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New York Times
November 8, 2002
Pg. 1

President Warns Hussein To Heed A Call To Disarm

By David E. Sanger with Julia Preston

WASHINGTON, Nov. 7 — With the Security Council moving toward approving a resolution on Friday to force Saddam Hussein to disarm, President Bush warned today that if Mr. Hussein failed to comply, Washington and its allies would "move swiftly with force to do the job."

In a news conference, Mr. Bush also issued his most explicit warning yet to the generals serving Mr. Hussein, saying they would be "held to account" if they responded to any attack by endangering lives in Iraq or in neighboring countries. Without saying so precisely, he was clearly warning them against executing any orders from Mr. Hussein to release chemical or biological weapons or to take aim at Israel if Iraq were attacked.

Mr. Bush said he was "optimistic" that the United States would get broad support on the resolution.

France said it would vote in favor of the resolution after Mr. Bush spoke by telephone with President Jacques Chirac. The conversation resolved the sparring between Paris and Washington over whether the resolution would allow Mr. Bush to order an attack on Iraq without returning to the United Nations for specific authorization.

But differences with President Vladimir V. Putin of Russia remained, even after Mr. Bush spoke with him today.

Mr. Bush, in his first public appearance since the Republicans gained control of Congress on Tuesday, also said that his top domestic priority was security, and that he wanted Congress to establish a new cabinet-level Department of Homeland Security by the end of the year. [Article and text, Page A24.]

While Mr. Bush said several times that he hoped war could be avoided, he expressed considerable skepticism that Mr. Hussein would comply with the inspection and disarmament process laid out in the resolution, which took final shape tonight in the Security Council.

Whatever the diplomatic niceties, Mr. Bush made it clear that he regarded the resolution to be all the authority he needed to act against Iraq should Mr. Hussein balk. Though Washington would consult other members of the Security Council, it would not feel it necessary to win their approval.

To drive home his determination, Mr. Bush described at some length his fears of what President Hussein might do if left unchecked.

"If we don't do something, he might attack us," Mr. Bush said. "And he might attack us with a more serious weapon." He added that Mr. Hussein might also provide such a weapon to what he called "an Al Qaeda-like network" that could detonate it in the United States and "leave not one fingerprint."

With a successful election now behind him and a victory in the United Nations within reach, Mr. Bush used his news conference to drive home his point that Mr. Hussein had little hope of evading the disarmament that he agreed to at the end of the Persian Gulf war in 1991.

In the opening moments of the news conference, Mr. Bush cast the confrontation as one that pitted "the civilized world" against a murderous tyrant.

He acknowledged that the confrontation itself could lead the Iraqi president to lash out in ways he has never before dared, but said that was the lesser risk.

His voice tinged with a bit of sarcasm, he allowed that "some people aren't going to like" the forced disarmament of Iraq, but noted drily that "some people won't like it if he ends up with a nuclear weapon and uses it."

Picking up on the challenge to the United Nations that he repeated so often on the campaign trail, Mr. Bush referred to the 16 past United Nations resolutions on Iraq, which he contends Mr. Hussein has ignored.

"This would be the 17th time that we expect Saddam to disarm," he said. "This time we mean it." A moment later, he added, "This time it's for real."

In a comment that seemed aimed at the United Nations — and perhaps also reflected on the record of two predecessors, Bill Clinton and his own father — Mr. Bush said, "And I say it must not have been for real the last 16 times, because nothing happened when he didn't."

At the United Nations today, the vote was formally scheduled for 10 a.m. Friday.

After Paris tenaciously resisted Washington during eight weeks of arduous negotiations, Ambassador Jean-David Levitte said his country's last doubts had been eliminated by small revisions made this afternoon. "It is ready for us," a French diplomat said. "We got what we wanted."

Asked if France intended to vote in favor, the diplomat said, with a smile and a sigh of relief, "Yes!"

The United States representative, John D. Negroponte, and Sir Jeremy Greenstock, of Britain, said they decided to schedule the vote after momentum built today in favor of the measure.

China, a permanent member of the Council that has remained in the background throughout the talks, came forward today to suggest that it, too, would vote in favor.

"If we can compare the differences of all sides to clouds, I can say that the clouds are getting thinner and thinner," said Zhang Yishan, the deputy representative from China, which holds the Council presidency this month. "The sunlight of unity is about to come."

The shift came after the United States and Britain, which is also sponsoring the resolution, changed two small words that made a world of difference to France. France took the lead in the talks, representing the views of China, Mexico and other nations that feared the United States would use the resolution to launch war immediately to topple Mr. Hussein.

In a hasty drafting session this afternoon, American and British diplomats simply changed the word "or" in one passage to "and," and substituted the word "secure" in a phrase that previously said the Council could act to "restore" international peace and security.

France had insisted on two stages of Council deliberations, including a commitment by President Bush to wait for United Nations weapons inspectors to submit a report, and to allow the report to be weighed by the Council, before he would send its troops into war in Iraq.

"There is now no route through this resolution that circumvents the weapons inspections," a British diplomat said. "There will be input from the inspectors — that's clear."

American and British diplomats stressed, however, that they did not feel that their hands are tied by resolution in the event the Security Council does not deem a violation by Iraq serious enough to bring on a military attack.

Among the envoys from the five permanent, veto-bearing nations, only the Russian ambassador, Sergey Lavrov, remained distant.

Mr. Lavrov said only that he had heard the explanations from American and British diplomats, that neither nation "interprets the language as containing automatic use of force," and would report this to Moscow.

Among the 10 other Council members, only Syria voiced any objections. The Syrian representative, Fayssal Mekdad, objected to the absence of any reference to the possibility of lifting economic sanctions against Iraq if it complied fully with the weapons inspections. He said it would be "very, very difficult, if not impossible" for Syria to take part in the vote.

But these remarks led Council members to assume that even Syria, the only Arab nation on the Council, would not vote against the resolution.

Mr. Bush, appearing more relaxed than he has in weeks, was conciliatory on every subject other than Iraq. He dismissed suggestions that North Korea — which is believed to possess two or more nuclear weapons and says it is developing more — poses a more urgent threat to the United States than does Iraq.

"We're taking a different strategy" on North Korea than on Iraq, he said, before adding a telling word: "initially." That left hanging the possibility that a more muscular confrontation with North Korea could be in the offing once Mr. Bush had dealt with Iraq.

In fact, Mr. Bush seems to be having more success getting the world together on a strategy for disarming Iraq than on a strategy for disarming North Korea, which told American officials a month ago that it is enriching uranium, a hard-to-detect technology to develop nuclear warheads.

Mr. Bush talked today of forging a common approach with Japan, South Korea and China. But South Korean officials are clearly not in agreement with the Bush strategy of economically isolating North Korea, and Mr. Bush himself steered clear today of discussing the question of whether the United States would halt its shipments of oil to the North.

His reluctance to discuss North Korea's nuclear program stood in stark contrast to his eagerness to describe his fears about what would happen if Mr. Hussein ever got such a weapon.

"We don't know how close he is to a nuclear weapon right now," Mr. Bush said of Mr. Hussein. "We know he wants one.

"Imagine Saddam Hussein with a nuclear weapon," Mr. Bush continued. "Imagine how the Israeli citizens would feel. Imagine how the citizen in Saudi Arabia would feel. Imagine how the world would change, how he could alter diplomacy by the very presence of a nuclear weapon."

