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Articles & Other Documents:

- | | |
|--|---|
| U.S. To Send Signal To North Koreans In Naval Exercise | Munitions, Not Fears, Are Going Up In Smoke |
| Alabamians Fear Chemical Disaster | Meanwhile, Saddam's Secrets Rise From The Desert |
| Agency Sees Many Obstacles | Smallpox Vaccine's Protection May Last Decades |
| Duration of antiviral immunity after smallpox vaccination (Abstract) | Russia's Denials About Biological Arms May Halt Funding |
| China Mustard Gas Crisis | Missiles Greater Threat Than Ever, Experts Say |
| Exercises Off Australia Aimed At Halting WMD Trafficking | |
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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 Jo Ann Eddy, CPC Outreach Editor, at (334) 953-7538 or DSN 493-7538. To subscribe, change e-mail address, or unsubscribe to this journal or to request inclusion on the mailing list for CPC publications, please contact Mrs. Eddy. The following articles, papers or documents do not necessarily reflect official endorsement of the United States Air Force, Department of Defense, or other US government agencies. Reproduction for private use or commercial gain is subject to original copyright restrictions. All rights are reserved

New York Times
August 18, 2003
Pg. 1

U.S. To Send Signal To North Koreans In Naval Exercise

By Steven R. Weisman

WASHINGTON, Monday, Aug. 18 — The Bush administration, while preparing for talks soon with North Korea, is also stepping up military pressure with plans for a joint naval exercise next month to train for interdicting at sea arms and other materials being transported to and from the North.

Administration officials and Asian diplomats said that the exercise would be carried out in the Coral Sea off northeastern Australia in September and that it was officially described as directed at no one country. A principal intention, however, was to send a sharp signal to North Korea to dismantle its nuclear weapons program, they said. The next round of talks with North Korea is planned for Aug. 27 in Beijing, with six nations taking part. The United States has been working with its allies to decide which items to present, from economic benefits to security guarantees, that would be provided if the North Korean government agreed to shut down its program verifiably and irreversibly.

North Korea said today that unless the United States changed its policy toward it, the North would use the talks to declare that it could not dismantle its nuclear weapons program.

The official North Korean news agency said such a change in American policy must include the signing of a nonaggression pact, the establishment of formal diplomatic relations and a guarantee that the United States would not interfere in North Korea's foreign trade.

The United States has stepped up efforts with Japan, South Korea and nine other nations to interdict ships doing business with North Korea. Last December, Spanish warships stopped a North Korean ship carrying Scud missiles to Yemen, but released it after Yemen protested.

"We are not saying which countries are being targeted, because it would not be politically wise," said an Asian diplomat, referring to the September naval exercise. "But the American government believes that one of the reasons why North Korea has agreed to the six-party talks in Beijing is that they are feeling the pinch."

An American official said the Coral Sea exercise would consist in part of ships and helicopters practicing the "nonpermissive boarding" of ships suspected of carrying drugs, missile components, nuclear materials and other items that the United States says are being imported or sold by North Korea.

Some diplomats are known to worry that exercises like the one in the Coral Sea might be seen as provocative by the government of Kim Jong Il in North Korea, and perhaps by China and Russia, which oppose confrontational tactics toward North Korea.

But administration officials said it was essential for the United States to have a more aggressive policy aimed at preventing North Korea from obtaining materials for its nuclear program or from selling missile parts, drugs or other contraband to get hard currency to pay for its weapons.

The Coral Sea naval exercise "has not surfaced as much of a factor" in negotiations with North Korea, an administration official said, adding: "If laws are broken or our national security is threatened, then everyone should recognize that we need to take that seriously. We are taking these steps to protect our own societies."

A Pentagon official said planning for the Coral Sea exercise had not been completed. It was not clear which countries, beyond Australia and the United States, would take part with ships. Japan was said to be ready to send a ship if the event could be formally characterized as a "police exercise" and not a military exercise. The Japanese Constitution limits its military to self-defense.

The exercises are part of a program announced by President Bush and leaders of other countries at a meeting in Krakow, Poland, at the end of May known as the Proliferation Security Initiative, with 11 nations participating: the United States, Britain, Australia, France, Germany, Italy, Japan, the Netherlands, Poland, Portugal and Spain. The Coral Sea naval exercise is to be the Initiative's first such action, and its participants set plans for it in July at a meeting in Brisbane, Australia.

Under a separate program, known as the D.P.R.K. Illicit Activities Initiative, referring to the Democratic People's Republic of Korea, North Korea's official name, there has been a quiet crackdown by many nations against the North's narcotics trade, counterfeiting, money laundering and other efforts to earn hard currency.

Among the recent actions under this initiative was the seizure of a North Korean freighter by the Australian authorities in April off Brisbane on suspicion of smuggling heroin and Japanese efforts to shut down a large trading company involved in illicit trade with North Korea.

Organized crime syndicates in Japan have long been believed to be involved in sending remittances to North Korea, money that in many cases generated at pinball casinos that are popular in Japan.

In addition, in early August, the Taiwan authorities boarded a North Korean freighter on a technical customs violation and then found and seized barrels of phosphorus pentasulfide, a lethal material that the United States later said could be used to make chemical weapons.

The Coral Sea naval exercise is to be the Proliferation Security Initiative's first such action, and its participants set plans for it only last month at a meeting in Brisbane.

An administration official said the interdiction exercise would "piggyback" on top of another long-planned naval exercise. But a Pentagon official said that exercise would run concurrently but not as part of the interdiction exercise, which he described as in its "embryonic stages," with a scope that remains undetermined.

The Bush administration's efforts to squeeze North Korea by applying "interdiction" and "seizure" techniques were outlined in a statement by the United States and its allies at the Krakow meeting. This summer, John R. Bolton, under secretary of state for arms control and international security, testified in Congress that the goal was to develop "new means to disrupt the proliferation trade at sea, in the air, and on land." Mr. Bolton is one of the program's champions.

