliferation Center, briefed members of the Senate Committee on Foreign Relations on Russian proliferation to Iran's weapons of mass destruction and missile programs. http://usinfo.state.gov/cgi-

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Los Angeles Times October 5, 2000 Pg. 1

U.S. Takes New Tack On China Arms Exports

By Jim Mann, Times Staff Writer

WASHINGTON--The Clinton administration is quietly attempting to complete a new arms-control agreement in which China would promise to stop supplying missile technology to Pakistan, Iran and other countries, according to administration officials.

Under the proposed deal, China would adopt its own new export-control laws covering missile technology, the officials said.

The Chinese have indicated a willingness to work out a deal in accord with the administration's approach. The negotiations, which are continuing this month in Beijing, center on how detailed and explicit the Chinese laws will be.

The aim is to have an agreement ready to be signed during Clinton's last months in office, perhaps at his final meeting with Chinese President Jiang Zemin in November.

But the deal now envisioned would fall short of Clinton's oft-stated goal of bringing China into the Missile Technology Control Regime, or MTCR, the accord signed by about 30 nations to restrict the export of missiles, missile parts and know-how.

Following Clinton's 1998 trip to Beijing, administration officials asserted that one of his main accomplishments had been winning China's assent to "actively study" joining the MTCR.

"It's important that China join the Missile Technology Control Regime, a step President Jiang agreed to consider at last year's summit in Beijing," Clinton asserted in a 1999 speech. The administration had earlier brought Russia into the MTCR as a full member.

However, China has balked at moving forward, and administration officials have decided to push for a less sweeping agreement in which Beijing would adopt its own laws on missile proliferation without joining the MTCR. Stopping China's proliferation of missile technology has been a continuing preoccupation for the Clinton administration, as it was for the Bush administration.

Last summer, the CIA reported to Congress that China's technical assistance to Pakistan's missile program was increasing. Intelligence officials said China had been providing items such as guidance systems and specialty steels, as well as scientists and technical advice.

The CIA, in an unclassified report covering the last half of 1999, said that in addition to Pakistan, "firms in China provided missile-related items, raw materials, and/or assistance to several countries of proliferation concern--such as Iran, North Korea and Libya."

The administration has been under pressure from Congress to impose sanctions against China for its export of M-11 missiles to Pakistan in 1992, and for subsequent missile-related sales to Pakistan. Those exports appear to be covered by a 1990 law authorizing the imposition of sanctions to combat missile proliferation.

Some Republicans on Capitol Hill reacted negatively Wednesday to the administration's current approach, arguing that China won't abide by the export controls it adopts.

"Chinese domestic law isn't worth the paper it's written on or the blood it's written with," said Marc Thiessen, a spokesman for the Senate Foreign Relations Committee, whose chairman is Sen. Jesse Helms (R-N.C.). Thiessen

said the administration's new effort is merely "a fig leaf to cover up an eight-year failure by this administration in containing proliferation to rogue states."

For many years, China has said it does not like the concept of the MTCR. Chinese officials have complained that they were not a member of the group that originally set the rules and that the regime amounts to a cartel in which the countries that already have missile capabilities keep them out of the hands of other countries.

More recently, Chinese officials have raised other objections. In January, Sha Zukang, China's top arms-control negotiator, told The Times that last year's North Atlantic Treaty Organization bombing campaign against Yugoslavia, especially the airstrike that hit the Chinese Embassy in Belgrade, "dealt a heavy blow to the MTCR." "Since the [Clinton] visit . . . everyone has seen the massive use of missiles [in Yugoslavia]--modern, accurate, precision-guided missiles, lasting for 78 days," Sha said in an interview. "Like it or not, that [NATO campaign] is an excellent advertisement for missiles."

Asked about China's statement during the 1998 summit that it would actively study joining the MTCR, Sha pointed out that the agreement didn't include the word "soon."

In the face of Beijing's objections, Clinton administration officials decided to seek a deal in which China would adopt laws that are similar to MTCR rules.

"We don't care what it's called, as long as it works," explained one administration official, who, like others interviewed for this report, was not willing to speak on the record about the administration's new initiative. The movement toward a deal began last month, when Sha met with officials from the National Security Council and the State Department who were in Beijing to attend an arms-control conference.

