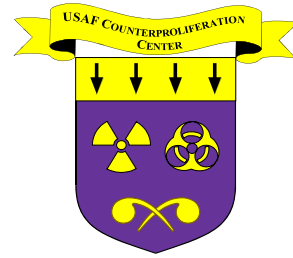


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USAF COUNTERPROLIFERATION CENTER

# CPC OUTREACH JOURNAL



*Air University*

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Washington Post

March 3, 2003

Pg. 1

## **Baghdad Destroys Six More Missiles**

*Iraq Threatens to Stop Obeying Order If U.S. Proceeds With Invasion Plans*

By Rajiv Chandrasekaran, Washington Post Foreign Service

BAGHDAD, March 2 -- Iraq said it destroyed six more banned Al Samoud-2 missiles today, but a senior adviser to President Saddam Hussein warned that it would stop doing so if the United States pursues plans to invade Iraq without obtaining approval from the U.N. Security Council.

"If it turns out, during an early stage this month, America is not going the legal way, then why should we continue?" Gen. Amir Saadi, Hussein's top science adviser, said at a news conference.

The destruction of the missiles had been portrayed as a crucial test of whether Iraq would abide by the terms of U.N. Resolution 1441, which requires Baghdad to account for its weapons of mass destruction. Last week, Iraq announced it would destroy the missiles, and that announcement appeared to provide support to the positions of France, Germany and other countries on the Security Council that oppose military action by the United States and are asking for the inspections to be extended.

The United States, however, argued last week that enough time had elapsed and that Iraq remained in material breach of the U.N. resolution.

A senior U.S. official said today that the White House remained unimpressed with Iraq's moves. "The standard for cooperation demanded by U.N. Resolution 1441 is full and immediate, not grudging and late," the official said. The resolution, approved last fall, authorized a new round of weapons inspections in Iraq.

Iraq destroyed the missiles as leaders of Turkey's ruling party said no decision had been made on whether to seek a second vote in parliament on whether to allow Turkish bases to be used in any U.S. military action. The parliament on Saturday rejected a request for the deployment.

In Iraq, the inspectors are trying to ensure that Iraq's stockpile of several dozen fully operational missiles, equipped with warheads and guidance systems, are among the first to be taken out of commission. Four Al Samoud-2s were flattened by bulldozers on Saturday, and Saadi said technicians bulldozed six more missiles in the presence of U.N. arms inspectors today. He said Iraq would seek to maintain that pace over the next few days.

Saadi said Iraq has about 100 operational Al Samoud-2s and as many as 20 others in various stages of assembly. If Iraq maintains the current rate of destruction, it could take almost three weeks to finish the task.

The chief U.N. weapons inspector, Hans Blix, ordered Iraq to destroy all of its Al Samoud-2s and related components after a panel of international experts concluded, based on data provided by the Iraqi government, that the missiles are capable of traveling beyond a 93-mile limit imposed by the Security Council after the 1991 Persian Gulf War. Iraq objected to the decision but opted to comply in an apparent effort to forestall a U.S.-sponsored council resolution that would deem Iraq in breach of its disarmament obligations and effectively provide U.N. endorsement for a U.S.-led war to topple Hussein's government.

Although the Al Samoud-2s are among Iraq's newest weapons systems, Western military analysts question the missiles' accuracy. At this evening's news conference, Saadi said they would not be instrumental in Iraq's efforts to fend off a U.S. invasion.

"These weapons are quite useful," he said. "However, they're not decisive in the battlefield, so sacrificing them is something that has been calculated by us" as acceptable.

Saadi argued that Iraq's decision over the past few days to start destroying the banned missiles, offering scientists for private interviews and excavating sites for evidence of its past weapons programs should be considered "proactive cooperation" with the inspectors -- a phrase Blix has used frequently to describe what he wants from Hussein.

"To all fair-minded people who are neutral and free, it's more than enough," Saadi said. But he acknowledged that Iraq's efforts probably would not be sufficient to guarantee the rejection of the U.S.-sponsored resolution.

"There are all kinds of pressures, unbearable pressures sometimes, and that in and of itself is an indication" of what might occur, he said.

Saadi also urged Americans to reevaluate their support for a war in Iraq, noting that military action could cost the United States at least \$80 billion. He said the U.S. government, which claims to have geographic coordinates of facilities allegedly engaged in the production of banned weapons, should instead give that information to the inspectors.

"It would be much easier and less costly and much faster to provide those coordinates" to the U.N. inspection commission, he said. "They'll do the job free of charge, at no cost to the American taxpayer."

Even though Iraq has sought to cast its behavior over the past several days as cooperative, U.N. officials said they are withholding judgment, perhaps until they must compile a presentation that Blix will deliver to the Security Council on Friday.

U.N. officials have expressed guarded optimism about the decision of a few non-nuclear scientists -- two on Friday and one on Saturday -- to consent to private interviews with inspectors. Two other scientists whom the inspectors had sought to interview on Saturday refused to be interviewed without a witness or a tape recorder, while a fourth could not be located. Another scientist refused a private interview today, according to Iraq's Foreign Ministry.

U.N. officials also are skeptical of Iraq's attempt to prove it destroyed 157 aerial bombs filled with biological warfare agents by excavating an abandoned helicopter airfield about 60 miles southwest of Baghdad where Iraq claims the destruction occurred. Saadi said technicians have found numerous bomb fragments and eight intact R-400 bombs, which were probably filled with anthrax bacteria, aflatoxin or botulinum toxin.

But inspectors said they doubt that debris and soil tests will be able to determine the volume of weapons destroyed at the site, as Iraq contends. The inspectors nonetheless took samples of the material in the bombs today to confirm its composition.

Saadi said Iraq does not want photographs or videotape of the destruction of the missiles to be released, despite the potential impact on world opinion, because the impact on the people of Iraq would be "too harsh."

Iraqi newspapers and television stations, all of which are controlled by the government, did not report on the destruction. Instead, Iraqis saw Hussein on the television news tonight, listening to army officers informing him of their readiness for war. One officer told Hussein that U.S. planes have been dropping leaflets urging Iraqi soldiers to surrender.

"They weren't able to defeat us with bombs," Hussein said. "Are they going to defeat us with leaflets?"

*Staff writer Dana Milbank in Washington contributed to this report.*

<http://www.washingtonpost.com/wp-dyn/articles/A30984-2003Mar2.html>

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New York Times

March 3, 2003

## North Korea Says A U.S. Attack Could Lead To A Nuclear War

By Keith Bradsher

SEOUL, South Korea, Monday, March 3 — North Korea's leader, Kim Jong Il, has warned that nuclear war could break out if the United States attacks his country's nuclear program. The remarks were his first public pronouncement since North Korea restarted a nuclear reactor last Wednesday.

The statements by Mr. Kim, which were read by an announcer for North Korean radio and monitored by the BBC, were consistent with statements in North Korean newspapers over the weekend, as North Korea has increased its criticisms of American policies in response to growing worries in Washington that North Korea may soon begin production of nuclear weapons.