A meeting has been scheduled in Paris in September, after the Coral Sea exercise, to draft criteria for future interdiction efforts.

"We're going to try to reach agreement in Paris on rules of the road," an administration official said.

Some officials involved in the project concede that in some cases, such as the shipment of weapons that were bought or sold legally, the initiative could be hampered by international laws barring the interdiction of ships on the high seas. After authorizing the stopping of the Yemen-bound Scud missiles in December, the United States found no legal basis for blocking the shipment.

But officials familiar with the Coral Sea exercise said this problem could be circumvented in part if a new round of sanctions are imposed on North Korea, and also Iran, because of their refusal to cooperate on the nuclear issue. The sanctions might be used to justify future interdictions, the officials said.

The interdictions could also be carried out because of suspicion of a violation, they said, and then the searches could be conducted for illicit materials. An analogy, an official said, would be stopping a car for speeding when the real reason for the stop was to search for drugs.

The administration speeded up its efforts against North Korea after October, when the North admitted to a top American envoy that it had secretly embarked on a program to produce highly enriched uranium for nuclear weapons, in violation of its 1994 agreement not to pursue such arms.

<http://www.nytimes.com/2003/08/18/international/18DIPL.html?hp>

[\(Return to Articles and Documents List\)](#)

Philadelphia Inquirer

August 18, 2003

Pg. 1

Munitions, Not Fears, Are Going Up In Smoke

Burning of chemical weapons is a worry in Alabama.

By Mario F. Cattabiani, Inquirer Staff Writer

ANNISTON, Ala. - Birds are not dropping from the skies. There are no chemical clouds hovering darkly. But Evelyn Ervin can't seem to shake those possibilities.

"It's scary. They say it's safe, but who really knows?" said Ervin, 78, as she sat on her home's porch swing, near the gates of the Anniston Army Depot. "Who knows what that stuff can do?"

That "stuff" includes sarin nerve agent, mustard gas, and other lethal chemicals packed into hundreds of thousands of rockets and artillery shells, part of the United States' Cold War arsenal.

After years of legal delays, the Army this month began the controversial process of incinerating the stockpiled munitions, which have been stored on this site in eastern Alabama for four decades. This will mark the first time in the nation's history that incineration alone has been used to destroy chemical weapons near a populated area, experts say.

On Saturday, Aug. 9, when it got under way, the process worked as planned. Over that weekend, the Army incinerated 10 M55s, 61/2-foot-long rockets made of fiberglass and aluminum and filled with sarin. But problems with the hydraulic and cooling systems forced the process to shut down on Monday and Tuesday. At no time were chemicals at risk of entering the atmosphere, said Mike Abrams, the depot's spokesman.

Burning has resumed. Still, the early problems have only handed more ammunition to foes of the process, who lost a last-ditch attempt in federal court to block the burning.

"It gives us even more cause for concern," said Craig Williams, executive director of the Kentucky-based Chemical Weapons Working Group. "They spent a billion dollars getting ready to go, and they operated for just 48 hours. It proves this technology is not what has been advertised."

Between 1961 and 1968, the Anniston site took in 661,529 weapons containing 2,253 tons of chemical agents. They were stored in concrete-reinforced, earth-covered bunkers in an 800-acre corner of the sprawling Army depot. Army officials insist that the incineration process is the most advanced and well-tested method of disposing of such a stockpile.

"Virtually fail-safe" is how Abrams described it.

"There are 750 of us working out there," he said, "and none of us are suicidal."

In the process, holes are punched into each weapon to drain its chemical contents. The weapon is then chopped into eight pieces and fed into a 1,100-degree furnace, which burns off any last chemical traces. The drained chemicals go into a holding tank, and they will be burned separately in a large batch, likely in late fall.

The Army has used the process before, but in more remote locations - on Johnston Atoll, a small island in the Pacific Ocean, and in the desert near Tooele, Utah.

The Army is testing another incinerator near Pine Bluff, Ark., and is expected to begin burning chemical weapons there late next year.

Opponents, however, want the government to use another method in Anniston, a process known as neutralization. In that method, water and other chemicals are used to dilute and deactivate the toxic substances. It is being used at the Aberdeen Proving Ground in Maryland.

In the 1970s, the military used a dual process of burning and neutralizing chemicals at a site eight miles from Denver.

Supporters of incineration, including Alabama Gov. Bob Riley, believe that the greater danger in Anniston would be doing nothing, allowing the aging weapons to leak or, worse, fall into the hands of terrorists.

"The safest thing is to destroy them as quickly as possible and get them out of the community," said Riley, who represented the region for six years in Congress before becoming governor in January.

Charles Steele, who runs the depot's community outreach office in downtown Anniston - a large storefront full of handouts, models and reams of studies showing the process to be safe - equated the weapons to a pit of rattlesnakes in a backyard.

"You may know they can never get out," he said, "but wouldn't you feel better if they weren't there?"

Bertha Pearce would. She lives just down the road from the depot's front gates.

"I trust they know what they are doing," she said. "I just want those things gone."

Critics, however, say that it is only a matter of time before their worst fears are realized.

"There is always going to be human error, and I'm scared to death about that," said Rufus Kinney, who lives in nearby Jacksonville, Ala., and is the spokesman for Families Concerned About Nerve Gas Incineration.

"The worst-case scenario? I fear they'll blow up West Anniston in the middle of the night."

Jeff Ridgeway lives less than a mile from the depot, making him one of the 35,000 people in the "Pink Zone," within the nine-mile radius where emergency management officials believe the danger to be the highest in case of an accident. He also works at the depot as a welder and has three school-age children.

"I think about it every morning I cross that gate," he said. "Are my kids going to be safe when I'm not close enough to get to them?"

About 65 people marched in Anniston on Saturday to protest the incinerator's start-up.