Tonight Mr. Bush invited several prominent Muslims to an iftar dinner, to break the daily Ramadan fast, and used it to argue that there is no reason to fear a war against Islam.

"Our nation is waging a war on a radical network of terrorists, not on a religion and not on a civilization," he said. "If we wage this war to defend our principles, we must live up to those principles, ourselves. And one of the deepest commitments of America is tolerance."

http://www.nytimes.com/2002/11/08/international/08PREX.html

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Washington Times
November 8, 2002
Pg. 1

U.S. Says Baghdad Is Hiding Anthrax

By Bill Gertz, The Washington Times

U.S. intelligence agencies have told U.N. weapons inspectors that Iraq has hidden 7,000 liters of anthrax, but chief inspector Hans Blix never reported the information to the U.N. Security Council, The Washington Times has learned.

The failure to inform the council has raised questions about whether Mr. Blix will report accurately on anticipated Iraqi obstruction of weapons inspections, which could begin again later this month, said administration officials who spoke on the condition of anonymity.

The recent intelligence assessment of the anthrax — about 1,800 gallons — is based on sensitive information, including data provided by Iraqi defectors and other U.S. intelligence-gathering means, the officials said.

U.S. intelligence officials said the anthrax stockpile is believed to be part of the 8,500 liters of anthrax that Iraq's government, after initial denials, admitted in 1995 to producing but told U.N. inspectors that it destroyed.

The intelligence was reported to the United Nations Monitoring, Verification and Inspection Commission, known as Unmovic, within the past several months. However, Mr. Blix, the executive chairman of Unmovic, has not reported the information to the members of the Security Council, the officials said.

Ewen Buchanan, a spokesman for Mr. Blix, would not address the issue of reporting the intelligence directly.

"Anthrax production in Iraq is clearly an open question," Mr. Buchanan said. "We don't know how much they've produced and whether they've destroyed all that they claimed."

Mr. Buchanan said previous assessments by the U.N. Special Commission said the Iraqis could have produced three times the 8,500 liters they admitted to having made.

"This is just the sort of question we would pursue," Mr. Buchanan said of the Iraqi anthrax cache.

Mr. Blix could not be reached for comment, but he said in a recent television interview that although he respects U.S. and British intelligence agency reports on Iraq's weapons, Unmovic cannot report the intelligence to the Security Council because spy agencies will not disclose their sources.

Mr. Blix said in an interview with talk-show host Charlie Rose that "the problem is that they will not give you evidence."

"They will say, 'We are convinced for various reasons that they have one thing or another,' but they will not say where it is," he said on the Oct. 31 broadcast.

"They will say that, 'Well, we have to protect our sources, so we will not give you evidence,'" he said. "And if some people ask me am I sure that they have weapons of mass destruction, I say, 'If I had that, I would take it to the Security Council straight away.'"

U.S. intelligence agencies also reported unusual activity at a suspected biological-weapons facility in Iraq, the officials said.

A CIA report made public last month stated that "Iraq admitted producing thousands of liters of the [biological-warfare] agents anthrax, botulinum toxin and aflatoxin" and had prepared missile warheads and bombs to deliver the weapons.

"Baghdad did not provide persuasive evidence to support its claims that it unilaterally destroyed its [biological-warfare] agents and munitions," the report said.

U.N. weapons inspectors said Baghdad's production figures for biological-warfare agents "vastly understated" its actual production and that it could have made two to four times the amount it said it produced, the report said.

The report said that about 8,000 anthrax spores, or less than one-millionth of a gram, is enough to cause a person to become infected and that inhaled anthrax is "100 percent fatal within five to seven days, although in recent cases, aggressive medical treatment has reduced the fatality rate."

The disclosure that Unmovic has not reported the intelligence to the Security Council follows the recent approval by the United Nations of Iraq's purchase of a specialty chemical that could be used to enhance Iraq's chemical and biological arms.

The sale of a shipment of a fine powder known as colloidal silicon dioxide was approved by the U.N. oil-for-food program for Iraq despite objections from the U.S. government amid concerns that the chemical could be used for weapons.

According to intelligence officials, reports about Iraq's hidden anthrax were bolstered by a former Iraqi government official who defected two years ago but only recently came forward with new information, U.S. officials said.
The former Iraqi official, who is part of an opposition group of ex-military officers, provided new details about storage sites where Iraq is keeping chemical and biological weapons, the U.S. officials said.
The defector's accounts have been verified by other intelligence, the officials said.
The failure to alert the Security Council to the anthrax stockpile has upset some Bush administration officials, who said the information might have helped persuade some members of the council to support tougher U.S. action.
"If Blix won't report this, what will he do when Iraq obstructs weapons inspectors?" one official asked.
Representatives of Russia, China and France have opposed U.S. efforts to win council approval of military action against Iraq and the ouster of dictator Saddam Hussein.
The issue of Iraq's hidden anthrax is likely to emerge in the next month as the United Nations begins a new round of inspections inside Iraq.
Weapons inspections were halted in 1998 after the Clinton administration began military strikes on Iraq aimed at knocking out suspected chemical-, biological- and nuclear-weapons development sites.
Army Gen. Tommy Franks, commander of the U.S. forces that would lead any attack on Iraq, said the issue of Iraq's weapons of mass destruction is a key area of concern.
"The linkages between the government of Iraq and other transnational terrorist organizations like al Qaeda is not the issue with me," Gen. Franks told reporters Oct. 29. "The issue is the potential of a state with weapons of mass destruction passing those weapons of mass destruction to proven terrorist capability. And I believe that that risk exists."
http://www.washtimes.com/national/20021108-712686.htm

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Los Angeles Times
November 8, 2002
Pg. 1

Inspectors Prepare For Action

Trainees are experts in their fields, but sniffing out arms production is a subtle art, veterans say.

By Alissa J. Rubin, Times Staff Writer

VIENNA -- About 50 scientists and engineers will finish a five-week crash course here today in the tricky business of searching for weapons in Iraq.
Little is known by the public about their training, which began behind soundproof doors on the seventh floor of a United Nations complex and then moved to undisclosed locations for hands-on sessions.
The trainees are prohibited from speaking to outsiders, so only the barest outline of their preparation can be gleaned. But the ultimate result will be very public: The inspectors' reports from Iraq could avert or precipitate a war.
Will these new inspectors be ready for the job? Interviews with former weapons inspectors and instructors suggest: not at first.
"This is sort of a new profession for most of them," said a senior U.N. official involved in the training. "They are experts in a certain area, they are doing very technical work, but we ask them to become inspectors.... Only a few of them have previous experience."
Former inspectors say it may take a few tours of duty to get the hang of the job. The new inspectors would go into Iraq for three to four months at a time.
Chief U.N. weapons inspector Hans Blix has said he can have an advance team of inspectors on the ground in Baghdad within 10 days once the U.N. Security Council approves a new resolution on Iraq, which it is expected to do today. The inspectors will have 60 days to submit an initial report to the council.
So far about 260 people, including the current class, have received the introductory five-week training conducted by the United Nations Monitoring, Verification and Inspection Commission, or UNMOVIC, over the past three years. A far smaller group, destined for leadership roles, takes advanced courses in specialized areas.
U.N. officials estimate that fewer than a third of any inspectors sent to Iraq to track down weapons of mass destruction would have previous experience there. Iraqis have accused some countries' past U.N. inspectors of using tours as an opportunity to spy.