"Should a war break out on the Korean Peninsula due to the U.S. imperialists, it will escalate into a nuclear war,"

Mr. Kim said, according to the announcer. "Then, not only the Korean people in the North and South but the people in Asia and many countries around the world will suffer from a frightful nuclear catastrophe."

However, Mr. Kim also repeated previous North Korean denials that the country's nuclear program had a military purpose. "Our nuclear activities are thoroughly for peaceful purposes and do not pose threats to anybody," he said. The announcer did not say when or where Mr. Kim had made the lengthy remarks, simply prefacing the statements by saying, "Great leader Comrade Kim Jong Il pointed out as follows."

Paik Hak Sun, the director of the Inter-Korea Studies Program at the Sejong Institute, an independent policy group, said that while the content of the remarks was similar to other North Korean statements, it was unusual for Mr. Kim himself to be quoted. "It is not so common that a North Korean broadcast quotes his name this way, because it is a sensitive issue," Mr. Paik said.

President Bush has said repeatedly that the United States has no intention of "invading" North Korea, but he has begun to talk in recent weeks of keeping open "all military options." American intelligence officials have estimated that North Korea already has two nuclear devices and could start producing more at a rate of nearly one a month if it restarts a plutonium reprocessing facility at its main nuclear complex north of the capital, Pyongyang.

Mr. Kim also criticized the United States for planning military exercises that begin here on Tuesday. "This cannot but be an extremely dangerous situation aimed at provoking a new war of aggression and a new nuclear war on the Korean Peninsula," he said.

Stephen M. Oertwig, a spokesman for the American forces here, declined this morning to respond to Mr. Kim's statements, citing an American policy of not commenting on North Korean allegations.

North Korea has a history of intensifying its statements before American military exercises. An annual exercise involving counterinsurgency in defending American bases in South Korea will start on Tuesday and will be followed by the main annual joint exercises of the United States and South Korea, beginning on March 19. The joint exercises are conducted to a considerable extent at computers and in meeting rooms, however, rather than in the field.

<http://www.nytimes.com/2003/03/03/international/asia/03KORE.html>

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Washington Post

March 1, 2003

Pg. 15

## **Iraqi Defector Claimed Arms Were Destroyed By 1995**

By Colum Lynch, Washington Post Staff Writer

UNITED NATIONS, Feb. 28 -- A prominent Iraqi defector credited by President Bush and other senior U.S. officials with helping to reveal the full extent of Baghdad's secret biological, chemical and nuclear weapons told U.N. inspectors in 1995 that the vast majority of Iraq's deadliest weapons had already been destroyed, according to a confidential copy of the notes of the meeting.

Gen. Hussein Kamel, the former head of Iraq's secret weapons program and a son-in-law of President Saddam Hussein, told a United Nations delegation in a secret meeting in Amman, Jordan, on Aug. 22, 1995, that Iraq had halted the production of VX nerve agent in the late 1980s and destroyed its banned missiles, stocks of anthrax and other chemical agents and poison gases soon after the Persian Gulf War.

However, U.N. inspectors have challenged the veracity of Kamel's claims.

Kamel, the former director of Iraq's Military Industrialization Corp., which oversees the country's weapons programs, acknowledged that Iraq had preserved much of the technology and know-how required for producing banned weapons in order to reconstitute the program after U.N. inspectors left the country.

But he told the delegation, headed by then-chief U.N. weapons inspector Rolf Ekeus, that "I ordered destruction of all chemical weapons. All weapons -- biological, chemical, missile, nuclear were destroyed."

Ekeus and other former U.N. inspectors said this week that while Kamel provided valuable information, he frequently embellished and lied to enhance his reputation or to preserve illegal weapons programs. "He was a consummate liar," Ekeus said in a telephone interview. "He wanted to return [to Iraq] at some stage and make a political comeback when Saddam Hussein moved to the side. All the more reason to preserve some of the WMD [weapons of mass destruction] secrets."

Kamel returned to Baghdad in 1996, where he was killed.

Ekeus said Kamel's suggestions that Iraq had destroyed all of its chemical and biological weapons as early as 1991 were "absurd." The former U.N. Special Commission, which was responsible for destroying Iraq's weapons from 1991 to 1998, carried out the destruction of more chemical, biological weapons than occurred during the Persian Gulf War, Ekeus noted. He said also that the U.N. inspectors carried out the destruction of tons of chemical weapons and agents between 1992 and 1994.

The defection of Kamel to Amman on Aug. 7, 1995, prompted the Iraqi government to turn over millions of pages of documents with new information on Iraq's efforts to produce chemical, biological and nuclear weapons.

The notes from Kamel's interview, which were obtained by Cambridge University lecturer Glen Rangwala and first reported this week in Newsweek, suggest that Bush may have overstated Kamel's importance in leading U.N. inspectors to the trail of tens of thousands of liters of anthrax and tons of VX nerve agent.

They indicated that the United States, which debriefed Kamel in Amman, may have ignored or dismissed his claims that many of Iraq's deadliest agents had been destroyed. The defection of Kamel "should serve as a reminder to all that we often learn more as the result of defections than we learned from the inspection regime itself," Vice President Cheney said on Aug. 26.

U.N. inspectors familiar with the Kamel meeting cautioned that the quotes from the interview, which were translated into English from Arabic and written down by a Russian weapons inspector, may contain some mistakes or misunderstandings. "You have to take what he says with a grain of salt," one U.N. inspector said.

Kamel said that Hussein had no intention of abandoning his pursuit of banned weapons once inspectors left. He said that Hussein's special guards had hidden two Russian Scud rocket launchers and a computer disk with information on Iraq's banned nuclear weapons program. Asked why Iraq would destroy its missiles and keep the launchers and missile molds, he said, "It is the first step to return to production. All blueprints for missiles are in a safe place."

Kamel himself suggested the U.N. inspectors were a far more useful and reliable source than Iraqi defectors. "You should not underestimate yourself," Kamel said. "You are very effective in Iraq." In the interview, he described one well-known defector, Khidhir Hamza, a nuclear scientist who participated in Iraq's secret nuclear weapons program, as "a professional liar."

<http://www.washingtonpost.com/wp-dyn/articles/A18467-2003Feb28.html>

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London Sunday Telegraph  
March 2, 2003

## **Saddam 'Killed Missile Chief' To Thwart UN Team**

By David Wastell and Julian Coman, Washington

Western intelligence agencies are investigating claims that Saddam Hussein ordered the murder of a senior Iraqi missile engineer to prevent him passing vital information to United Nations weapons inspectors.

Gen Muhammad Sa'id al-Darraj, who was in charge of Iraq's mobile Scud missiles until three months ago, died 24 hours after talks with Saddam's officials, according to Arab newspaper reports. The officials wanted to discuss how the general would conceal his knowledge if he were called for interview by the UN.

The London-based Al-Zaman newspaper said that Gen al-Darraj told "indignant" relatives shortly before he died that he had been slipped a poisoned drink during the meeting at one of Saddam's presidential palaces.