"No more burning, no more lies, better way - neutralize," the demonstrators chanted.

For now, the depot plans to take the process slowly, burning one weapon at a time. Abrams calls it a test drive designed to catch any glitches, such as the problems discovered with the hydraulic and cooling system last week.

By next year, the system should be able to destroy up to 40 weapons an hour, Abrams said. Eliminating all the weapons will take seven years.

As the burning began last week, local emergency management officials started handing out safety gear - protective hoods with attached air filters, plus plastic sheeting and tape to seal homes.

Like thousands of others in Anniston, which is 50 miles east of Birmingham, Ervin picked up the package just in case. But knowing it is in the next room provides little relief. Ervin wonders if the gear would work.

"But," she said, "you can't run away from the Lord when He says it's your time."

<http://www.philly.com/mld/inquirer/news/nation/6556863.htm>

[\(Return to Articles and Documents List\)](#)

USA Today

August 18, 2003

Pg. 3

Alabamians Fear Chemical Disaster

They live in shadow of Army WMD incinerator

By Larry Copeland, USA Today

ANNISTON, Ala. — Fear and distrust run deep here in "the pink zone."

These are the neighborhoods closest to the Anniston Army Depot, where the Army began burning obsolete but deadly chemical weapons this month. Toxins such as sarin and VX nerve gas — the very weapons of mass destruction that have been so much in the news lately — will be destroyed at the depot over the next seven years.

If an accident occurred that sent a toxic cloud into the air, the pink zone would be Ground Zero.

In an eerie preview of what life might be like in a future chemical attack by terrorists, people who live within 6 miles of the incinerator have been issued protective plastic hoods, portable air filters, duct tape and plastic and told to prepare a "safe room" in their homes.

Anniston is the first American city where citizens have been issued gas masks by the government. For months, people have been urged to learn how to use them. And they've been told that if a chemical leak occurs, don't flee; instead, "shelter in place" in their homes, schools or businesses.

Safe rooms are being created in schools, jails and hospitals in the pink zone. The government is spending \$55 million to retrofit buildings where the public gathers with refrigerator-size air-filtration systems, according to the Federal Emergency Management Agency. A total of \$140 million is being spent on Anniston's preparedness. But that brings little comfort in the pink zone. Randy Hayes, 51, senior pastor of Church on the Rock, says the preparations are "just to appease people, so there's not widespread panic."

Many take it as a given that there will be an accident at the incinerator, where the Army will destroy 4.5 million pounds of rockets containing sarin, VX and nerve agents. (These are among chemicals the U.S. government said were being produced by Saddam Hussein and could be used by terrorists.)

People here say they know what it's like to feel betrayed.

Like thousands of others, Hayes is a plaintiff in one of several class-action lawsuits against a former Monsanto chemical plant.

The lawsuits accuse the company of contaminating west Anniston for decades with polychlorinated biphenyls — or PCBs — which probably cause cancer. PCBs are also linked to low birth weight and learning disabilities. Monsanto had no connection to the Army's incinerator.

In the pink zone, families have been decimated.

Uncles and aunts die early from cancer. Babies are born with major organs outside their bodies. Children struggle with mysterious mood swings and the inability to learn.

It didn't help that two days after starting to burn the weapons, the Army said last Monday it was shutting down for a day because of mechanical problems. The incinerator shut down again Tuesday but was operating Wednesday.

'Absolute madness'

Rufus Kinney, a Jacksonville State University English teacher, was the lone protester outside the gates when the incinerator was fired up Aug. 9.

"The irony is that our government is looking for weapons of mass destruction in Iraq, and at the same time, they're not protecting us from our own weapons of mass destruction," he says. "This is absolute madness. I call it crazy in Alabama taken to a new level."

The Calhoun County Emergency Management Agency has distributed more than 17,000 gas masks, almost 12,000 portable air-filtration units and almost 14,000 shelter-in-place kits. The Army says it is highly unlikely that any of it will ever be needed.

Michael Abrams, an incinerator spokesman, says burning the chemicals is a safe method of disposal. Since 1990, he says, the Army has burned 16,214,000 pounds of chemical agents at two other facilities — Deseret Chemical Depot in Tooele, Utah and Johnston Atoll in the Pacific Ocean southwest of Hawaii.

Abrams acknowledges that those facilities are in remote locations: a sparsely populated area and the ocean. He says there were "only two or three" occurrences of any chemical agent escaping. Opponents argue incineration has never been used in a populated area. They say "neutralization," another means of chemical weapons destruction used elsewhere in the nation, is less risky. Decades ago, when the decision was made to destroy Anniston's chemical weapons, "there was not a neutralization technology that handled (sarin), VX, mustard, explosives and contaminated metal parts," Abrams says.

Chanting, "No more burning, no more lies, better way, neutralize," about 65 people marched Saturday to protest the incinerator's start-up. The Anniston facility contains about 7% of the nation's approximately 31,000 tons of stockpiled chemical weapons. Those arms are being destroyed to comply with an international treaty to neutralize the weapons by 2007. More than 660,000 chemical weapons are stored here in concrete bunkers known as "igloos." The Cold War relics were quietly brought here during the 1960s.

Some local political leaders support the Army's plan. Anniston Mayor Chip Howell and six other Calhoun County mayors pushed for the incineration to start. "I'm as comfortable as I can be," he says.

Worried about 'the plume'

In Anniston and the cities and towns nearby, people talk a lot about "the plume" — an accidentally released toxic cloud — and how fast it might move over their homes and schools. The mood hovers between paranoia and imminent panic, giving the city the pending doom feel of an old Twilight Zone episode.

Rumors and speculation are rampant. "People here feel hopeless," says the Rev. Nimrod Reynolds, senior pastor of 17th Street Missionary Baptist Church.