Even for veteran inspectors, the task ahead is far more daunting than it was during the previous inspection regime in the 1990s. From the moment the teams touch down, they will be under extraordinary pressure to make judgments about whether the Iraqis have assembled prohibited weapons systems or the means for making them.

These are hard assessments for experienced inspectors, but for newcomers who don't know the lay of the land and lack a sixth sense acquired from performing repeated inspections, it is far more difficult.

"As long as you yourself have not been tested in the field, you cannot know what it is like," said Jacques Baute, the leader of the Iraq team for the International Atomic Energy Agency and a former weapons inspector at the organization that preceded UNMOVIC.

The atomic agency inspects for nuclear weapons, while UNMOVIC looks for chemical and biological weapons and the missiles used to deliver them.

The task facing weapons inspectors is slow and far from glamorous, and requires skills as diverse as map reading, diplomacy, a knack for psychology and the ability to write a cogent lab report. "The most difficult aspect of the job is the amount of work it requires to be a good inspector," said the senior U.N. official involved in training.

Former inspectors, most of whom would speak only on condition of anonymity because they work in sensitive positions, emphasized learning the art of seeing both what is there and what is absent. Does everything look the way it should? Is the Iraqi explanation of a facility's purpose plausible? Is there something that fails to fit?

"For example, if you go into a room and several documents are on the table, are those the drawings the Iraqis are really working on, or did they just burn the real drawings or throw them in the wastebasket?" said a former chief missile inspector who sometimes instructs trainees.

To answer such questions requires detailed knowledge of, among other things, how specific chemical and biological products are manufactured; the equipment used for making them; the ingredients that need to be on hand; and whether temperature controls are required. But it also requires a feel for the story behind the story.

Inspectors are drawn from the defense industry, aerospace companies, chemical and pesticide manufacturers and engineering. Some are academics; others work for government or have private-sector jobs.

Baute says his first inspection was eye-opening: "My first inspection was a document search. But you don't just do the search in offices and in file. You open drawers, cupboards; you check to see if the ceiling is solid. These are not things that I would have expected to be doing."

Inspectors must scrutinize each site, testing Iraqi claims about its use against their own observations.

In the mid-1990s, inspectors went to a plant where they suspected biological weapons were being manufactured. The Iraqis told them the facility was used only to make a single-cell protein for animal feed, a legitimate use.

"But then we see that it's way off in the desert, it's surrounded by high walls, it's spread over several kilometers — and we start investigating it," said the senior U.N. official involved in the UNMOVIC training.

The site, Al Hakam, turned out to be the main installation where the Iraqis were producing anthrax, using the same equipment needed to make single-cell proteins.

"There wasn't one smoking gun, but a whole list of factors that were inconsistent," said Ewen Buchanan, a spokesman for UNMOVIC.

The plant was demolished in 1996.

The key is follow-through. Sometimes, however, inspectors' worst suspicions are allayed by evidence — or a lack of it. In one instance, nuclear inspectors found traces of iodine-131, a byproduct of nuclear fission when found with other fission byproducts. But close scrutiny and testing failed to detect any such byproducts. On its own, iodine-131 has a legitimate medical use — treating people with thyroid problems.

A crucial skill is the ability to interview Iraqi personnel. Inspectors must be polite but persistent, canny but straightforward.

"Not every inspector should conduct interviews," said one senior inspector. "Some are better at analyzing data. Just because you're the best missile expert doesn't mean you'll be the best missile inspector."

Hermann Strasser, a former biological weapons inspector from Austria with expertise in pesticides, recalled interviewing a plant manager about the use of certain equipment.

"They are experts at baffling you," he recalled. "First I got some information; I realized there was something wrong, so I asked some more questions; then I got a second story, then a third story, then a fourth story. The truth may be somewhere, but you don't know which story to trust. The Iraqis would spend an hour telling you a story and then say, 'Is that fine now?' "

When Strasser would raise a problem in an explanation, they would say, " 'Oh, I must have forgotten something,' " he said.

A look at the curriculum for the inspectors-in-training hints at the range of skills needed. In addition to an introduction to the legal rights of inspectors, all trainees attend lectures on Iraq's history and political situation, the effects of a decade of U.N. sanctions on the Iraqi people, and cultural sensitivity.

Those classes take just the first two weeks. In the third week, trainees spend three days with an Austrian military division that specializes in chemical, biological and nuclear safety. They learn how to use and work in protective gear and how to detect symptoms of exposure to toxins, according to Ute Axmann, an Austrian army spokeswoman. Inspectors also must master the material gleaned from past inspections.
Then they split into groups, depending on their expertise. The drill includes two practical exercises: an analysis of documents taken during an investigation and a mock inspection. The host country typically makes a chemical plant and a biological laboratory available for the run-through, with former weapons inspectors playing the Iraqis.
The mock Iraqis try to fluster trainees by refusing to let them take photographs or requiring that they write a letter saying why they need to see the facility. "They have to know their rights," said UNMOVIC spokesman Buchanan. They are allowed to take photographs and do not have to provide written documentation of why they are doing an inspection.
But some lessons can't be learned in the classroom.
"They have been briefed on everything ... but what is not achieved is that they are not faced with the stress of real life," said one former inspector. "The exam will be the real inspection."
http://www.latimes.com/news/nationworld/world/la-fg-inspect8nov08004446,0,7144707.story?coll=la%2Dheadlines%2Dworld%2Dmanual

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USA Today
November 8, 2002
Pg. 8

Iraqis Expert At Blocking Inspectors

By Tom Squitieri, USA Today
David Kay, a former United Nations weapons inspector, remembers the day in 1991 when his team showed up at an Iraqi building with solid information that records of secret weapons programs were stashed in a specific office.
"As we went down the hall, the Iraqis were lined up, smiling," Kay says. "They knew we were coming, and they really sanitized the office. There was a desk and chairs and nothing else."
Kay's information had come from an Iraqi defector, but it had been months between the time the defector left Iraq and the time the information finally got to the inspectors. By then, the Iraqis had realized the scientist was gone, and they had covered their tracks.
Kay says he is amused as he recalls the incident now. But he wasn't amused at the time, and his experiences in Iraq are a pointed warning about the frustrations inspectors will face in trying to ferret out banned weapons when they return to Baghdad for the first time in four years. Back then, they faced persistent, escalating resistance from the Iraqis, and they left the country shortly before U.S. and British forces began a retaliatory bombing campaign.
Friday, the U.N. Security Council is expected to approve a resolution that could send inspectors back to Iraq in the next couple of weeks and begin inspections before Christmas. According to the timetable, inspectors would have to report back to the United Nations by Feb. 21.
With the Bush administration ready to seize on Iraqi obstruction as justification for an invasion to depose leader Saddam Hussein, a key question is just what it would take to provoke a war.
"Our greatest concern is what type of incident would trigger a response, and what is the threshold," says Edwin Lyman, president of the Nuclear Control Institute, a non-proliferation group in Washington. "You have to expect that Iraq will give them the 'dog ate my homework' excuse. What level of obfuscation would be enough to trigger an immediate military response?"