Iraqi opposition groups suspect that the general's loyalty to Saddam was in doubt after he was removed from his post at the end of last year.

British Government officials said yesterday that they were still trying to corroborate the report.

UN inspectors held their initial private interviews with Iraqis involved in Saddam's weapons programme - a biologist and a missile expert - on Friday, their first such talks for three weeks.

Last week Britain's ambassador to the UN, Sir Jeremy Greenstock, gave a private briefing to other members of the Security Council on Iraq's continuing efforts to conceal its chemical weapons and nerve gas production from the weapons inspectors, The Telegraph has learnt.

Officials say that Sir Jeremy will reveal more to his senior UN colleagues this week, including sensitive intelligence information, in an effort to boost support for the British and American-backed resolution on Iraq.

Donald Rumsfeld, the United States Secretary of Defence, put further pressure on Saddam's regime by linking senior Iraqi officials to a new list of 24 crimes for which detainees in the war on terrorism may be tried by American military tribunals.

Mr Rumsfeld said that war-crimes suspects in Saddam's regime might be brought to Guantanamo Bay, where about 650 al-Qa'eda suspects are currently held, after any military action. According to Pentagon officials, Saddam and other top Ba'ath Party activists could be put on trial for crimes against Kurds in northern Iraq and Shia Muslims in the south.

The war crimes list includes "employing poison or analogous weapons", "using protected persons as shields" and "using protected property as shields". Mr Rumsfeld said that the 19-page list was a codification of existing laws of war to take account of the new landscape of international terrorism.

During an emergency Arab summit in Egypt yesterday the United Arab Emirates became the first Arab country to call publicly for Saddam and his aides to go into exile, to spare Iraq's people from war.

The UAE said that the Iraqi leadership should be offered "all suitable privileges to leave within two weeks", plus internationally binding guarantees that they would not face prosecution "in any form". The proposal appeared to receive backing from Saudi Arabia's foreign minister, Prince Saud al Faisal.

At the same summit, President Bashar al-Assad of Syria called on fellow Arab League nations not to provide America with military facilities to wage war on Iraq.

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Los Angeles Times  
March 1, 2003

## **Infection Tied To Smallpox Vaccine**

*The eye problem is linked to contact with a member of the military who was inoculated.*

By Lisa Richardson, Times Staff Writer

A patient has been hospitalized in Los Angeles County with an eye infection acquired through close contact with someone inoculated in the military's smallpox vaccination program, health officials said.

The adult patient, who has not been identified, is the first person in California to be hospitalized as a result of the national drive to vaccinate emergency health workers and military personnel.

More than 100,000 members of the military have been vaccinated, and three cases of adverse reactions have been reported.

Citing privacy and confidentiality measures, public health officials declined to release the Los Angeles County patient's gender or age, to identify the hospital or to say how the patient was being treated. However, officials said the patient's condition was improving.

How the patient became infected by the vaccinia virus -- derived from the stomachs of calves -- is still unclear, said Dr. Jonathan Fielding, the county's director of public health.

"We really don't know how it happened -- it could have happened in a variety of ways," he said. "What's important is they had direct contact with the person, rather than this being something that was just in the air."

First, the person experienced some eye swelling, then conjunctivitis, Fielding said. "Soon the side of the face had swollen, and the eye became weepy."

Fielding emphasized that so far there have been no reported adverse reactions to the county smallpox vaccination program of health-care workers. Nor have there been transmissions to patients or others from health-care workers nationwide.

Basic "common-sense precautions" are the most effective ways to prevent vaccinia transmission, Fielding said.

"You have to pay attention to correct hand hygiene, frequent hand-washing," he said.

Nationally, the Centers for Disease Control and Prevention has reported at least two adverse reactions caused by the smallpox vaccine, but both cases involved people who had been vaccinated.

A woman reported pain at the vaccination site, malaise and a rash on her chest and back that was treated with antihistamines. And a 60-year-old man with a history of coronary artery disease had a case of angina four days after receiving the vaccine.

Angina is not known to be associated with the smallpox vaccine, said CDC spokesman Von Roebuck, but the agency listed the case because it occurred so soon after the vaccination.

Vaccinia is not smallpox. It is spread by touching a vaccination site before it has healed or by touching bandages, clothing or other material contaminated with live virus.

The vaccination site often becomes itchy, which may lead to scratching, rubbing or otherwise touching the site.

Although it is rare, vaccinated persons can spread vaccinia to other parts of their own bodies, typically the eyes or genitals, or to other individuals.

According to the CDC, such spreading occurs in between 20 and 60 of 1 million people vaccinated for the first time, and it more often involves children.

<http://www.latimes.com/news/local/la-me-pox1mar01.1.1396832.story>

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Atlanta Journal-Constitution

March 2, 2003

## **Army Chemical Incineration Plant Will Wait For Anniston**

By Associated Press

Anniston, Ala. -- The Army will not begin destroying Cold War-era chemical weapons at the Anniston Army Depot incinerator until local officials say they are prepared for an emergency, says the head of a new Army department responsible for the disposal.

The move marks a significant shift in policy for the Army, which previously had resisted linking its timetable for burning 2,254 tons of chemical agents at its \$1 billion incinerator with community preparedness.

Michael Parker, interim director of the newly formed Chemical Materials Agency, described the change in an interview with The Anniston Star. He also said the Army is working to meet four readiness benchmarks set by U.S. Sen. Richard Shelby (R-Ala.) in a January letter to the secretary of the Army.

Shelby's demands for the Army include:

\*Over-pressurizing schools within a 12-mile radius of the incinerator -- something the Army had said would take two years but now says it can do by October.

\*Taking responsibility for activating a siren system to warn of an incident at the depot.

\*Funding additional protective measures for groups such as the elderly and disabled.

\*Providing accurate, updated toxicity information about the chemical weapons stored at the depot.

A startup date hasn't been set, but Parker said he hopes the community can resolve remaining preparedness issues soon. Mike Burney, director of the Calhoun County Emergency Management Agency, said he hopes emergency measures can be in place by October.

Shelby, Gov. Bob Riley and others praised the emphasis Parker has placed on community preparedness but remained mindful of past frustrations.



"Challenges remain," Shelby said. "But I am optimistic Mr. Parker's leadership will elevate the level of preparedness to where it needs to be so the Anniston destruction facility can begin to destroy these weapons."  
[http://www.accessatlanta.com/ajc/epaper/editions/sunday/news\\_e316893ca0d5d0b300de.html](http://www.accessatlanta.com/ajc/epaper/editions/sunday/news_e316893ca0d5d0b300de.html)

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Dayton Daily News  
March 2, 2003

## Tools Of War In Base Labs

*Wright-Pat involved in Iraq effort*

By Timothy R. Gaffney

WRIGHT-PATTERSON AIR FORCE BASE-- U.S. forces are poised to invade Iraq to eliminate its weapons of mass destruction, but many of the tools designed to do the job are still in government laboratories.