Brenda Lindell is concerned and she doesn't even live in the pink zone. Her home in east Anniston is in a nearby area where the residents were given air-filtration units and shelter-in-place kits.

Lindell, a founder of Families Concerned about Nerve Gas Incineration, fought the project for more than a decade. "You think that's going to keep me safe?" she says, poking through the box containing her kit. "I don't think so."

Contributing: Associated Press

<http://www.usatoday.com/usatoday/20030818/5415396s.htm>

[\(Return to Articles and Documents List\)](#)

London Sunday Telegraph
August 17, 2003

Meanwhile, Saddam's Secrets Rise From The Desert

New revelations from the man leading the WMD survey team show that Saddam gave the order to fire his deadly weapons. Con Coughlin assesses the meaning of this little-acknowledged breakthrough

Thousands of miles from the febrile atmosphere of Court 73 of the Royal Courts of Justice in London where Lord Hutton is conducting his inquiry into the death of Dr David Kelly, one of the British scientist's former colleagues was last week making yet another highly significant discovery in the hunt for Saddam Hussein's weapons of mass destruction arsenal.

Dr David Kay, the American weapons expert who heads the 1,400-strong Iraq Survey Team that is conducting an extensive search for Saddam's biological, chemical and nuclear programmes in Iraq, made the startling revelation that the Iraqi dictator had ordered his commanders to fire chemical shells at invading coalition troops during the recent conflict.

Dr Kay's discovery, which will be contained in a congressional report to be published in Washington next month, is just the latest of a number of telling breakthroughs that have been made in Iraq by the survey team but which, because of the furore that has gripped the British media over the Kelly case, have gone largely unreported.

And if Dr Kay's recent predictions about uncovering the secrets of Saddam's various weapons of mass destruction programmes prove to be correct, then the painstaking investigation currently being undertaken by Lord Hutton into whether the British Government exaggerated the threat posed by Saddam would be rendered irrelevant.

Certainly many of the discoveries now being made by the survey team would come as no surprise to Dr Kelly who, irrespective of the doubts he expressed about the Iraqis' ability to deploy chemical or biological weapons within 45 minutes of Saddam giving the order, was under no illusion about the wider threat posed by the Iraqi leader's clandestine programmes.

Indeed, the reason that Susan Watts, Newsnight's science editor, and other BBC reporters such as Andrew Gilligan were in contact with Dr Kelly in the first place was that, because of the work he had undertaken as a member of Dr Kay's United Nations weapons teams in Iraq in the 1990s, he was well-acquainted with all aspects of Saddam's weapons programmes.

As Miss Watts made clear in her evidence to Lord Hutton last week, Dr Kelly "thought very definitely that there were [Iraqi] weapons programmes and that if there were to be any evidence of this, it might well be a lengthy process to find that evidence and a process of putting together pieces of information, and that that process was really only beginning".

The fundamental purpose of the work now being carried out by Dr Kay's survey team in Iraq is to complete the process to which Dr Kelly was referring, namely to bring to a close the painstaking weapons inspection process that was launched following the 1991 Gulf war - in which Dr Kelly played an important role but which, because of Saddam's various attempts to obstruct the process, was never completed.

Despite having to work in onerous conditions, Dr Kay and his inspection teams remain confident that they will be able to provide convincing evidence of Saddam's illegal weapons programmes.

When asked during a recent interview with the American NBC television network whether he would find evidence on Saddam's biological, nuclear and chemical weapons programmes, Dr Kay replied: "I think we will have a very strong case on all of those. I think we'll have a strong case on missiles as well."

That was undoubtedly Dr Kay's view when I spent time with him in Baghdad in the spring and he helped to corroborate documents discovered by The Telegraph that indicated Saddam was attempting to develop a ballistic missile with a range of 600 miles.

Since then Dr Kay has been recruited by America's Central Intelligence Agency to head the survey team. Apart from interviewing scores of Iraqi scientists who were involved in Saddam's various weapons projects, Dr Kay has seized a number of top-secret documents that reveal in extraordinary detail the lengths to which Saddam's officials went to conceal the various weapons programmes.

Dr Kay has also been assisted by the fact that Ba'ath party officials were meticulous in keeping records on every aspect of their work, from the deals they did with foreign governments to the frequent progress reports they delivered to Saddam.

Consequently he is more confident than ever that the survey team will eventually be able to provide a definitive account of Iraq's various weapons programmes. "I'm certain that we're going to find the truth," he said. "We want to understand the programme from the beginning to its end, to how it was proceeding at every step, to who was involved."

Dr Kay's discovery that Saddam actually issued the order to his commanders to use chemical weapons against coalition forces might also help to shed light on another crucial aspect: the involvement of British intelligence as the conflict in Iraq developed.

One of the great success stories of Operation Iraqi Freedom is that Saddam's commanders declined to implement Saddam's order because, prior to the war, many had been successfully persuaded by British intelligence not to fight. No mention of this brilliant intelligence coup, of course, will be made at the Hutton inquiry because it is not deemed relevant to the more parochial issue of whether or not Saddam's forces could deploy weapons of mass destruction within 45 minutes.

Con Coughlin is the author of Saddam: The Secret Life.

<http://www.telegraph.co.uk/news/main.jhtml?xml=%2Fnews%2F2003%2F08%2F17%2Fnkell117.xml&secureRefresh=true&requestid=128491>

[\(Return to Articles and Documents List\)](#)

Washington Times

August 18, 2003

Pg. 10

Agency Sees Many Obstacles

Chemical weapons organization faces financial trouble, U.S. pressure

By Charles J. Hanley, Associated Press

THE HAGUE — When they head out around the world with their cases of high-tech gear, their chemical suits, their global authority, the men and women from The Hague represent an agency viewed as a model for 21st century disarmament. But it's a flawed model whose problems run deep.