Frustrating inspectors

Kay and other experts say the Iraqis use a variety of techniques to frustrate inspectors: removing evidence, blocking access, even firing at inspectors or holding them prisoner.
Would the Bush administration go to war over the empty office Kay described? Probably not. But if not that, what exactly would it take?
The U.N. resolution has triggers for new Security Council action to authorize military force, including the requirement that Iraq accept the resolution within seven days and produce within 30 days a full declaration of all its weapons programs and dual civilian-military facilities. But the Bush administration has not specified what could trigger military action, in part to avoid giving Iraq cues about how far it can go before being called to account.

U.S. officials say they realize that many nations believe Washington is looking for an excuse to attack Iraq, so the Bush administration will not play "gotcha" on minor infractions. They also want to give chief U.N. weapons inspector Hans Blix some freedom to work with Iraq, because U.S. officials believe Blix's credibility and his support for Washington's views are crucial to U.S. credibility at the United Nations. But U.S. officials warn that if there is a major breach by Iraq, such as turning inspectors away from a site, they could consider that the basis for taking military action under the resolution expected to be adopted today.

If U.S. forces are to invade, the best time would be during the winter, before intense heat would make fighting very difficult in the cumbersome suits designed to protect troops against chemical or biological weapons. That means U.S. strategists could be looking for a provocation by late this year or early next.

In Baghdad, most Iraqis interviewed during a recent visit said they see the inspectors' arrival as their last hope to avoid a devastating war. Having lived through years of conflict — first with Iran during the 1980s and then with a U.S.-led coalition in the Gulf War in 1991— Iraqis have clung to every scrap of news about the U.N. weapons inspectors as a sign that they might avert another disaster. The small Baghdad Stock Exchange rose sharply on days when Iraqi officials were negotiating with Blix's team in Vienna.

Tough job

Inspectors will have a tough job when they return to Baghdad. Making even a cursory inspection will probably take at least the two to three months allowed under the accelerated timetable the Security Council is expected to approve.

"It's pretty clear to us that the (previous U.N.) inspectors did not find all the facilities and stocks of Saddam's weapons of mass destruction in their first go-round," Undersecretary of State John Bolton said recently. "You could have a very robust team go into Iraq and because of Saddam's denial and deception, it might not find anything for quite some time."

U.N. officials and former inspectors say they would need at least two months just to get a new inspection program up and running. Tentative plans call for three teams of 80 to 100 inspectors spending four-month shifts in Iraq.

About 270 U.N. inspectors were being trained to go to Iraq even as the final details of a new inspection resolution were being negotiated. U.N. officials hope to disperse the teams to live around the country to reduce the drive time for snap inspections and to make it harder for the Iraqis to figure out where inspectors are going. Before, all inspectors were based in Baghdad.

But even with those and other changes, no one minimizes the challenge.

"They (the Iraqis) had a whole deception and denial program, and it has gotten better and better," says Trevor Findlay, executive director of the Verification Research, Training and Information Center, a London-based arms control think tank.

Even though inspectors have learned from experience and now have better training and better technology, the Iraqis still have the edge, experts say. Kay led three inspection teams in the months after the Gulf War, conducting about 240 inspections. "I'd guess that only about a half dozen of them were genuine surprises to the Iraqis, and those required elaborate ruses," Kay says.

Obstruction tactics

Former inspectors say Iraq thwarts inspections by:

Slowing down inspectors by creating traffic jams. Bus breakdowns are the most common, followed by epidemics of flat tires. Creating military exclusion zones that force inspectors to take long, roundabout detours to a site. That gives Iraqis time to destroy or remove anything incriminating.

Removing batteries and solar power cells from cameras designed to monitor sites.

Harassing and threatening inspectors. In September 1991, several inspectors were held hostage for three days in a Baghdad parking lot for refusing to surrender incriminating documents they had seized. Inspectors have been shot at, driven through violent mobs, followed and called in the middle of the night. Their hotel rooms are bugged, their luggage is opened and the contents strewn about, and threats have been made against their families.

Requiring inspectors to be accompanied by a military escort on the grounds that parts of Iraq are "not safe." That slows convoys, intimidates Iraqis whom the inspectors want to interview and prevents quick helicopter flights to watch the back doors of buildings being inspected.

Making key officials unavailable. For example, inspectors arrive at a site only to find that the commander is not there, which forces the inspectors to wait. On other occasions, the person with the key to the building is missing and has to be found. "All this as they move the stuff out of the back gate," Kay says.

Kay warns that the Iraqis will try to lure inspectors into places that have no weapons but take a long time to search. "They tend to offer more than you need for access, and that is a good sign nothing is there," he says. "They love you to spend an extra week in a place that has nothing going on."

Contributing: Vivienne Walt

http://www.usatoday.com/news/world/2002-11-08-un-inspectors-usat_x.htm

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Washington Post
November 8, 2002
Pg. 22

Bush Considers Smallpox Vaccine For Troops

Rumsfeld Recommends Inoculating Forces, but President Wants More Questions Answered

By Mike Allen and Bradley Graham, Washington Post Staff Writers

President Bush received a recommendation yesterday from Defense Secretary Donald H. Rumsfeld to inoculate U.S. troops against smallpox but did not immediately accept it. One White House official said the Pentagon had not answered many of the president's questions.

"There's a lot of issues on both sides," the official said. "He's concerned not just about whether to do it, but how you do it. You don't want to do it if you can't do it right."

Another official compared Bush's contemplation about the issue to last year's agonizing over whether to allow federal funds to be used for research on stem cells from human embryos, since the issues involved are so grave and Bush is considering them so carefully.

The question of whether to immunize U.S. forces is part of a larger dilemma that includes whether to vaccinate civilian health care workers and, eventually, the general public. Although routine smallpox vaccinations stopped in the United States in 1972, the matter has gained new urgency amid heightened concerns about biological warfare and intelligence reports citing four nations, including Iraq and North Korea, as having covert stocks of the smallpox pathogen. But the vaccine itself has caused serious, sometimes fatal, complications in a very small percentage of recipients.

Pentagon officials have developed a plan for inoculating as many as 500,000 troops, with the first shots earmarked for emergency support troops such as medical specialists. Next in line would be troops designated for deployment in the Middle East and other areas in which the risk of combat is considered high, officials said.

Rumsfeld was described by an aide yesterday as strongly favoring the inoculation program, considering it critical to ensuring the protection of U.S. forces. But moving ahead with it has proved more problematic than a separate Pentagon effort that resumed last month to inoculate troops against anthrax.

The Department of Health and Human Services has set aside for the military about 1 million of the fewer than 2 million doses that have been licensed for use by the Food and Drug Administration. Senior federal health officials have recommended making the vaccine available in stages to the civilian population, beginning with people who work in hospital emergency rooms, followed by other health care workers and emergency responders and, ultimately, the public.

http://www.washingtonpost.com/wp-dyn/articles/A25346-2002Nov7.html

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November 8, 2002

N. Korea's Bellicose Rhetoric Against U.S. Is Seen As Mostly Brinkmanship

By Barbara Demick, Times Staff Writer

SEOUL -- Whatever else one says about the North Koreans, they've never been accused of churning out bland diplomatic blather or beating around the bush. The propaganda machine in Pyongyang is so famous for its sharp tongue that a headline writer once labeled it the "great vituperator."