The Defense Department has been pushing programs to develop missiles and bombs that can pierce hardened and buried bunkers and destroy chemical or biological weapons stored inside.

Researchers and program managers at Wright-Patterson Air Force Base are deeply involved in the effort.

One system researchers have been testing would use cruise missiles with penetrating warheads to pierce bunkers, and special explosives or neutralizing chemicals to destroy the chemical or biological agents inside. While the goal is a clean kill with no contamination, the system would also use Predator Unmanned Aerial Vehicles to launch mini-UAVs to sample the air for deadly leaks.

The work involves the Air Force Research Laboratory headquartered at Wright-Patterson, the Aeronautical Systems Center's Predator program managed at the base, the Navy and other defense agencies. The Pentagon's Defense Threat Reduction Agency leads the effort.

The Bush administration claims Iraq has amassed enough chemical and biological agents to fill thousands of artillery shells, bombs and missiles in violation of United Nations resolutions. UN inspectors say Iraq has resisted new efforts to identify and eliminate the weapons, and President Bush has been pressing UN member nations to disarm Iraq by force.

But attacking chemical or biological weapon stockpiles risks creating the very nightmare U.S. forces would be trying to prevent in invading Iraq. Some observers say the consequences of a botched stockpile are so dire that commanders will try to avoid striking them.

"To attack storage areas would be foolish. They present no threat to you, and in fact blowing up a storage area could cause a catastrophe," retired Air Force Lt. Gen. Michael Short said Thursday.

Short, who commanded Allied air forces against Yugoslavia in 1999, said U.S. forces are more likely to seize storage facilities with helicopters or paratroopers and hold them until heavy reinforcements can move in.

Even attacking battlefield ammunition bunkers presents exposure risks, as Operation Desert Storm showed.

Pentagon studies of Gulf War illnesses have concluded that air attacks and demolition of Iraqi bunkers in 1991 released deadly chemicals such as the nerve agent sarin, although they dispute claims that soldiers were sickened by exposure to low levels of the agents.

Pentagon studies show war planners were more concerned about the prospect of Iraqi chemical weapon attacks than the effects of accidental dispersal.

Leading up to the war, several government agencies conducted computer modeling and simulation of attacks against Iraqi targets, but "none of these efforts attempted to show the results of the dispersal of chemical or biological warfare agents," according to a 2000 Pentagon paper.

In 1997, press reports alleged an Energy Department study for the Air Force shortly before the Gulf War had showed bombing Iraqi chemical weapon sites was certain to release deadly nerve agents that could endanger American troops. But an ensuing Pentagon investigation found little evidence of serious studies.

One place investigators looked was in the Air Force Research Laboratory's Human Effectiveness Directorate at Wright-Patterson.

A scientist whose name was deleted from the investigator's 1998 report said his staff of 35 scientists analyzed the Iraqi chemical-biological threat during the Gulf War. The scientists "periodically discussed the possible results of release stemming from U.S. air strikes against storage facilities, but the Air Force never requested serious investigations," the report said.

That has changed since the Gulf War.

The ability to knock out weapons of mass destruction sites has become known as counterproliferation and is one of the missions of the Defense Threat Reduction Agency. Speaking to the Senate Armed Services Committee last

April, DTRA Director Steven Younger called counterproliferation "a sort of noncooperative threat reduction program."

Younger's agency has studied a range of attack concepts, especially for deeply buried or hardened bunkers. Among them are a rapid-fire well-digging machine called "Deep Digger," which special operations forces would use to get to a bunker through solid rock, to earth-penetrating nuclear weapons.

It's also pursuing some programs only identified in budget documents as "classified."

The DTRA has been working with the Air Force and Navy to combine several new weapon technologies into a bunker-busting system that can be tailored for specific targets. Officials say "one-size-fits-all" weapons just won't work against chemical-biological targets.

"We don't want to just blow up a bunker and let (chemical or biological agents) escape out into the atmosphere," Air Force Lt. Col. John Wilcox said in a Pentagon press briefing last year.

Wilcox, who works in the Pentagon's Advanced Systems and Concepts office, said researchers in an AFRL program called Agent Defeat are trying to develop a "boutique" of chemicals that could be used to burn up or sterilize the contents of a storage site.

Agent Defeat is managed at AFRL's munitions directorate at Eglin Air Force Base in Florida.

Other technologies include warheads that can punch through several layers of concrete and fuses that detonate a warhead at a preprogrammed depth or level within a bunker. In addition to gravity bombs, both the Air Force and Navy are developing penetrating warheads for cruise missiles.

Related programs are developing ways to check the air around a weapon site after an attack to find out if any agents have escaped.

One is called the Chemical Combat Assessment System. It involves the Predator UAV equipped with special sensors to check for indications of chemical weapon agents, and mini-UAVs to fly down for a closer inspection.

Last year, a Predator became the first UAV to launch another UAV, according to General Atomics Aeronautical Systems Inc., Predator's manufacturer. The remotely piloted Predator, about the size of a small private plane, deployed a mini-UAV named FINDER from a rail under one of its wings at 10,000 feet. The 57-pound, Navy-developed FINDER flew by itself for several minutes before a ground controller guided it to a landing.

In use, a Predator that sniffed signs of a chemical plume with its own sensors would release one or two FINDERS to fly down closer to the target and relay data about the plume's size and path for up to two hours. Analysts on the ground would use the data to assess the danger, according to Navy and DTRA documents.

A program to develop a similar system for biological threats isn't as far along, according to a 2002 Defense Department report.

It isn't clear whether the military would try to use these systems against Iraqi chemical or biological sites if the United States attacks. AFRL and DTRA officials weren't able to respond to questions last week.

A military analyst who studies counterproliferation doubted they're ready.

"They are not anywhere near completion," said Michael Levi, an analyst with the Federation of American Scientists in Washington, D.C. Levi wrote a report on counterproliferation efforts, "Fire in the Hole," for the Carnegie Endowment for International Peace last year.

Like Short, Levi also doubted U.S. forces would try to destroy chemical or biological storage sites with air attacks.

"The risk of dispersing the agents is substantial, and the payoff isn't that great," he said. Blowing up the stockpiles would also destroy evidence supporting the U.S. decision to invade Iraq in the first place, he said.

Levi said there's another reason U.S. forces are unlikely to attack stockpiles: They may not know where they are.

U.N. inspectors have turned up only a handful of chemical warheads.

"If you can't find your target, it's useless to talk about what kinds of weapons you have," he said.

<http://www.activedayton.com/ddn/local/daily/0302challenge.html>

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New York Times

March 1, 2003

Pg. 1

## **Border Inspectors To Look For Radioactive Materials**

By Philip Shenon

WASHINGTON, Feb. 28 — All travelers arriving in the United States will be screened by federal border inspectors for radiological materials beginning this weekend, according to senior Bush administration officials.