Some critics say that any new Chinese laws on missile technology would lack the impact and international validity of a decision to join the MTCR.

"The next time they export something bad to Pakistan, all we can do is complain that they aren't following their own laws," said Gary Milhollin, director of the Wisconsin Project on Nuclear Arms Control, which seeks tougher policies on proliferation. "And then they can say that's their own business."

However, Milhollin and other critics said they had misgivings about the Clinton administration's long effort to bring China into the MTCR as well.

If China were in the MTCR, it would be entitled to share intelligence about missiles with the United States and other countries. And if China were a member, that could make it easier for other MTCR countries, including the United States, to sell missile or satellite technology to China.

Moreover, some Republicans on Capitol Hill say they don't want China brought into the MTCR because they claim Beijing wouldn't follow the rules anyway, and because membership would make it harder for the U.S. to impose sanctions on China. The laws authorizing sanctions for missile proliferation differentiate between members of the MTCR and those outside the regime.

Some experts argue that China holds out the prospect of joining the MTCR, without intending to ever do so, as a way of gaining leverage over the U.S. in other areas such as U.S. arms sales to Taiwan and plans for a U.S. missile defense system.

"The more we seek it [China's MTCR membership], the more leverage they have over us," said Bates Gill, a specialist on Chinese weapons proliferation at the Brookings Institution, a centrist think tank in Washington. "Why should we invest the political capital when they can extract concessions bit by bit from us, and when in the end they're not going to join?"

New York Times October 6, 2000

Putin Joins India In Vow On How To Use Atomic Plants

By Celia W. Dugger

NEW DELHI, Oct. 5 — President Vladimir V. Putin of Russia today took a high-profile tour of India's leading nuclear research center, where reactors and bombs are designed, and promised to work with India in developing peaceful uses for atomic energy while encouraging India to sign the nuclear nonproliferation and test ban treaties. Mr. Putin's hour-and-a-half visit to the Bhabha Atomic Research Center in Bombay was the last stop on his four-day trip to India. It suggested how far India has come in regaining international acceptance since it conducted nuclear tests in May 1998.

Mr. Putin described the research center as a "temple of science and technology."

In a joint statement, Russia also struck a note of tolerance for India's decision to hold off on signing the Comprehensive Test Ban Treaty.

"Russia welcomed India's voluntary moratorium on nuclear testing," the statement said, "and appreciated the Indian government's efforts to develop a broad national consensus" on the treaty.

Mr. Putin's trip here, the first by a Russian head of state in seven years, renewed ties between two countries whose friendly relations date from the cold war era, when the United States tilted heavily toward Pakistan, India's archrival. Over the last few days, India and Russia signed military procurement deals, agreed to combat terrorism emanating from Afghanistan and declared that they would strengthen their cooperation on the peaceful uses of nuclear power. Historically, most of India's military hardware has been of Russian origin, and Russia's role as India's chief military supplier was sustained on this visit.

The calculus is simple. Russia, which is in deep economic trouble, needs to sell its job-generating military products. And India, whose military was built with Soviet equipment, needs to buy them.

Looking to strengthen its conventional forces after a conflict last year with Pakistan in Kashmir, India announced that it would buy 310 T-90 tanks from Russia and produce 140 SU-30 fighter aircraft with Russian technology. Russia said it would give India a carrier, the Admiral Gorshkov, which will be refitted and modernized in Russia at Indian expense and equipped with Russian-made helicopters and other aircraft.

"Whether India likes it or not, India cannot shake off the Russian connection, as far as military hardware is concerned," said P. R. Chari, director of the Institute for Peace and Conflict Studies, a research organization here. "If 70 percent of your military equipment is of Russian or Soviet origin, you are symbiotically linked to them for spares and ancillary equipment."

India and Russia also announced a common front to combat terrorist violence committed by militant Islamic groups based in Afghanistan and said in their joint statement that the areas of Afghanistan ruled by the Taliban — that is most of the country — "had become the breeding ground for religious extremism and international terrorism." Neither country suggested offering military aid to the opposition forces that are fighting the Taliban. Defense experts here said Russia and India could improve sharing their intelligence and work with other major powers, including the United States and China, to bring greater diplomatic pressure on the Taliban.