In recent days, the North Koreans have warned that they might revoke their moratorium on missile testing. They've insisted that they have the right to develop any kind of weapon they choose to defend themselves against "U.S. imperialist war hawks," whose behavior they colorfully describe as "brigandish" and "gangster-like."

Despite their blunt language, the North Koreans don't always mean what they say. Longtime North Korea watchers say the regime often ratchets up the rhetoric not when it wants to pick a fight, but when it wants to talk.

That may be precisely what is happening now.

"North Korea wants very badly to establish relations with the United States," said Rhee Bong Jo, an assistant South Korean unification minister who visited Pyongyang last month shortly after the North Koreans confessed that they have a secret program to enrich uranium for nuclear bombs. "Their admission was for the sake of negotiation. This was brinkmanship."

Donald Gregg, a former U.S. ambassador to South Korea who traveled to the North's capital this week, said officials there complained repeatedly that they had managed to improve relations with Russia, China, Japan and South Korea, but not the United States.

" 'What's the matter with you Americans? Why don't you join the procession of countries making better relations with North Korea?' " Gregg quoted a top North Korean general, Rhee Chang Bok, as telling him.

Confronted early last month by Assistant Secretary of State James A. Kelly, the only official U.S. envoy to visit Pyongyang since President Bush took office, the North Koreans admitted to the uranium enrichment program. They also said that the U.S. had in effect nullified a 1994 agreement under which North Korea gave up its nuclear weapons development in exchange for help with its energy needs.

In the last week, various North Korean diplomats have made alternatively belligerent and conciliatory statements on the subject.

A North Korean envoy to the United Nations, Han Song Ryol, said in a statement to the New York Times that Pyongyang wanted to negotiate a deal to close down its nuclear enrichment project.

But other North Koreans have defiantly defended the program. "We [are] entitled to possess not only nuclear weapons but any type of weapon more powerful than that in order to protect our sovereignty and right to subsistence from an ever-growing U.S. nuclear threat," North Korea's ambassador to China, Choe Jin Su, said at a news conference last week. Meanwhile, the envoy in Hong Kong, Rhee To Sop, told the South China Morning Post that "if we scrap, for instance, the nuclear program or reduce our armed forces, we would have nothing to defend ourselves."

And the North Korean newspaper Rodong Sinmun editorialized, "We can't live without weapons. We won't trade our weapons for mountains of gold."

Most troubling, the official North Korean news agency issued a statement Tuesday from an unnamed Foreign Ministry spokesman threatening to end the moratorium on missile testing. In 1998, North Korea test-fired a long-range Taepodong rocket over Japan. The threat to renew testing was seen as an explicit warning to Tokyo, with which North Korea has begun to discuss normalization, but it was shrugged off by Japanese Prime Minister Junichiro Koizumi.

Peter Hayes, director of the Nautilus Institute in Berkeley, which studies the North Korean nuclear program, says that world leaders and diplomats have learned not to become overly rattled by Pyongyang's insults and threats, because they are precursors to dialogue.

"You can predict when they are edging toward dialogue by the fierce strategy that comes before," Hayes said. He noted that North Korean leader Kim Jong Il is an avid student of filmmaking who has also written on the subject. "This is all very carefully choreographed with a nod to guerrilla tactics."

Song Yong Sun, a professor at the Korean Institute for Defense Analysis in Seoul, believes that the North Koreans chose their moment carefully, figuring that in the midst of its effort to build a coalition against Iraq, the United States would be more lenient with North Korea.

"This is classic bluff and bluster that is very typical of the way the North Koreans conducted their negotiations in the past. They need a crisis in order to negotiate," said Scott Snyder, the Asia Foundation representative in Seoul. "It is in their interest to play up the threat precisely because they are weak."

Snyder sees the current situation as similar to 1993, when the North Koreans raised the specter of a nuclear crisis by threatening to pull out of the Nuclear Nonproliferation Treaty. He believes that their tactics ultimately worked with the Clinton administration and that the resulting 1994 framework gave the North Koreans much more than they would have gotten with a more conventional negotiating style.

Under the agreement, an international consortium led by the United States, South Korea and Japan is to build two light-water reactors to supply North Korea's energy needs in return for its relinquishing of all nuclear weapons development.

According to the North Korean view, the U.S. is to blame for the apparent failure of the agreement because of reactor construction delays that have pushed back the completion date from 2003 to 2008.

But those who have spoken recently with the North Koreans say that their main complaint is that the Bush administration has not lived up to additional clauses in the 1994 pact aimed at improving relations and dialogue between the nations. The Bush administration now takes the position that North Korea must dismantle its nuclear program before any talks can be held.

Among other specific measures, the '94 pact called for the U.S. and North Korea to open liaison offices in each other's capital as a precursor to exchanging ambassadors, the lifting of barriers to trade and investment, and mutual assurance against the use or threat of nuclear weapons. The North Koreans have suggested on several occasions that Bush's inclusion of their country in an "axis of evil" was an implicit threat.
Donald Oberdorfer, a North Korea specialist, says he is concerned that the rhetoric from both the U.S. and North Korea could bring the two as close to war as in 1994, when U.S. battle plans were ordered up for an attack on North Korea.
"I'm concerned that the United States and North Korea not play off of each other, building up tension," Oberdorfer said, "because that would be dangerous, as dangerous as in 1994."
http://www.latimes.com/news/nationworld/world/la-fg-talktalk8nov08.story

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New Scientist
November 9, 2002

Bunker-Busters Set To Go Nuclear

By David Hambling

The US government is set to fund research into a new type of nuclear weapon that is designed to penetrate and obliterate deeply buried targets such as underground weapons bunkers.
Coming 50 years after the world's first hydrogen bomb was detonated in the Pacific, the news has alarmed scientists opposed to nuclear proliferation. They say the thousands of tonnes of radioactive debris produced by a bunker-busting nuclear weapon would not be contained within the rock, concrete and soil above the target, but would contaminate a wide area around it.
Funding of $15 million has been proposed for research into the so-called Robust Nuclear Earth Penetrator (RNEP), as part of the government's draft Defense Authorisation Bill for 2003. But the bill has not yet been passed by the Senate Committee on Armed Services. While a decision has been delayed until after this week's Congressional elections, a source close to the committee says the RNEP will get the green light.
Research into the nuclear bunker-buster follows the Bush administration's leaked Nuclear Posture Review, which in part set out the circumstances under which nuclear weapons might be used. It says the RNEP could be used in pre-emptive strikes against rogue states using deeply buried facilities to store weapons of mass destruction, for example.