The plan is designed to stop terrorists from bringing nuclear material across the border. It is the most important in a series of counterterrorism measures that are being put into place as the Customs Service, the Immigration and Naturalization Service and 18 other federal agencies formally merge into the new Department of Homeland Security on Saturday.

Some people entering the United States are already screened for radioactive materials when they walk or drive past border checkpoints where customs agents are carrying portable radiation detectors. That program was begun by the Customs Service after the Sept. 11 terror attacks.

But beginning this weekend, officials said, the detectors will be distributed and used far more widely, which should guarantee that all people entering the United States at the nation's airports, seaports and land borders — an estimated 500,000 people a day — will be screened for radioactive materials.

"We think this is an important way of improving our capability of detecting radiological materials, including dirty bombs and the material that could be used to make a dirty bomb," said Customs Commissioner Robert C. Bonner, whose title will soon change to commissioner of the Bureau of Customs and Border Protection in the new Homeland Security Department.

Mr. Bonner said that every person entering the United States beginning this weekend will be screened by at least one inspector carrying a radiation detector, calling that "an important detection capability that we don't have today." The expanded screenings are not expected to cause delays at the borders. The customs program begun after Sept. 11 showed that only a small number of people and vehicles ever set off the detectors, and that most of those quickly prove to be false alarms.

Officials said the expanded program would allow for radiation screening of all trucks entering the United States.

Cargo sent by sea and air would continue to be screened only selectively, although officials said the Homeland Security Department planned to have complete radiation screening of that cargo, as well, within a year.

The disclosure of the stepped up screening plans came as President Bush vowed today to speed up the distribution of money for domestic security. He again criticized the Republican-led Congress for having failed to provide billions of dollars that were promised by Washington to state and local governments to help them prepare for the possibility of terrorist attacks.

At a ceremony today to mark the formal integration of the 20 existing agencies into the Homeland Security Department, President Bush said that there was "no such thing as a 100 percent guarantee that we're protected against the hidden network of cold-blooded killers, yet we're determined to do everything in our power to defeat this enemy and to defend our people."

The new radiation screening effort comes as the administration has endured weeks of criticism by Democrats and private security experts for doing too little to respond to terrorist threats and for spending too little money on the new department, even as it has warned of a heightened threat of a domestic attack by Al Qaeda.

The program that begins Saturday will require all travelers, their vehicles and their possessions to pass within monitoring distance — several feet — of one of the 7,000 portable radiation detectors that have been purchased for the program.

Officials said the decision to require all travelers and their belongings to undergo the screening reflected a mounting concern, based on evidence gathered from captured Qaeda members and other intelligence, that terrorist groups intend to try to detonate some kind of radiation device within the United States, most likely a so-called dirty bomb, in which conventional explosives spread radioactive material.

The pager-sized detectors, which are usually worn on an inspector's belt and are supposed to detect even small amounts of radioactive material, are already used by many customs agents at border entry points around the country. But tens of millions of travelers arriving in the United States each year, especially at land borders between the United States and Canada and Mexico, are waved past a customs inspection station.

At some large land border stations, checkpoints are staffed either by a customs agent, who probably is wearing a detector, or an immigration officer, who is not.

Officials at the Homeland Security Department said they expected that all 18,000 border inspectors who are being consolidated into the new department — 9,000 customs agents, 6,000 immigration agents and 3,000 agriculture agents — will be outfitted with one of the radiation devices and trained in their use by the middle of next year. The detectors, known as personal radiation pagers, cost about \$2,500 each, officials said.

Mr. Bonner, a former judge who previously directed the Drug Enforcement Administration, is overseeing this weekend's formal consolidation of border inspection functions that are now shared among the Customs Service, the Immigration and Naturalization Service, the Agriculture Department and the Border Patrol.

The department named interim directors this week for the nation's 307 ports, the formal border stations that range from extensive, like Kennedy International Airport in New York, to minuscule, like the border outposts in North

Dakota and Montana. Beginning this weekend, one port director at each location will oversee all immigration, customs and agricultural inspections.

Mr. Bonner said in an interview that the consolidation of the border agencies should allow the government to tighten security and improve its ability to keep out terrorists and weapons of mass destruction. "We are uniting and unifying all of the federal inspection employees into a single force for the purpose of carrying out what is the priority mission of the Homeland Security Department," he said.

For the public, the consolidation of the border agencies may be the most noticeable of the changes that will occur this weekend.

The department went into business last month, but only as a skeleton operation. With this weekend's consolidation, Mr. Ridge will have direct authority over some of the nation's largest and most important law-enforcement and domestic security agencies, including the Coast Guard, the Secret Service, the Federal Emergency Management Agency and the Transportation Security Administration.

<http://www.nytimes.com/2003/03/01/politics/01HOME.html>

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## Security Agents Screen Visitors for Radioactive Material

*By Guy Gugliotta*

Washington Post Staff Writer

Sunday, March 2, 2003; Page A06

Inspectors from the new Bureau of Customs and Border Protection yesterday began using pocket-sized detection devices to screen every visitor to the United States for radioactive material, bureau officials said yesterday.

Bureau spokesman Dean Boyd described the move as a natural outgrowth of the mergers of disparate agencies into the Department of Homeland Security. Inspectors from the former U.S. Customs Service, who have used the devices for years, will now share them with their new colleagues from the former Immigration and Naturalization Service (INS).

"When you get off the airplane at international arrivals, the first guy you ran into was usually an INS person," Boyd said. "Today, that person is going to have a pager, and when he ends his shift, he passes the pager on to the guy who takes his place."

Boyd described the detectors as "slightly bigger" than telephone pagers, and said inspectors at airports, seaports and land border crossings wear them on their belts. When a radioactive source passes the detector, the device emits a signal, indicating "from 1 to 9" the strength of the "hit" it has received, Boyd said.

Boyd said the detectors are designed to pick up emissions from radioactive isotopes, including nuclear device materials such as plutonium or enriched uranium, or non-weapons-grade radioactive material suitable for use in "dirty bombs," which use conventional explosives to spread contamination over an extended area.

Boyd said wider distribution of the pagers "is the result of the fact that we have a unified border agency now." He said the Department of Homeland Security can "guarantee that every inspector will have a pager" at every one of 307 U.S. ports of entry.

The Bureau of Customs and Border Protection, an agency within the Homeland Security Department, officially opened for business yesterday, bringing together 9,000 former Customs Service inspectors, 6,000 former INS inspectors, 3,000 former Agriculture Department inspectors and 10,000 personnel from the former Border Patrol.

"The beauty of the system is that you have unification," Boyd said. "In the past at the ports of entry, there would be different bosses for each security agency, but what's happening now is that there is a single person in charge -- it's a clear chain of command."

Boyd said the bureau has about 7,000 of the \$2,500 pagers and intends to outfit every inspector with one. He cautioned, however, that the pagers "are not the silver bullet," but only "one aspect" of a "defense in depth" to detect illegal importation of radiological material.

The bureau's tools also include a hand-held "radiation isotope identifier," which can distinguish among different radiation emitters and give inspectors clues about whether the material is intended for a legitimate industrial or medical purpose.