The young agency, the Organization for the Prohibition of Chemical Weapons, enforces the 1997 treaty banning a tool of war that horrified the world in the last century. The birth of the OPCW spelled progress at a time when arms control was making little progress elsewhere.

But OPCW finances are weak. Its inspectors are checking less than 1 percent of potentially suspect chemical plants. The treaty timetable for Russia and America to destroy huge stocks of mustard gas, sarin and other deadly agents is slipping further into the future year by year.

Even the U.N. experts' ability to pull surprise inspections is stalemated, by order of the U.S. Senate. And the gear they tote is also compromised: The spectrometers — chemical detectors — are "blinded," intentionally limited in what they can detect.

The organization's former director general, Jose M. Bustani of Brazil, complained it was hobbled by "political agendas" and "unilateralism," mainly from Washington. The Bush administration accused him of mismanagement and engineered his ouster last year.

Just last month, a U.N. tribunal ruled that he was wrongfully dismissed on "extremely vague" charges, and awarded him \$57,000 in compensation.

The U.S. undersecretary of state responsible maintains the move was necessary. "We were able to get good management installed at the OPCW and the organization is now proceeding ahead with its mission," John R. Bolton said in an interview in Washington.

A year into his tenure, new OPCW chief Rogelio Pfirter of Argentina calls his agency "a good example of functionality." But Mr. Pfirter acknowledges fundamental weaknesses, too, the same as confronted Mr. Bustani.

Another Bush administration official, speaking on the condition of anonymity because of his sensitive position, called OPCW's financial straits "a ticking time bomb" that might "possibly break this organization."

The Chemical Weapons Convention was the first treaty in history requiring elimination of an entire class of weapons under a timetable and under oversight of international inspectors. The vast majority of nations — 153 — are treaty members, but significant gaps exist, especially in the Middle East, where Israel, Egypt and other Arab states have failed to ratify it.

From their headquarters, a striking, drum-shaped building in this staid European capital, OPCW specialists armed with long lists of controlled compounds keep watch on a world of complex chemicals that destroy skin on contact, blind or choke, paralyze and kill, substances that nations packed into artillery shells, bombs, rockets and land mines for generations.

More than 200 chemists and other inspectors, of an OPCW staff of 500, crisscross the globe checking on weapon storage sites and chemical plants to verify that munitions are being destroyed and industrial products are not being diverted. A typical "dual-use" product is thiodiglycol, a chemical usable in felt-tip pen ink or to make mustard, a gas that burns skin, lungs and eyes.

The treaty set a deadline of 2007 for the United States, Russia, India and South Korea — declared possessors — to destroy chemical weapons.

At nine locations stretching from Johnston Atoll in the Pacific to Edgewood, Md., the U.S. Army held 31,280 tons of mustard and the nerve agents sarin and VX. The Army has incinerated or chemically neutralized about one-quarter of the stockpile, in a \$24 billion program slowed by local disputes over safety and other delays.

Washington may have to ask the OPCW for a deadline extension. But Moscow has encountered much worse problems, eliminating only 1 percent of its stockpile thus far, and has requested a five-year extension to 2012. For one thing, the U.S. Congress, demanding a better accounting of Moscow's program, froze hundreds of millions of aid dollars meant for a giant neutralization plant in southern Russia.

Overseeing destruction takes up 80 percent of the inspectors' time, and Washington and Moscow are far in arrears reimbursing those costs. On top of that, one-third of the 2003 member assessments due last Jan. 1 are still outstanding, deepening the hole in a budget already considered paltry — \$77 million this year — by arms-control specialists.

"It's impossible to do the trick with that budget," Mr. Bustani, now Brazil's ambassador to Britain, said in an interview.

New director Pfirter, like Mr. Bustani a career diplomat, pointed out a worsening problem of balance: An upcoming "bulge" in U.S. and Russian destruction activity will put still more stress on his inspectors, leaving the more than 5,000 declared industrial chemical plants worldwide almost untouched.

"We're still inspecting too little," Mr. Pfirter said. "We're not even at 1 percent at the moment." Inspectors worry especially about small, versatile chemical plants in developing nations that could be quickly converted to military production.

Aggressive inspection would meet resistance. India and Pakistan, for example, object to talk of inspecting plants other than those making the most dangerous substances.

Other fundamental defects were built in at the OPCW's birth.

The U.S. Senate, in ratifying the treaty, decreed that the president could reject an OPCW "challenge," or surprise, inspection on U.S. soil. That defied treaty language and put a chill on any attempt by governments to demand such inspections anywhere. The legislation also claimed to exempt U.S. chemicals from testing in foreign laboratories, an option inspectors consider crucial for independent analysis.

"These exemptions deprive the inspectors of their two strongest tools. They're treaty-killing provisions," said arms-control scholar Amy Smithson at the Henry L. Stimson Center in Washington.

A third tool was "blinded." Not wanting to give inspectors free run of chemical industries, to identify any compound they found, governments insisted their spectrometer software indicate only whether a sample matches one on a limited database of the most dangerous chemicals. Thousands of other harmful, often novel compounds are not detected.

"That really limited on-site analysis," said a former OPCW verification chief, Ron G. Manley of Britain.

In Washington, Undersecretary Bolton said the OPCW's long-term effectiveness "remains to be seen." Of the Senate "exemptions," he said: "I don't think they're an obstacle. Nobody worries about them. I haven't heard it raised."

One who worries is Patricia Lewis, director of the U.N. Institute for Disarmament Research in Geneva. "I don't think they [the United States] want to give any credibility to multilateral institutions that do the inspections," she said in an interview.

<http://www.washtimes.com/world/20030817-105444-5187r.htm>

[\(Return to Articles and Documents List\)](#)

(Editor's Note: Abstract of referenced study follows article.)