In his speech on Wednesday to Parliament, Mr. Putin said the same groups, even the same individuals, were plotting terrorist acts "from the Philippines to Kosovo, including Kashmir, Afghanistan and Russia's northern Caucasus." Russia and India also offered each other support in their struggles with internal unrest, Russia's in Chechnya and India's in Kashmir, which India and Pakistan have been fighting over for more than 50 years. Both conflicts are being fueled by Islamic militancy.

The two countries offered the least detail about the agreement to enhance their cooperation on nuclear energy. A spokesman for the Indian External Affairs Ministry, Raminder Singh Jassal, said the memorandum of understanding on nuclear power would not be made public and offered no reason for the secrecy. "In what form the cooperation will develop, it's difficult to anticipate," Mr. Jassal said. "Russia is already collaborating with India in the construction of a 2,000-megawatt nuclear power station in Tamil Nadu." The United States does not share nuclear power technology with India, because of American laws that require receiving countries to consent to international inspections of all nuclear sites, a rule that India refuses to obey.

Washington Times October 6, 2000

Russia Said To Aid Iran's Missile Effort

By Bill Gertz, The Washington Times

Russia is continuing to assist Iran's missile program despite efforts by the Clinton administration to halt the transfers, which involve support from Moscow's official space agency, officials told Congress yesterday. "Iran is acquiring Russian technology, which could significantly accelerate the pace of its ballistic missile development program," CIA official John Lauder told a Senate subcommittee. "Assistance by Russian entities has helped Iran save years in the development of the Shahab-3, which was flight-tested in 1998 and twice again this year."

The Russian missile assistance also is helping Tehran build longer-range missiles named the Shahab-4 and Shahab-5, Mr. Lauder said.

Additionally, Russia is continuing to sell advanced conventional weapons to Iran despite a deal banning such sales, reached in 1995 by Vice President Al Gore and Russian Prime Minister Viktor Chernomyrdin.

Mr. Lauder and Robert Einhorn, an assistant secretary of state in charge of stopping arms proliferation, testified during a hearing before the Senate Foreign Relations subcommittee on Near East and South Asian affairs.

Mr. Einhorn said the Russian-Iranian arms trade is a "persistent problem" and that some "progress" was made in the past five years in seeking to curb Russian weapons transfers.

However, Russia's government has shown a "lack of determination" to halt missile-related and nuclear technology transfers that are helping Tehran build long-range missiles and nuclear weapons, he said.

"We are convinced that if Russia's leaders gave the matter sufficient priority, Iran's nuclear and missile procurement efforts in Russia could be stopped," Mr. Einhorn said.

Asked about the 1995 agreement, Mr. Einhorn said Russia has continued to supply arms under a loophole that permits shipments under existing contracts.

Asked if the administration can declare that the Russian Space Agency and its subsidiaries have halted missile technology sales to Iran, Mr. Einhorn said: "I doubt very much we are going to be able to make that assertion. In fact, I feel confident that we will have to report to you that a number of entities subordinate to the Russian Space Agency have in fact provided support for Iran's missile program."

The Russian government appointed Yuri Koptev, the space agency director, as the key official in discussions with the Clinton administration on the missile trade to Iran. Intelligence reports have linked Mr. Koptev to the covert missile support to Iran.

Sen. Sam Brownback, Kansas Republican and subcommittee chairman, said "this administration has not solved the proliferation problem."

"The problem has grown decidedly worse, and the world is a far more dangerous place because of it," he said. Weapons and technology transfers to Iran from Russia continue "unabated," he said.

"Just last month, Tehran again test-fired its Shahab-3 missile. That missile would be sitting in a box somewhere if it wasn't for the assistance of Russia to Iran. To my mind, we're facing a major crisis in the coming years, and responsibility can largely be laid at the feet of this administration."

Mr. Brownback said the 1995 agreement signed by Mr. Gore was supposed to halt the Russian weapons trade with Iran in exchange for a U.S. promise to let Moscow do business with U.S. defense contractors. The deal has given Russia \$7.7 billion, mostly from satellite launches.