Customs began distributing the isotope identifiers after the Sept. 11, 2001, attacks.

For a broader look at suspicious trucks and containers, the bureau has the vehicle and cargo inspection system, which uses X-rays to spot "anomalies" inside cargo carriers. By X-raying a tank truck, the system can tell whether terrorists have sunk nuclear materials into the liquid inside.

Boyd said even the simple pagers were quite sensitive to radioactivity.

In 2000, Uzbek guards on the border of Kazakhstan and Uzbekistan in Central Asia stopped a truck with pagers given to them by the U.S. Customs Service. Searching the truck, which was driving to Pakistan, the guards found 10 lead-encased containers of radioactive material. They detained the truck and seized its contents.

<http://www.washingtonpost.com/wp-dyn/articles/A23113-2003Mar1.html>

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Washington Times

March 1, 2003

Pg. 5

## **Nuke Agency Seeks Radioactive Material**

NEW YORK (AP) — The United Nations' International Atomic Energy Agency has sent an emergency mission to Nigeria to help find an undisclosed amount of missing or stolen radioactive material, the agency said yesterday. Nigeria asked the U.N. nuclear watchdog's Emergency Response Center for help in early February after the materials disappeared from an oil company in the southern Niger Delta oil region.

Agency workers arrived Feb. 16, an agency representative said on the condition of anonymity.

Among the missing material is beryllium, a cancer-causing, radioactive material also used in the nuclear industry, the Vienna, Austria-based agency said.

Fox News reported that americium, a man-made radioactive element, was also stolen.

Nigeria's nuclear regulatory board has told the public of the missing material, urging caution if anyone finds it because of the dangers of radiation poisoning.

It was not clear what function the missing material played in oil production. Radioactive materials are used in the oil industry for purposes including X-raying pipelines.

Nigerian authorities said in early February they were worried the material could fall into the hands of people who might use it for purposes that could threaten public safety. They have put all security agencies on alert.

Osama bin Laden's al Qaeda terrorist group has attempted to obtain radioactive material to build a so-called dirty bomb, in which a conventional explosion is used to spread radiation.

Nigeria is the world's sixth-largest oil exporter, and nearly all of the oil comes from the Niger Delta. But it has no known nuclear program.

Oil companies' facilities in the delta are the object of frequent attacks by saboteurs and thieves.

<http://www.washtimes.com/world/20030301-68255976.htm>

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New York Times

March 4, 2003

## **U.S. Troops' Chemical Suits Do Not Leak, Army Insists**

By Thom Shanker

WASHINGTON, March 3 — The Army's top officers for combating chemical and biological weapons said today that American ground forces arrayed near Iraq had been issued the newest generation of protective suits, and not older ones, many of which had been found defective.

Each Army soldier facing Iraqi forces has been issued two of the new protective uniforms and each marine has been issued three, the Army officers said.

The protective suits, known as Joint Service Lightweight Integrated Suit Technology, can be worn in the field for up to 45 days, but once exposed to chemical or biological agents, they must be replaced after 24 hours. So as a contingency, two additional chemical-biological warfare suits for each soldier and marine are stored at warehouses in the region.

Those backup suits, however, are drawn from stocks of the older protective uniforms, called Battle Dress Overgarments. Each has been inspected to make sure it is free of defects, the senior officers said.

Last October, investigators for the General Accounting Office told Congress that the military lost track of up to 250,000 potentially defective Battle Dress Overgarments. Those came from a manufacturing run of just under 800,000 that produced suits with holes and poor stitching that could allow poisons to seep in.

The audit and Congressional hearings raised questions of whether frontline troops deploying to Iraq were at risk should Saddam Hussein's forces use chemical or biological weapons.

The Pentagon responded that most of the defective suits had been found or already were discarded after being used in training. Even so, the auditors warned that poor accounting practices made it impossible to locate about 250,000 of the suits.

Maj. Gen. John C. Doesburg, commanding general of the Army Soldier Biological and Chemical Command, said at a Pentagon briefing today that only the newest Joint Service Lightweight Integrated Suit Technology protective uniforms had been issued to forces around Iraq.

"If the eventuality ends up that we have to issue some of those Battle Dress Overgarments, although we've done extensive checks into our inventory, we will inspect each one of them prior to them being issued," General Doesburg said.

Brig. Gen. Stephen V. Reeves, the Pentagon's program executive officer for chemical and biological defense, said the contingency stocks of older protective suits at warehouses in the region were ordered inspected on three occasions, and no defective suits were found.

Representative Christopher Shays, Republican of Connecticut, who is chairman of the House Government Reform Subcommittee on National Security, said in a telephone interview tonight that the Pentagon leaders "still haven't given chem-bio defense the kind of attention they needed to give it.

"We've had 12 years to prepare for any involvement in the Persian Gulf," he said "It does have their attention now."

Mr. Shays said he was encouraged that troops deploying to the region all had the newest protective suits, but remained concerned they had insufficient training. He said the bottom line is that "they still are not ready.

"But they will be," he added.

Ray Decker, the G.A.O.'s director for defense capabilities and management, today echoed worries that the military still was not training or exercising sufficiently in the protective suits. "Troops will not be as confident operating in this environment," he said. "They just have not been tested in it in exercises."

The Army officers said that about 15,000 enlisted personnel, noncommissioned officers and officers who had received specialized training in nuclear, biological and chemical warfare are working at every level from the company to headquarters to train and advise those units.

General Doesburg said that the military was carefully watching Iraqi forces for signs it might prepare to use chemical or biological weapons. He said that night is the most likely time for an attack, because temperature inversions and the absence of the sun's ultraviolet rays make these agents more potent.

Asked about the use of incendiary bombs to attack depots suspected of holding chemical or biological arsenals, General Doesburg suggested that the American military's choice would be to capture those sites first.

"Our experience from the gulf war was that Saddam Hussein mixed things in his depots and weapons storage sites," he said. "You don't want to make any mistakes. You don't want to say it's purely conventional munitions and miss the chemical munitions. You don't want to say that it's purely chemical munitions and you find out it's majority of conventional munitions."

Although the anticipated method of delivering chemical or biological weapons is by aircraft, missile or artillery, General Doesburg warned that Iraqi Special Operations Forces could attempt to surprise American forces by carrying these agents to a target by hand.

"That would be against very selected targets and very small amounts because it's being carried in by humans rather than larger employment methods," he said.

<http://www.nytimes.com/2003/03/04/international/middleeast/04CHEM.html>

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Bloomberg.com  
March 4, 2003

## **Iraq Probably Can't Mount Major Chemical Attack, General Says**

By Tony Capaccio

Washington -- Iraq probably doesn't have enough chemical or biological weapons to sustain a counterattack that would stop an invasion by U.S. troops, the head of the Army's chemical and biological defense command said. Although Saddam Hussein's army might be able to slow the U.S. military, its stores of chemical and biological agents likely aren't big enough to exhaust the inventory of protective gear issued to soldiers, Major General John Doesburg said.