Washington Post

August 18, 2003

Pg. 2

Smallpox Vaccine's Protection May Last Decades

People Inoculated More Than 30 Years Ago May Still Have Immunity to Fatal Virus, Study Finds

By David Brown, Washington Post Staff Writer

Many of the 120 million Americans who were vaccinated against smallpox more than 30 years ago may still have enough immunity against the disease to protect them from fatal infection, should the virus ever be used as a biological weapon.

That is the conclusion of a study, published yesterday, that examined the immune systems of more than 100 people immunized against smallpox before 1972, when that vaccination ceased being routine for U.S. children.

The findings suggest the United States may be less vulnerable than previously believed to the worst-case bioterrorism scenario -- intentional release of the smallpox virus. However, they are not likely to change the federal government's current effort to vaccinate about 400,000 people who would be most likely to have initial contact with victims of a smallpox attack.

"This puts us ahead of the curve. Instead of having a population that is fully susceptible to a smallpox outbreak, this suggests we have some degree of 'herd immunity,'" said Mark K. Slifka, an immunologist at Oregon Health & Science University, who led the study published online by the journal *Nature Medicine*.

The most virulent strains of smallpox cause about 35 percent mortality among unvaccinated people. The last case of smallpox occurred in 1978, and the disease is now eradicated. The virus causing it is known to exist only in several high-security laboratory freezers in the United States and Russia.

Anthony S. Fauci, director of the National Institute of Allergy and Infectious Diseases and one of the Bush administration's main advisers on bioterrorism preparedness, said the findings don't change his views. "I don't think this study impacts on what optimal protection is," he said. "If you want to optimally protect, a person needs to be vaccinated within a relatively recent time frame.

"What they do answer is the question: Is there immunity that lingers over many years? Clearly, there is laboratory immunity that persists," he said.

How effective that immunity would be in practical terms can't be quantified precisely in this era when nobody's immune system encounters the virus. Furthermore, it is impossible to say which of many measurements of the body's immune response best predicts resistance to either getting the disease, or at least not dying from it. That's because many of those measurements -- including some used in the new study -- were invented after smallpox was eradicated.

In the new study, Slifka, Erika Hammarlund and other collaborators in Oregon measured two forms of immunity -- the production of virus-fighting proteins called antibodies, and the production of cells that kill other cells that have been infected.

In both cases, immunity was measured against vaccinia virus, a close relative of smallpox virus. Smallpox vaccination involves intentionally infecting a person with vaccinia, which stimulates an immune response that protects against smallpox.

When the researchers tested blood from volunteers, they found little difference in the antibody levels between those vaccinated as recently as a year ago, those vaccinated 30 years ago and even a few people vaccinated 75 years ago. This arm of the immune system's response to vaccinia was unexpectedly persistent, they said.

However, cellular immunity -- the other arm -- declined substantially over time. Among people who got a single vaccination 31 to 50 years ago, about 90 percent had measurable CD4 lymphocytes ("helper" cells), but only about 50 percent had measurable CD8 lymphocytes ("killer" cells). For those vaccinated 51 to 75 years ago, only about 50 percent had measurable amounts of both cells.

Immunity against smallpox almost certainly requires some activity by both the antibody and cellular arms of the immune system, but no one knows what the minimum effective level is. Slifka said he believes that the antibody component may be especially important.

A study published in 1972 looked at the experiences of 680 people who contracted smallpox in outbreaks in which the disease was carried into European countries or Canada long after the virus had ceased circulating there naturally. Among people who had been vaccinated more than 20 years earlier, the fatality rate was 11 percent, compared with 52 percent for people who had never been vaccinated.

A study of people who contracted the disease during an outbreak in Liverpool in 1902 showed even greater protection from long-ago vaccination. Among the people older than 50 who had been vaccinated only in childhood, only about 6 percent died, compared with 50 percent of those of the same age who had never been vaccinated.

Because antibodies are the most likely immune component to persist that long after vaccination, they "may play a larger role than previously believed," Slifka said.

The Oregon researchers, however, found no relationship between antibody levels and a person's cellular immune response. That fact, along with the observation that neither clearly is a marker for effective protection, suggests that "we must try to measure both in any studies of newer or improved vaccines" under development, said J. Michael Lane, who ran the Centers for Disease Control and Prevention's part of the global smallpox eradication campaign. Some experts are not reassured by the new study.

D.A. Henderson, the physician who directed the eradication program for the World Health Organization, said an unnaturally heavy dose of smallpox virus, as might occur in a bioterrorism attack, could overwhelm whatever immunity may remain from a decades-old vaccination. In addition, the method used to administer the vaccine to Americans years ago resulted in a larger percentage of failed inoculations than the modern method, he said.

"I'm weighted rather more toward believing that we have less in the way of protection than might be assumed based on the number of people vaccinated," Henderson said. He advises the Bush administration on bioterrorism preparedness and is on the faculty of Johns Hopkins University.

Earlier this year, the federal government asked state governments to set up and immunize smallpox "response teams," consisting primarily of epidemiologists who would be available to investigate possible smallpox outbreaks. It also asked hospitals to immunize key health care workers, mostly people in emergency rooms who would have first contact with smallpox victims.

The states estimated that about 420,000 people might need to receive smallpox vaccination in order to fill these two functions. To date, however, fewer than 40,000 people have been vaccinated, largely because of fears about side effects and complications. (About 500,000 members of the military have also been vaccinated.) Some hospitals have stopped trying to recruit new volunteers for vaccination.