"It really should not have come as any surprise to anyone that despite the 1995 agreement, Russia continued to sell advanced conventional weapons to Iran," Mr. Brownback said.

The CIA's latest semiannual report to Congress on arms transfers stated that Russia is continuing to sell advanced conventional weapons to Iran.

Washington Times October 6, 2000

Threat Seen In Russia's Biological Agents

By Lesley McKenzie, The Washington Times

Russia's biological weapons sites, which pose a far greater threat than do its nuclear weapons, may have been dismantled and hidden for future use, according to a leading specialist on the weapons plants.

"The capability of the old Russian Ministry of Defense sites remains uninvestigated and largely unknown," said Christopher Davis, a member of the first Western team to visit biological warfare facilities of the former Soviet Union.

"The suspicion is that, at the very least, the basic know-how, expertise, equipment and stock of seed cultures have been retained somewhere within the Ministry of Defense system," he said Monday at Jane's Conference on Weapons of Mass Destruction in Arlington, Va.

Mr. Davis traced the Soviet history of biological warfare research and development, and noted areas of concern. "Biological agents, if of the transmissible variety, are capable of causing casualties far in excess of those caused by nuclear weapons," he said.

These weapons are also available at a lower cost than nuclear weapons.

The special characteristics of biological weapons include their ability to attack all "living targets," which range from human beings to plants and livestock, possibly rendering a nation unable to feed itself.

Some biological weapons also have the ability to first exhibit their effects on an area hours or possibly days after their release, making it difficult to ascertain the identity of the aggressor.

The United States chose to disarm its biological warfare program in 1969, but the Soviet Union continued its warfare development through the establishment of an agency named Biopreparat in 1973-1974.

Biopreparat developed biological weapons behind a civilian facade of pharmaceutical and biotechnology industries. This tactic served as an alternative to chemical and nuclear weapons controlled under arms treaties and weapons conventions.

For many years, only a small number of people across the Atlantic were aware of the problem, and many chose not to listen to their warnings, Mr. Davis said.

Only in the period between 1989 and 1991 were analysts able to convince governments that these programs were a threat to the world.

A secret U.S.-British visit to Russian facilities took place in 1991, but as late as 1993, the two nations still were confronting the former Soviet Union about the continued development of biological warfare.

Since then, while Biopreparat has undergone change, efforts were continually being made to help Russians convert these military establishments into civilian facilities.

Now the chief scientific adviser for the Applied Sciences Group at Veridian Systems, Mr. Davis cited several issues that remain unresolved.

"What happened to the part of the program in the closed military facilities to which there have been no visits by Western experts?" he asked.

Also of concern are the hundreds of personnel who were involved in Biopreparat. There are rumors that many have been offered work by certain governments in the Middle East.

Mr. Davis also stressed his concern with regard to the stocks of seed cultures to be used in the production of weapons.

Robert Gallucci, dean of Georgetown University's School of Foreign Service, agreed with Mr. Davis' assessment. "This is not a new problem," he said. "Ever since [former President Boris] Yeltsin agreed to a program of visits between the U.K., U.S. and Russia almost a decade ago, we have been working with Russian governments to bring transparency to this problem."

He added that although some advance has been made in gaining access to former Soviet biological warfare facilities, those under the Ministry of Defense remain closed to visitors.

"There is concern, therefore, that there remains a very large production capacity, and possibly even research and stockpiles, that have not been destroyed as required by the Biological Weapons Convention," Mr. Gallucci said.

Dallas Morning News October 8, 2000

Biological Training Safe, Army Says

Exercises at Fort Polk would use spores that simulate anthrax

By Associated Press

FORT POLK, La. – Proposed biological training at Fort Polk will be safe for people and the environment, Army officials and scientists say.

Army officials are defending the proposed training in response to what they said are "inaccurate reports" about a training exercise that includes the spraying of benign bacterial spores so soldiers can practice detecting them. After the Army published a public notice last month announcing the exercise, some people feared the exercise could be dangerous to the public. An unofficial hearing was conducted last week in DeRidder to discuss concerns. Official public hearings about the proposed training will be scheduled in Leesville and Lafayette.

"I live here in Louisiana with everyone else, and I would never have training conducted on this facility that would endanger soldiers and civilians," Brig. Gen. Charles Swannack, Fort Polk's commander, said at the hearing last week.