“It takes a lot of chemicals to have a significant effect on the battlefield,” Doesburg, head of the U.S. Soldier and Biological Chemical Command, said in an interview. “We don’t suspect he has the stockpile.”

More than 225,000 troops from the U.S., U.K. and Australia are in the Persian Gulf region, ready for a possible war to strip Iraq of weapons of mass destruction. President George W. Bush is pushing for a United Nations vote next week on a resolution that would clear the way for a military confrontation.

U.S. officials have said Iraq is capable of dispensing chemical or biological agents from aircraft-mounted sprayers, drones, bombs, missiles or artillery shells. Iraq used chemical weapons in its war with Iran in the 1980s. Those arms weren’t used when the U.S. military drove Iraq from Kuwait in the 1991 Gulf War.

Iraq’s capability to launch repeated, large-scale chemical attacks is a military concern because U.S. troops deployed to the Gulf have two new protective suits that can be worn for 24 hours each if contaminated. Troops also have access to another two older, more bulky suits that offer 24 hours each of protection before they too must be changed.

### **Stockpile Size**

Doesburg and other officials said the four-day supply of suits could withstand repeated volleys that Iraq probably can’t muster.

“You have to have this huge stockpile -- think back to the Cold War and the numbers announced by the former Soviet Union as to what constituted their stockpile,” he said. “You are looking at huge numbers.”

Although there are no reliable figures about Iraq’s current stockpile, after the 1991 war its government said it produced 210 tons of tabun, 795 tons of sarin and cyclosarin and 3.9 tons of VX, all nerve agents, and 2,850 tons of mustard gas.

Iraq also has declared it produced at least 19,000 liters of botulinum toxin, 8,500 liters of anthrax and 2,200 liters of aflatoxin -- biological agents.

### **Comparison**

By comparison, the former Soviet Union, which was the world’s largest developer of biological weapons, produced “thousands of tons of agent” annually, including anthrax, smallpox, and plague, the Pentagon said in a January 2001 report. It also admitted having 40,000 metric tons of chemical agents.

The U.S. suspects Iraq’s stocks “are not of that magnitude, so as a consequence to be able to do four, large-scale attacks, one following the other is extremely difficult,” Doesburg said.

In addition, Iraq forces, except for some Republican Guard and special units, are inadequately trained to fight in a chemical and biological environment, he said.

“Unless he plans on causing adverse reactions for his own soldiers, we will see indicators at a tactical level that his soldiers are preparing for particular use of a chemical or biological agent,” Doesburg said. “Across the board, their ability to both protect themselves and be aware of the potential employment by Saddam Hussein of chemical weapons is not good.”

### **Suit Production**

The U.S. military has accelerated production of chemical and biological protective suits in preparation for a potential war with Iraq.

Production of lighter, more durable suits increased to 90,000 a month in December from 79,000, Pentagon Undersecretary for Acquisition Edward “Pete” Aldridge said in an earlier interview.

“As the inventory builds up, they will be given more, but that’s sufficient for the time being,” Aldridge said.

U.S. Army troops also have access to about 20,000 new chemical detection alarms that are much more reliable than older models used during the 1991 Persian Gulf War, increasing their chances of avoiding repeat attacks, officials said.

Better equipment combined with a doctrine that stresses mobility that would allow troops to maneuver around contaminated areas, will minimize any Iraq chances for repeat attacks, said Colonel Thomas Spoehr, commander of the 3rd Chemical Brigade.

“The odds of them being able to do that again tomorrow -- because you have obviously moved out of that contaminated area -- and now they are going to hit you again and contaminate your new suit? Very unlikely,” he said after a Pentagon briefing.

The odds are even less likely Iraq would be able to contaminate the same troops “a third or fourth time in different spots,” Spoehr said.

### **Seek and Destroy**

Doesburg said the Army has set up units to go into Iraq probably after fighting has ceased to seek, analyze and destroy any unused weapons stockpiles, raw chemical and biological agents and facilities

“We have identified the folks who would be responsible for that mission and have given them specialized training and we’ve provided them a lot of capability, first to do the identification very rapidly and then follow up with how we would destroy the agents,” he said.

It's unclear at this time how many troops would be involved or the extent and duration of their missions, he said.  
[http://quote.bloomberg.com/fcgcgi.cgi?ptitle=Special%20Report&s1=blk&tp=ad\\_topright\\_all&T=markets\\_bfgcgi\\_content99.ht&s2=ad\\_right1\\_all&bt=ad\\_position1\\_all&middle=ad\\_frame2\\_all&s=APmQ2WhV5SXJhcSBQ](http://quote.bloomberg.com/fcgcgi.cgi?ptitle=Special%20Report&s1=blk&tp=ad_topright_all&T=markets_bfgcgi_content99.ht&s2=ad_right1_all&bt=ad_position1_all&middle=ad_frame2_all&s=APmQ2WhV5SXJhcSBQ)

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ABCNews.com

March 3, 2003

## Home Of The Bomb

*At Top-Secret Lab, Scientists Worry Nuclear Material Will Get Into Wrong Hands*

By V.K. Malhotra, ABCNews.com

LOSALAMOS, N.M. — Tucked away in this remote mountain region lies the birthplace of weapons of mass destruction. No, this is not Iraq, but rather the state of New Mexico.

It is here at the 43-square-mile fortress known as Los Alamos National Laboratory that the United States created and tested the world's first nuclear weapon.

Nearly 60 years ago, the best scientific minds in the country were recruited and brought to Los Alamos for what was described as a secret project — later known as "The Manhattan Project" — led by scientist Robert Oppenheimer.

The goal was to create the world's first atomic bomb.

It was a troubling time for the United States. The country was entrenched in battle on two fronts of World War II, and American casualties were mounting. The U.S. military wanted an end to the war, and they hoped the scientists at Los Alamos would be able to help do just that.

For their part, Oppenheimer and most of his fellow scientists believed they were engaged in a noble cause, designing the weapon to end all wars, a weapon so awesome that it would make even the idea of future war impossible.

Then, in July of 1945, in this barren stretch of the New Mexico desert that Oppenheimer named "Trinity," the United States successfully tested the world's first nuclear weapon. It was used in war just a few weeks after, and has not been used since.

### **Nowadays, a Very Different Mission**

Today, materials for new weapons remain stockpiled at Los Alamos under closely guarded conditions within the heavily fortified facility. The actual warheads and missiles are stored elsewhere in New Mexico, Texas, or deployed into the field.

But the lab is on a different mission. Ironically, the operation that created nuclear weapons is now working tirelessly to prevent them from ever being used again — at least by another country. The largest division here today is called the Non-Proliferation and International Security Division, or NIS.

"It is strange," acknowledged Terry Hawkins, NIS director. "The rest of the laboratory is trying to make what we call 'pits,' the core of nuclear devices, and what NIS does is try to prevent other countries from making 'pits' for their nuclear devices."