"Mini-nukes"

The RNEP would be used on targets that may be immune to conventional weapons. Its backers claim it would create little contamination above ground, but critics say that it would produce huge amounts of nuclear fallout. The RNEP may also remove the distinction between a nuclear deterrent and conventional weapons, increasing the risk of a nuclear exchange.
US law prevents development of new "mini-nukes" that have an explosive yield of less than 5 kilotons. But the RNEP falls outside this ban because it is not a new weapon.
Rather, it will be a modification of an existing nuclear bomb, probably a highly modified B61, sources say, a weapon whose explosive yield can be set from anything between 0.3 and 340 kilotons. The bomb uses fission at low yields but is a fusion (hydrogen) bomb at high yields. The Hiroshima fission bomb had a yield of 12 kilotons.
Underground explosions are 10 to 15 times as effective against buried facilities as airbursts. A conventional bunker-buster is dropped from high altitude and hits the ground at enormous speed. It penetrates earth, rock and concrete before exploding. A nuclear version has the advantage of a far more powerful shock wave, increasing the depth of its destructive effect.
The US already has around fifty 'penetrating' nuclear weapons in its stockpile, but these can only reach a depth of six metres in earth. David Wright, a nuclear-weapons expert at the Union of Concerned Scientists in Washington DC, says this would not be nearly enough to contain the radioactivity.
"Even for a 0.3-kiloton explosion, you would need a burial depth of about 70 metres in dry soil and about 40 metres in dry, hard rock to contain the blast," Wright says. An explosion at the maximum depth achievable so far would throw thousands of tonnes of highly radioactive debris into the air.

Velocity threshold

Moreover, Wright's calculations show that a warhead of this size at the depths currently possible would only destroy a hardened target buried less than 10 to 20 metres deep in rock. Some Iraqi facilities are said to be under 60 metres of rock, requiring a warhead of hundreds of kilotons, which would cause unacceptable devastation above ground.

But a study by the Federation of American Scientists concludes that greater penetration with the RNEP is unlikely, as there is a threshold at which increasing impact velocities simply cause the warhead to deform and melt. Attempting to make the RNEP and its warhead robust enough to withstand impact will require extensive research and development. Weapons designers at three Department of Energy labs - Lawrence Livermore in California, and Los Alamos and Sandia in New Mexico - will have to come up with the new ground-penetration technology. Sandia has already patented a new penetrator (see graphic).
While the Comprehensive Test Ban Treaty bars any test with a live warhead, this would not prevent the RNEP's use untested.
http://www.newscientist.com/news/news.jsp?id=ns99993016

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USA Today
November 11, 2002
Pg. 1

Deadline On Iraq Is Firm, U.S. Says

War plan is ready if Saddam resists

By Susan Page, USA Today
WASHINGTON — Top administration officials say a military showdown with Iraq could be triggered as soon as Dec. 8, the deadline in a tough United Nations Security Council resolution for Saddam Hussein to account for any weapons of mass destruction.
"We're not going to wait until February to see whether Iraq is cooperating or not," Secretary of State Colin Powell said on CNN's Late Edition.
President Bush already has settled on a war plan that calls for bombing strikes and a ground invasion by as many as 250,000 U.S. and allied forces if the inspections process falters, administration sources say. In recent weeks, some National Guard and Reserve units have been alerted that they could be called up.
The United States seems poised for war, the final piece put in place by a 15-0 vote Friday by the Security Council. Resolution 1441 — which finds Iraq in violation of its commitment to disarm and lays out a timetable for new inspections — even drew unexpected support from Iraq's neighbor Syria.
It was a striking turnaround for Bush. Just two months ago, critics were calling his advisers divided and his administration isolated from world opinion. Now he is in a commanding position to order the use of force against Iraq, having won overwhelming votes in the Security Council and in Congress.
Iraq has until Friday to pledge to comply with the resolution. By Dec. 8, it must declare any prohibited weapons or the facilities to produce them. U.N. weapons inspectors must resume their work by Dec. 23, reporting back to the Security Council by Feb. 21.
But Saddam could be found in "material breach" of the U.N. resolution before then, U.S. officials say, if he fails to disclose banned weapons or weapons sites. U.S. officials already have prepared their own list of suspected sites, using reports from previous inspections and information from intelligence sources and Iraqi defectors.
If Iraq omits sites, that could be the provocation for an attack, U.S. officials say. The United States has agreed to additional consultations with the Security Council but says a vote on using force wouldn't be required.
"The U.N. can meet and discuss, but we don't need their permission," White House chief of staff Andy Card said on NBC's Meet the Press .
In Cairo, Iraqi Foreign Minister Naji Sabri, who was attending an Arab League meeting, said the Iraqi parliament would convene today to consider a response to the U.N. resolution.
Contributing: Judy Keen, Dave Moniz and Tom Squitieri
http://www.usatoday.com/news/washington/2002-11-10-iraq-deadline_x.htm

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New York Times
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Pg. 1

Iraq Inspections Receive Approval From Arab League

By Neil MacFarquhar

BEIRUT, Lebanon, Nov. 10 — Arab governments voiced collective support today for new weapons inspections inside Iraq, although they want Arab experts added to the inspection teams and warned that the latest United Nations resolution should not be considered a free pass for Washington to invade.

The support, expressed in a resolution at a meeting of Arab League foreign ministers in Cairo, suggests that most governments in the region remain perfectly happy to see Saddam Hussein defanged, political experts said, yet fear the repercussions of another war in the region.

The action by the Arab League stressed that the Security Council vote on Friday was "not a pretext for another military action against Iraq," Naji Sabri, the Iraqi foreign minister, said today after the Arab League meeting.

At the same time, Iraq appeared to be bowing toward the inevitable, with Iraqi television announcing that Mr. Hussein was planning to convene a special session of Parliament on Monday to discuss the issue of renewed inspections — the usual choreography for a simulated public stamp of approval for a decision the leadership finds distasteful.

The extent to which Arab governments are concerned about the effects of any action against Iraq on regional stability was expressed today by Syria's foreign minister, Farouk al-Sharaa, on the sidelines of the meeting. He said Syria's decision to join in a unanimous 15-0 Security Council vote to pass the resolution demanding renewed inspections to find potential nuclear, biological and chemical weapons was intended to spare the Iraqis from being attacked by the United States.

"This resolution stopped an immediate strike against Iraq, but only an immediate strike," he said. "Now America cannot strike Iraq under U.N. auspices, although of course the United States can strike Iraq unilaterally outside international law. If this happens, the world will not be with the Americans. It will have to deal with all those demonstrators from Los Angeles to the Far East and the Arab countries."

"This resolution was for the immediate effect," he said. "It avoided an inevitable strike against Iraq."

Iraq's government-controlled newspapers had initially called the Security Council resolution "bad and unfair." But by today, Iraqi officials and news media were hailing it as an international effort to thwart the American desire for war.

Although Iraq has until Friday to declare that it intends to comply fully with the terms of the resolution, Mr. Sabri noted that Iraq had agreed before to renewed inspections and thought there was no need to alter the United Nations guidelines about the way they worked.

"The problem is that we need experts who work in a professional, objective way," Mr. Sabri said, adding that, as the Arab League communiqué said, the new inspection teams should not "try to provoke or incite clashes as they have previously."

He said that such unbiased arms inspections would expose the "great lie" promulgated by the United States. "It is the lie about the existence of weapons of mass destruction in Iraq," he said.

The Arab League resolution also restated the longstanding Arab position that Iraq must work with the United Nations inspectors and demanded that the inspection teams add more Arab experts.

The resolution emphasized that only the Security Council should evaluate reports from the inspectors. Such cooperation should lead to the lifting of penalties that have been in place against Iraq since it invaded Kuwait in 1990, the league said, adding that ordinary Iraqis had suffered because of the sanctions.