The proposed training involves spraying the bacterial spores into the air so members of the 7th Chemical Company can train using the Biological Integrated Detection System, known as BIDS. The system detects, collects and identifies biological hazards in the air.

"This is the most realistic training that we can provide our soldiers, and it is important to this country to have our soldiers trained to the best of our ability," Brig. Gen. Swannack said.

The bacterial spray is a dead form of Bacillus subtilis, a spore that has properties similar to anthrax, but that is "no way near anthrax," said Dr. Richard Hidalgo, Louisiana State University professor of veterinary microbiology and parasitology.

The Army wanted a chemical similar to anthrax because of its potential use against U.S. soldiers in combat.

Dr. Hidalgo said the spore was the safest similar material available. It can be found in water and dirt; more than likely, it "could be dusted off your skin" after walking outside, he said.

Brig. Gen. Swannack said the base had planned to use egg whites for the training but found it was safer to use the dead spore because many people are allergic to egg whites.

The post's environmental studies concluded that the spore would have "no substantial impact" on humans or the environment.

The spores would be released in three areas at Fort Polk from backpacks when wind speed and direction wouldn't spread them beyond the base.

The spore would not be dropped onto the training area from helicopters or airplanes, Brig. Gen. Swannack said. The BIDS training could start as early as December but will probably begin in January.

Fort Polk has never trained using the spore, officials said, but Bacillus subtilis has been used at Dugway Proving Ground in Utah and at Fort McClellan, Ala.

Army officials said the 7th Chemical Company worked with the spore at Fort McClellan, and none of the soldiers have been ill since.

Army Times October 9, 2000 Pg. 26

Unusual Compound Found In Vaccine Samples

By Karen Jowers

Federal health officials found trace amounts of a substance called squalene in samples of the anthrax vaccine, contradicting the Pentagon's repeated assertions that the compound was not there.

Squalene, which is found in the cells of humans, plants and animals, is a building block for producing cholesterol. It has been used to boost immune responses in some experimental vaccines, but the Food and Drug Administration has not approved its use in any licensed vaccines.

In one controversial study, researchers looking into possible causes of Persian Gulf War illnesses said they found antibodies to squalene in most of the sick veterans they studied, including those who were immunized against anthrax but not deployed.

Scientists and lawmakers want more research done to determine how squalene got into the anthrax vaccine and what effect it could have on people who receive the shots. The Defense Department insists the substance was not part of the formula for making anthrax vaccine.

After FDA researchers, using more sensitive tests than defense researchers used, found trace amounts of squalene in samples of the vaccine, they sent a letter in March to Rep. Jack Metcalf, R-Wash., who has been investigating the issue for three years. Metcalf made their findings public Sept. 27 in "The Metcalf Report on the Potential Role of Squalene in Gulf War Illnesses."

Metcalf did not release the FDA letter until now because defense officials told him the amounts were insignificant, said a congressional staff member. But researchers now say the trace amounts still might be enough to trigger the body's immune response.

"The Department of Defense has wasted years in determined effort to stonewall this issue," Metcalf wrote in his report, which calls for an immediate suspension of the anthrax immunization program until the matter is resolved. The Defense Department plans to continue the immunizations, spokesman Jim Turner said.

An FDA spokesman had no comment on the safety of the vaccine, but FDA officials have stated publicly since March that the anthrax vaccine is safe.

A more sensitive test

In previous tests of the vaccine, researchers used technology that was able to detect squalene in parts per million, but FDA researchers developed a more sensitive test that could detect the substance in parts per billion.

In samples from five lots of the vaccine, FDA researchers found squalene present in "low parts per billion." In the two samples from lots of the vaccine used during the Persian Gulf War, they found squalene present in about 11 parts per billion. In samples from the other three lots, they found up to 83 parts per billion, said Lenore Gelb, an FDA spokeswoman. Information was not available about how the vaccine from those three lots might have been used.

"It's not unusual for a compound to have some kind of biological effect at that level," said Robert Garry, a researcher and professor in the microbiology and immunology department at Tulane University Medical Center in New Orleans. His discovery of the presence of antibodies to squalene in sick veterans helped touch off the controversy.