Hawkins believes the greatest threat to the United States, and the world for that matter, is nuclear terrorism. He and his team, many of whom are veterans of the weapons development program here, worry about nuclear materials falling into the hands of rogue nations and even worse, terrorists.

"We are looking at that as the ultimate threat that we would face," said Hawkins. "It is the most difficult one for a terrorist to achieve, but it's the one we are most concerned about because of the consequences."

### **'A Race' To Stay Ahead of Terrorists**

The actual building of a bomb remains relatively easy for rogue nations and terrorists. However, materials like plutonium and highly enriched uranium — two of the main ingredients for nuclear weapons — are closely tracked by the Los Alamos lab and the 32 countries that work in conjunction with them to monitor the movement of such materials worldwide.

Though confident of their monitoring system, Hawkins realizes there is still a great deal to worry about.

"Every day when I go to bed, I hope that we have secured the last kilogram of material that some terrorist might be trying to acquire," he said. "It's a race. I used to say that it was inevitable that a terrorist would be able to acquire such a device. Now I say no ... it's not inevitable. It's a race."

The scientists at Los Alamos know well the task at hand for United Nations weapons inspectors currently working in Iraq. Almost every one of them has been trained in nuclear material detection here.

In all, nearly 2,500 inspectors have received training here since the program began a few years ago. The strength of the training program at Los Alamos is its use of real material in training situations. The instructors here use real



plutonium and uranium, so the inspectors get a feel of what they are really facing when they find themselves searching facilities in a foreign country like Iraq.

The lab's acting director, George Nanos is confident in his training program, and the inspectors the lab has trained. "The inspectors are very good," he told ABCNEWS. "If they get within earshot or sensor shot [of nuclear materials] they'll find it."

### **Top Priority: Weapons Research**

Even though Los Alamos now focuses in part on non-proliferation and international security, the lab is still very much weapons-driven. The maintenance of America's nuclear arsenal remains its top priority.

The focus of the research is how the existing stockpile is aging. The last weapons were built in 1989, and were designed for a life span of 5 to 10 years. Now, scientists study how to maintain them and make sure they remain effective.

Scientists here conduct field experiments, for instance, to test the strengths of various metals like titanium and copper and to assess their strength with regard to extreme heat and exposure to nuclear substances.

The data is then entered into a "super" computer, called "Q" — named after the all-knowing character from the James Bond films. It is the second most powerful computer in the world, according to scientists here. The most powerful one is in Japan, but give them a little time, they add, and "Q" will soon be the most powerful.

Rows upon rows of storage drives house the immense amount of information. The hum is a sign "Q" is hard at work processing the secrets of the American nuclear arsenal. The data stored in "Q" is then processed in what is called the "Visual Room," where raw data is turned into amazing imagery, much of it three-dimensional.

Since most of the weapons data is classified, visitors are shown examples of other information the lab retrieves data on, such as a simulation of the angle at which the asteroid that wiped out the dinosaurs hit the Earth. It is this data visualization concept, created here at Los Alamos, that its experts say has provided the technology for video games.

While other research conducted here at Los Alamos, its military-related work is growing ever more serious as the country moves toward war. Nanos echoed the fear and hope of the men and women working at Los Alamos.

"I'm encouraged by the fact that we have not seen [a nuclear device] yet, but the danger is getting greater," he said. "The pressure that is going on worldwide to get a hold of this material, to try to do something like that, shows there is enough going on that it causes me a great deal of concern."

<http://abcnews.go.com/sections/wnt/SciTech/losalamos030303.html>

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## **Bioterrorism Test Set for Rural Oklahoma**

**By THE ASSOCIATED PRESS**

**Filed at 3:11 a.m. ET**

GOLDSBY, Okla. (AP) -- A crop-duster will buzz parts of rural Oklahoma in the coming weeks, dropping powdered clay and grain alcohol in a test the government hopes will help prepare the nation for a bioterrorist attack. The test is risk-free and may one day save lives, the government says. That doesn't mean people living in the test areas have to like it -- or that they don't have a few jitters.

"I'd just as soon they didn't do it here," said truck driver Bill Andrews, finishing lunch at a cafe here, 30 miles south of Oklahoma City. "But they had to have a bunch of fools somewhere."

Federal officials sent letters to about 600 residents living in the three testing areas around Oklahoma City, telling them not to worry if they see a crop-duster emitting dust puffs over their land.

That's all it took -- phones at Goldsby town hall started to buzz. Others found out about the tests from the nightly news, which caused a bit of panic, said town clerk Kristi Kilcrease.

"If it would have been handled differently, people wouldn't be so scared," she said.

The original test materials also included powdered chicken egg whites and a sterilized natural pesticide called Bt (bacillus thuringiensis). But so many residents were worried about food allergies and crops that the Army delayed the test, then removed those materials entirely.

"We're not here to stir up unwanted fear and anxiety in the community," said Army Maj. Rudy Burwell in Washington, D.C. "This is a zero-risk test."

Environmental Protection Agency spokeswoman Cynthia Fanning said it's understandable a crop-duster dropping powder from the sky may be frightening, given post-Sept. 11 fears of terrorists using planes. But Fanning said the test is no big deal.

"It's going to be the equivalent to about the amount of dust that would be kicked up by a car going down a gravel road," she said. "It probably won't be visible, and we don't expect it to be detectable at ground level."

The powdered clay, grain alcohol, which is found in beer, and polyethylene glycol -- often used in lotions -- are expected to dissipate before reaching the ground, Fanning said.

The materials, all biodegradable and harmless, resemble biological or chemical weapons as far as particle size, weight and density, Army officials said.

A new start date for the experiment, originally planned for this week, isn't scheduled. The test likely will stretch into May, with releases happening almost daily during two-week periods.

It is the latest and most advanced in a series of tests the EPA has held in Maryland, Utah and Florida beginning in early 2001, before the terrorist attacks. The Army and EPA dumped powdered egg whites and a bacterium similar to Bt over the ocean near Key West, Fla., last April with no ill effects.

``There's a whole umbrella of concern about bio-chem that's resonating across the country," Burwell said. ``We watch the news and the world climate and see there are potentially really nasty things out there. We want to do what we can to protect the homeland."

The test, happening in Oklahoma because of the state's advanced weather radar system, will help EPA and Army scientists determine how well radar can pick out chemicals or germs in the air. Radar systems will collect data as the materials spray out of the plane, and scientists will analyze it, looking for some way it could help warn the public if there was an attack.

Central Oklahoma is home to major radar centers of the Federal Aviation Administration and the National Weather Service. Scientists don't expect to develop a complete early-warning system from the test, and further tests in other parts of the country are likely.

Despite all the test preparation and assurances, there are still some skeptics.

Waitress Carolyn Kennedy at Libby's Cafe in Goldsby said there isn't anything to worry about as long as the Army is telling the truth.

``But it's the government and I don't trust the government," she said, then added jokingly: ``They'll knock us out with one spray."

<http://www.nytimes.com/aponline/national/AP-Bioterrorism-Test.html>

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