<http://www.washingtonpost.com/wp-dyn/articles/A7037-2003Aug17.html>

[\(Return to Articles and Documents List\)](#)

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Duration of antiviral immunity after smallpox vaccination

Erika Hammarlund¹, Matthew W Lewis¹, Scott G Hansen¹, Lisa I Strelow¹, Jay A Nelson¹, Gary J Sexton², Jon M Hanifin³ & Mark K Slifka¹

Although naturally occurring smallpox was eliminated through the efforts of the World Health Organization Global Eradication Program, it remains possible that smallpox could be intentionally released. Here we examine the magnitude and duration of antiviral immunity induced by one or more smallpox vaccinations. We found that more than 90% of volunteers vaccinated 25–75 years ago still maintain substantial humoral or cellular immunity (or both) against vaccinia, the virus used to vaccinate against smallpox. Antiviral antibody responses remained stable between 1–75 years after vaccination, whereas antiviral T-cell responses declined slowly, with a half-life of 8–15 years. If these levels of immunity are considered to be at least partially protective, then the morbidity and mortality associated with an intentional smallpox outbreak would be substantially reduced because of pre-existing immunity in a large number of previously vaccinated individuals.

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<http://www.nature.com/cgi-taf/DynaPage.taf?file=/nm/journal/vaop/ncurrent/abs/nm917.html>

[\(Return to Articles and Documents List\)](#)

Miami Herald
August 18, 2003

Russia's Denials About Biological Arms May Halt Funding

Congress questions \$1 billion for weapons-reduction plan

By Mark McDonald, Knight Ridder News Service

MOSCOW - Russia's refusal to allow U.S. inspectors into its biological weapons sites is threatening the funding for the continued destruction of the huge Russian arsenal of chemical weapons, according to Sen. Richard Lugar, chairman of the Senate Foreign Relations Committee.

Moscow's evasiveness and denials about its biological programs have led some members of Congress to question \$1 billion in new funding for a decade-long effort known as the Cooperative Threat Reduction Program.

The program has spent \$6.4 billion since 1992 to help Russia safeguard and dismantle its weapons of mass destruction, everything from rusting nuclear submarines and poorly guarded warheads to deadly vials of anthrax and smallpox. In a recent interview, Lugar, R-Ind., said the elimination of Russia's remaining chemical stockpile was "a monumental task . . . which Russia cannot afford."

"Russia's denials with regard to the biological situation offer an avenue where opponents of spending money can say, 'See, we still really don't know,'" Lugar said. "Some members of Congress say, 'Is Russia complying, literally, to the dotted line, with all the arms-control treaties?'"

"But it's not useful to set up conditions in which there has to be 100 percent compliance before we do anything."

Lugar said he met recently with President Bush and Secretary of Defense Donald Rumsfeld to seek a presidential waiver that would snip off the strings that some in Congress want to attach to the program's funds in the new U.S. budget. He said Friday he was optimistic that Bush would grant the waiver.

The weapons-elimination program is informally known as Nunn-Lugar after its original cosponsors -- former Sen. Sam Nunn of Georgia and Lugar.

Lugar has been in Russia in recent days to meet with senior military leaders. He also was due to witness the destruction of several Soviet-era intercontinental ballistic missiles at a military facility in the city of Perm. Since 1992, the Nunn-Lugar program has overseen the destruction of 440 tons of chemical weapons in Russia -- about 1 percent of Russia's total. More than 43,000 tons of nerve gas and blister agent remain in seven arsenals across the country. Amy Smithson, a biological and chemical weapons expert, has called these sites "the toxic archipelago."

Most experts say the archipelago remains poorly guarded. Sen. Bob Graham, D-Fla., was alarmed at the lack of security when he visited a Russian site last year. In one laboratory, he said, the door to a refrigerator containing various animal poxes was secured only by a piece of string.

Lugar said some biological- and chemical-weapon facilities have been converted to civilian uses since the collapse of the Soviet Union in 1991.

The General Accounting Office reported to Congress in March, however, that 65 percent of Russia's nerve-agent stockpile is "unsecured" and that "a large quantity of chemical weapons in Russia will remain vulnerable to theft or diversion and pose a potential threat to U.S. national security interests."

The GAO estimates "it could be another 40 years before Russia's stockpile would be completely destroyed."

<http://www.miami.com/mld/miamiherald/news/world/6557252.htm>

[\(Return to Articles and Documents List\)](#)

New York Times
August 19, 2003

China Mustard Gas Crisis

By Reuters

BEIJING, Aug. 18 — Leaking barrels of Japanese chemical weapons from World War II that poisoned dozens of people in China have been neutralized and are no longer a threat, the official New China News Agency said today. Forty-three people had been sent to the hospital since five barrels of mustard gas were unearthed at a construction site in the northeastern city of Qiqihar on Aug. 4, it said.

The agency quoted the top Communist Party official in Qiqihar as saying that the chemical weapons had been "disinfected thoroughly."

Last week, Japan apologized, and the government pledged to dispose of the arms as soon as possible. Japanese doctors who came to China to help treat the ill went back to Japan today, the news agency said.

<http://www.nytimes.com/2003/08/19/international/asia/19JAPA.html>

[\(Return to Articles and Documents List\)](#)

Huntsville (AL) Times
August 19, 2003

Missiles Greater Threat Than Ever, Experts Say

Defense conference held at the VBC looks at weapons

By Shelby G. Spires, Times Aerospace Writer

Low-cost technology, terrorism and increasing anti-American sentiment around the globe will lead to more capable ballistic missiles - a threat to U.S. troops and other nations, defense experts said today at the Sixth Annual Space and Missile Defense Conference and Exhibition held at the Von Braun Center.

More than 2,000 defense experts from around the world are gathered in Huntsville this week to discuss the proliferation of advanced missiles and missile defense weapons. The conference is set to wrap-up Thursday afternoon.

Experts predict that over the next five years, the United States and its allies will face a growing threat because of cruise missiles, improved ballistic missiles and the spread of nuclear, chemical and biological weapons.

"Technology is progressing very fast. The bad guys out there get this also, and they are using it," said Lt. Gen.

Joseph M. Cosumano Jr., commanding general of Army Space and Missile Defense Command, during the opening of the conference this morning.

Cosumano said the recent war in Iraq was the first time the United States faced an enemy that tried to jam American satellites used by the military to guide bombs.