In addition, the league proposed that the United Nations pay equal attention to Israel's weapons of mass destruction and stressed that Arab League members were committed both to maintaining Iraq as a united country and to maintaining the stability of all Arab countries. "They reiterate the absolute Arab rejection to striking Iraq and consider it a threat to the national security of all Arab countries," the league resolution said.

Although an Arab summit meeting in Beirut last March issued a statement that an attack on Iraq would be considered an attack on all Arab countries, commentators have dismissed that as an empty threat. But concern remained that any such conflict would rearrange the existing state of relations among countries in the region and between those countries and the United States.

The official Iraqi news agency reported today that Mr. Sabri had sought assurances from Arab governments that they would take specific steps in the event of an attack. The steps included not only barring American forces from using bases in their countries to attack Iraq, but also committing themselves to further measures like stopping oil shipments to countries that participate in any attack, breaking diplomatic relations and withdrawing financial assets.

Finally, Mr. Sabri proposed that governments should allow their citizens to volunteer to defend Iraq, the report said. None of those specific proposals were reflected in the communiqué issued by the league.

"They have been meeting over and over, and they are trying to justify themselves, to save face in front of their constituency, in front of the Arab people," said Nizar Hamzeh, a professor of political science at the American University of Beirut, referring to the Arab League countries. "They are afraid about what comes after this war against Iraq: which is the next country, what is the next target?"
Worst-case scenarios in the region have raised fears that the United States could redraw the map of the region, much the way the secret Sykes-Picot pact by Britain and France did early in the last century, although calmer heads reject such an outcome.
"All the Arab states that I know would prefer Iraq without weapons of mass destruction," said Abdelmonem Said, the director of the Al-Ahram Center for Political and Strategic Studies, speaking by telephone from Cairo. "It's journalists and the intelligentsia who want Iraq to have weapons of mass destruction because Israel has them."
Governments in the region are also concerned how others will suddenly act — Iran in particular — if a traditional enemy is suddenly rendered toothless by an American invasion.
"You start to shuffle the cards and everybody gets worried," said Mr. Said. "That is what they are worried about, the strategic implications of a war against Iraq."
Commentators in the region have said that when Syria voted with the Security Council, it was less out of a desire to shield Iraq than out of fear of the consequences of ignoring the United States — whether affecting future Mideast peace talks or, worse, making Syria a tempting target for the kind of treatment Iraq has been accorded.
"The price of even abstaining would be high, at the very least it would be complete isolation," wrote Zohair Qussaibati, a columnist for Al Hayat, an Arabic-language daily published in London. He argued that all Arab states would eventually line up similarly. Although Arab states would like to present the resolution as a victory, he wrote, it really reflected the United States' ability to do what it wants.
"Everyone came out of this meeting pretending that they are wise, happy and victorious, including Baghdad, which considered that the international community triumphed over the evil American administration," Mr. Qussaibati wrote. "This is a catastrophe in reading what happened," he added, noting that something as simple as Iraq firing at a plane in its airspace might end up being considered sufficient cause for a war.
http://www.nytimes.com/2002/11/11/international/middleeast/11ARAB.html

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Washington Post
November 11, 2002
Pg. 1

Hunting A Deadly Soviet Legacy

Concerns About 'Dirty Bomb' Drive Efforts to Find Radioactive Cesium

By Joby Warrick, Washington Post Staff Writer

TBILISI, Georgia -- In the 1970s, scientists in the former Soviet Union developed scores of powerful radioactive devices and dispatched them to the countryside for a project known cryptically as Gamma Kolos, or "Gamma Ears." Its purpose: to deliberately expose plants to radiation and measure the effects.
Some of tests were aimed at simulating farming conditions after a nuclear war. In rugged eastern Georgia, researchers bombarded wheat seed with radiation to see if the plants would grow better. All the experiments used a common source of radiation, a lead-shielded canister containing enough radioactive cesium 137, U.S. officials now say, to contaminate a small city.
The experiments stopped long ago, but last year's terrorist attacks on New York and the Pentagon have kindled an intense interest in Gamma Kolos that revolves around a single question: Where's the cesium now?
Spurred by fears of a "dirty bomb" attack that could spread radioactive poisons across major cities, U.S. and international nuclear experts have begun quietly searching former Soviet republics to recover the remains of the Gamma Kolos project before someone else does.
Unknown in the West until recently, the Soviet project is viewed as especially dangerous because its cesium devices could be easily exploited for terrorism: small, portable and possessing a potent core of cesium chloride in the form of pellets or, more frequently, a fine powder. Cesium 137, a silvery metal isotope used commonly in medical radiotherapy, emits powerful gamma radiation and has a half-life of three decades.
"It's like talc -- extremely dispersible," said Abel Gonzales, director of radiation and waste safety for the International Atomic Energy Agency, the United Nations-chartered nuclear watchdog. "You don't even need a bomb. Just open a can and people will die."

With heightened urgency and new backing from the U.S. Energy Department, the IAEA led a 10-month sweep of the former Soviet republic of Georgia, now a troubled but independent state. The search turned up five of the Gamma Kolos devices, all of which are now in safe storage. Four more devices have been found in Moldova, while in Russia U.S. officials are helping to construct security systems for agricultural research centers where large quantities of powdered cesium are stored.

But elsewhere across the old Soviet empire, the search is hampered by a lack of funding and a dearth of information. None of the cesium devices is known to be have been stolen, but in some Central Asian states there are no records showing how many of the devices exist or what has happened to them. Estimates of the total number of devices are vague -- "anywhere from 100 to 1,000," not counting stocks of cesium in loose storage in Russia, a senior IAEA official said.

Russia is beginning to cooperate in the search, although it cannot yet account for all the cesium, Bush administration officials said.

"I can tell you the Russians themselves are very worried about the cesium that's still out there in some of the [former Soviet] republics," a top official of the U.S. Nuclear Security Administration said, speaking on the condition of anonymity.

At least some of the republics share that concern. In Georgia, officials are combing the countryside with radiation detectors following a string of accidents in which civilians stumbled upon abandoned radioactive devices and suffered severe radiation burns. In at least one instance, the radioactive device had drawn the interest of local businessmen who were hoping to sell it on the black market, according to U.S. and Georgian government officials.

"We're not a nuclear country, yet we have these problems with nuclear material," said Zurab Tavartkiladze, Georgia's deputy environmental minister. "How many more are out there? We don't know, because we don't know how many existed to start with."

'Dirty Bomb' Concerns

While the United States has spent billions of dollars in the past decade helping secure or destroy Soviet-era nuclear and chemical weapons, only since last September has the U.S. effort expanded to include nonfissile radioactive material such as cesium 137. The interest first arose from intelligence reports last fall that al Qaeda terrorists were exploring the use of radiological weapons known as dirty bombs. It grew with the discovery by U.S. troops of detailed bomb-building instructions in Afghan caves used by al Qaeda forces. In June, the threat became personal for many Washingtonians when the Justice Department announced it had foiled an alleged al Qaeda plot to explode such a device in a U.S. city, possibly the capital.

The concerns prompted Energy Secretary Spencer Abraham in September to call for a global housecleaning to find and secure material that could be used in dirty bombs -- a threat that was made "horrifying clear" by the events of the previous 12 months, he said.