In a Sept. 22 letter to Metcalf, Dorothy E. Lewis, associate professor of immunology at Baylor College of Medicine in Waco, Texas, wrote, "It is possible that very small amounts of a biologically active product could induce an immune response."

Garry believes there are three possible explanations for the presence of squalene:

- * It occurred naturally, although chances are slim. "You typically think of squalene being a product of animal systems, not biologics," he said.
- * It is the result of contamination in the manufacturing process.
- * It was added to the vaccine to boost immune response in other words, to boost the strength of the vaccine. Asked about the FDA researchers' findings during a Sept. 28 press briefing, Pentagon spokesman Ken Bacon said, "There have been recurrent reports of squalene. We have never found any confirmation of those reports.
- "These reports go back to the use of anthrax vaccine during the Gulf War period. Squalene has not been used in vaccines for a long period of time, and we're not aware that there was any squalene in any of the vaccine."

IAF draws up nuclear strategy

NEW DEIHI: The Indian Air Force has finalised its doctrine for responding to a nuclear threat, the Chief of Air Staff, Air Chief Marshal Anil Yashwant Tipnis, said Saturday.

"India is committed to a no-first-use policy for nuclear weapons. The only option then is to develop a second strike capability," he said. "How we will react, how we will operate (in the face of a nuclear threat or attack), that has been decided," he told reporters at a briefing.

Tipnis was speaking on the eve of Air Force Day, which commemorates the raising of the force in October 1932. The IAF chief did not say when the IAF's nuclear doctrine had been finalized. He also refused to provide any details about the force's operating procedures in the event of a nuclear attack.

A draft nuclear doctrine announced by the government last year said the country was committed to a no-first use policy. The draft document also said the country would create a triad of land, air and sea-based systems for the delivery of nuclear weapons in order to have a second strike capability in the event of a nuclear attack.

The IAF has reportedly been working on the possible use of its Mirage 2000 aircraft for the delivery of nuclear weapons while the navy is developing a nuclear-powered submarine that would be fitted with nuclear-tipped Cruise missiles. Last year, India tested the Agni II intermediate range ballistic missile with a range of more than 2,000 km that can carry a nuclear warhead.

Tipnis said the planned induction of frontline aircraft, including 140 Su-30s to be manufactured under license in India and the British Hawk advanced jet trainer (AJT), would prepare the force to face the challenges of the new millennium.

"An agreement for the licensed manufacture of Su-30s has been finalized. The production of the aircraft in India is likely to commence soon after the 50 Su-30s ordered from Russia are delivered," Tipnis said. India and Russia signed an in-principle agreement for transfer of technology for the manufacture of 140 Su-30s earlier this week. The deal is likely to be worth about \$1 billion.

India had earlier ordered 50 Su-30s through two contarcts finalized in 1996 and 1998. Only 18 of these aircraft have been delivered so far, and delivery of more aircraft has fallen far behind schedule due to problems faced by the Russian manufacturers in integrating Indian and Western avionics and systems selected by the IAF with the basic airframe of the Su-30.

"Very few fighters in the world have the capabilities of the Su-30 which will enhance the strategic capabilities of the IAF," he said.

The IAF had zeroed in on the Hawk AJT made by British Aerospace and negotiations were underway to replace all U.S.-made components fitted on the aircraft so that the IAF would not be affected by U.S. sanctions on the supply of military hardware when it inducted these aircraft, Tipnis said.

"British Aerospace is studying the cost of making these changes and the contracts is likely to be finalized by the end of this year," he said.

Tipnis admitted his force's flight safety record had come in for considerable scrutiny in the media due to a spate of crashes over the past two years, most of them involving the ageing MiG-21s that formed the backbone of the IAF's fighter fleet. "We are not complacent about flight safety. A little more than 40 per cent of the crashes were caused by pilot error and the problem is being addressed," he said.

The IAF is also considering the induction of other force multipliers such as flight refueling aircraft like Russia's II-78 and advanced warning and control (AWAC) aircraft, he said. Tipnis, however, ruled out the acquisition of the Russian A-50 AWAC, saying it did not meet the IAF's requirements.(India Abroad News Service)