"We dealt with the threat using (Global Positioning Satellite) guided bombs, but the lightbulb came on" for the enemy, Cosumano said.

The threat is not just from one area or a few nations in the world, experts said. It ranges across the globe, mostly in the Middle East, but nations in South America and Asia are also developing missile technology that could threaten the United States.

Experts predict that the threat will come mostly from the Middle East, said Ken Knight, a senior official with the Defense Intelligence Agency.

"There is a generation of young men in the Middle East coming of age now," Knight said, "that are frustrated by their prospects and are not open to objective view points ... and are blaming the United States.

"They are frustrated and have access to technologies that allow them to take out half a city, not just blow up a room."

American intelligence agencies estimate there are at least 25 nations, and 12 terrorist-type organizations, that are developing ballistic missiles that could be used to threaten the United States, its military and other nations around the world, said Clyde Walker, director of the Missile and Space Intelligence Center on Redstone Arsenal.

Nations such as China, Iran, North Korea, Syria and Libya either have robust missile programs or are purchasing ballistic missile technology from other nations. North Korea is the chief provider of this technology, Walker said.

Many of the threatening nations are updating older missiles, like the Russian-designed Scud, or reconfiguring different missile systems. Of particular concern, Walker said, are efforts by Iran to turn the Russian designed SA-2 surface-to-air missile system from a weapon that shoots down aircraft to a ground attack weapon.

During the Cold War, the then-Soviet Union sold the SA-2 surface-to-air missile to many client states, particularly North Vietnam and later Iran and Iraq. It is widely used throughout the world.

"Before Operation Iraqi Freedom, Iraq was developing the SA-2 as a ballistic missile," Walker said. "That, of course, has stopped now, since the end" of the Iraq war.

Walker said the Iraqi military had also developed newer ballistic missiles since the end of the 1991 Gulf War.

During the recent war in Iraq, several ballistic missiles were fired at U.S. troops, Walker said. "Five Al Samoud-2 missiles were intercepted by Patriots," Walker said. "We are bringing those (missiles) back now in country for study."

The Missile and Space Intelligence Center is in charge of collecting data on enemy missiles that can be used to improve and develop weapons like the Patriot, which is designed to intercept enemy missiles and aircraft.

In the future, American forces will face more than Scud-like ballistic missiles, said Knight, chief of the DIA's Defense Warning Office.

Cruise missiles, which are computer-guided unmanned aerial vehicles, are cheaper to produce than large ballistic missiles. Basically a small jet aircraft, the cruise missile can use computer and satellite guided navigation for precise attacks.

Knight predicted cruise missiles that carry a range of warheads would threaten Americans troops in the future.

Nations that are pursuing cruise missile technology are China, Iran, Syria and Libya, Knight said.

The Defense Intelligence Agency estimates that by 2020, China will have about 100 cruise missiles, while Iran, Syria and Libya will have stockpiles that number greater than 10 cruise missiles.

<http://www.al.com/search/index.ssf?/base/news/1061315244263740.xml?huntsvilletimes?nlocal>

[\(Return to Articles and Documents List\)](#)

Pacific Stars and Stripes

August 20, 2003

Exercises Off Australia Aimed At Halting WMD Trafficking

By Sandra Jontz, Stars and Stripes

ARLINGTON, Va. — The U.S. Navy is holding two separate training exercises this fall off the Australian Coast in efforts to rid the seas of weapons of mass destruction, Pentagon officials said.

In one exercise, called Proliferation Security Initiative, 10 nations will join the United States to train for interdictions of ships believed to be carrying weapons of mass destruction, a Pentagon spokesman said.

"PSI interdiction training exercises are planned for several regions around the world where the highest volume of WMD-related trafficking takes place," said Cmdr. Randy Sandoz. "This includes the Pacific Ocean, Mediterranean Sea and the Arabian Sea," with the first of the exercises taking place in the Coral Sea, off Australia's northeast coast.

The PSI training will follow another exercise involving just U.S. and Australian naval forces, dubbed “Crocodile 03.”

While officials here have not named any nations that would be targeted by such raids, North Korea is thought high on the list.

On Dec. 9, Spain’s navy, working with U.S. authorities, intercepted a North Korean ship carrying missiles to Yemen.

The planned exercises come shortly after the scheduled Aug. 27 meeting in Beijing in which leaders from North Korea will meet with officials from the United States, South Korea, China, Japan and Russia to discuss the increasing tension over North Korea’s renewed nuclear program and U.S. threats to block shipping.

“When it comes to North Korea, they are probably the most serious proliferator of missiles and related technologies,” White House spokesman Scott McClellan said Monday in a briefing in Crawford, Texas.

“And so ... those are exercises that we said would be carried out in partnership with other nations to prepare, to make sure that we are better prepared to interdict operations that involve proliferation.”

But hosting the exercises in the Pacific first is “just logistical,” Sandoz said.

“These are two completely different evolutions,” Sandoz added. “Australia and PSI partners are taking advantage of the fact that Australia and the United States will have assets available in the area once their naval exercise ends; therefore, the PSI exercise has been planned for mid-September just as ‘Crocodile’ ends.”

The PSI partners are Australia, France, Germany, Italy, Japan, the Netherlands, Poland, Portugal, Spain, United Kingdom and the United States. President Bush announced the program in May.

“Although the scenario for the upcoming [PSI] exercise hosted by Australia is still being fine-tuned, it is foreseen as a compliant boarding of a merchant vessel suspected of carrying WMD-related items and will not, as [a Monday New York Times] article claimed, be a ‘nonpermissive boarding of ships suspected of carrying drugs, missile components, nuclear materials and other items that the United States says are being imported or sold by North Korea,’” Sandoz said.

--*The Associated Press contributed to this report.*

<http://www.estripes.com/article.asp?section=104&article=17110>

[\(Return to Articles and Documents List\)](#)