"After September 11 [2001], there could be no doubt, if there ever was one, that terrorists would use nuclear materials to harm innocent citizens of the civilized nations of the world -- if they could acquire them," Abraham said.

Although far less lethal than traditional nuclear weapons, dirty bombs could be attractive to terrorists because they can inflict widespread disruption for relatively little cost. With conventional explosives and a few ounces of cesium 137 or strontium 90, a dirty bomb could contaminate large swaths of real estate with dangerous radiation, unleashing panic and rendering some areas uninhabitable for decades.

In a computer simulation of a dirty-bomb attack on New York, the detonation of 3,500 curies of cesium chloride in Lower Manhattan -- about 50 grams or 1.75 ounces -- would spread radioactive fallout over 60 city blocks. Immediate casualties would be limited to victims of the immediate blast, but the after-effects, including relocation and cleanup, would cost tens of billions of dollars, said Michael A. Levi, a physicist and director of the Federation of American Scientists' Strategic Security Project, which conducted the study.

"The financial costs, from the loss of property to business losses, could be huge," Levi said. "People may refuse to return, and others may be unwilling to travel to the area. The threshold for scaring people away from some activities is very low."

Radioactive material for such a bomb can be found in almost every country, including the United States. But terrorists looking for bargains could hardly do better than in the former Soviet Union. The Soviets are known to have produced tens of thousands of radioactive devices for uses ranging from medical diagnostics to military communications, and many were simply abandoned after the Soviet breakup in 1991. Some regions are so littered with such devices that published tourist guides caution travelers to watch out for them.

Nowhere has the problem attracted greater attention than in Georgia, a struggling democracy and staunch U.S. ally in which there have been not only mishaps involving radioactive devices, but documented attempts to steal or smuggle nuclear material. Porous borders with the separatist provinces of Abkhazia and South Ossetia have become

thoroughfares for smuggled contraband from cigarettes to weapons, according to Georgian and U.S. government officials. Four years ago, a sting operation in the port city of Batumi netted three kilograms of enriched uranium -- one of the largest seizures ever made of material that could be used in a nuclear bomb.

"Not only is Georgia's government incapable of stopping this kind of smuggling, but some local officials would no doubt take part in it," said Mikheil Saakashvili, a parliament member and leader of Georgia's opposition National Movement party. "There are no resources for monitoring, and the pay for the border guards is $30 to $50 a month."

To head off future thefts, Georgia last year launched an aggressive campaign to find abandoned radioactive devices and store them in a secure, central location. Last month, dozens of Georgian workers armed with hand-held radiation detectors swept an abandoned Soviet missile base near the capital city of Tbilisi, part of a grid-by-grid search that has now covered 15 percent of the country, including all major population centers.

The search turned up small amounts of cesium 137 and strontium 90: in tools, calibration devices, night-vision equipment. "Most of it was junk," said Lia Chelidze, the Georgian government's liaison to the IAEA. But in all, she said, Georgians recovered more than 200 pieces of radioactive equipment during their search, 11 of them with a massive radioactive potency.

Of those 11, six were strontium-powered generators once used in military communications equipment. The five other items had been designated for use on farms as part of a project only a few Georgians knew by name: Gamma Kolos.

A Lone Sentry

The devices themselves resemble antique milk cans, and for years they were left to rust in sheds owned by Georgia's agriculture department. Today, a small radiation symbol, visible on some of the devices, offers the only hint of their highly lethal contents.

"That's 2,100 curies, just there," said Lerry Meskhi, head of Georgia's nuclear and radiation safety service, pointing to one of the Gamma Kolos devices soon to be entombed in a freshly dug pit beneath a government storage building. "In this small space, there's more than 10,000 curies," or units of radiation, he said.

The measurements were alarming.. By comparison, the second-worst civilian nuclear accident -- after the 1986 Chernobyl accident -- involved a medical radiotherapy machine containing roughly half as many curies of cesium 137. Poor villagers in the Brazilian town of Goiania found the machine in an abandoned clinic in 1987 and broke it apart to salvage the metal. Within days nearly 30 people suffered serious radiation injuries and four of them later died. Hundreds of others were treated for exposure and dozens of houses were demolished in the cleanup.

"Even one curie can cause a lot of harm, but it's not something that would attract a terrorist," said the IAEA's Gonzales. "With 2,000 or 3,000 curies you can do a lot of damage."

There is no evidence of immediate danger in the rambling government compound where Georgia's Gamma Kolos equipment is stored. Hidden from public view, the building is in a decaying suburb of the capital, flanked by massive factories that have been idle since shortly after the Soviet collapse more than a decade ago. The few cars that pass must navigate their way around truck-sized potholes and livestock that freely roam the street.

A lone sentry, in civilian clothes and apparently unarmed, guards the roll-away gate to the compound. Georgian officials acknowledge that the real security is in the form of tons of concrete that will seal the devices from intruders, compliments of the U.S. Department of Energy.

Few, if any, officials of the current government were in office when Gamma Kolos was active. Although records are sparse, Georgian environmental officials said the devices were probably built in the 1970s and have lost more than half of their original 4,500-curie strength due to normal atomic decay. The canisters were mounted on tractors and towed directly into fields for planting, they said. Wheat seeds were fed into the machine for a jolt of gamma radiation before being dropped into furrows. "It was supposed to speed up germination and increase yields," one official said. Whether it worked is unclear; in the West, scientists have used radiation to force mutations in crop strains.

The Soviet practice remains a puzzle to some experts in the West. But at the time, it was deemed successful enough that Soviet scientists sent the devices to other republics, from Moldova to Turkmenistan and Kyrgyzstan in Central Asia. Precise figures are unknown, but IAEA officials say they believe the number of devices in other states is much higher than in Georgia, one of the smallest of the former Soviet republics. "Georgia is a mosquito compared to these other places," a senior IAEA official said.

In other regions, the devices were buried in fields to test how crops would perform in a radioactive environment, according to U.S. officials familiar with the experiments. More of the devices and large quantities of surplus cesium were kept at Soviet agricultural institutions and in a network of regional radioactive dumps, the officials said.

Energy Department officials said the U.S. government became aware of the problem in the late 1990s but decided to focus on what was regarded at the time as more serious threats: securing weapons-grade uranium and plutonium as well as the vast stocks of Soviet chemical weapons.

"Two years ago, these radiological sources were not even on the horizon," one Energy Department official said. "But if September 11 taught us anything, it's that whatever seemed unimaginable before is very much imaginable now."

With a congressionally approved $25 million in new spending earmarked for the project, U.S. officials are hoping to make rapid progress in locating missing cesium devices and locking them away in vaults such as the one recently built in a Tbilisi suburb. After initial hesitation, Russia this spring formally embraced the effort and pledged full cooperation in helping U.S. and IAEA officials locate missing radioactive devices, including those in other countries.

"The Russians now 'get it,' " a senior Energy Department official said, "and their cooperation is important because they are aware of things that went on in those regions that we don't know about."

So far, the Russian cooperation has yet to produce a single document or solid lead. But the recent commitments by the Russian government reflect a growing awareness that dirty bombs are Russia's problem, too, Abel Gonzales of the IAEA said.

"The attitudes are starting to change, so for the first time we see that we're all in the same boat," Gonzales said. "After that, it's just a matter of going after them, one by one."

http://www.washingtonpost.com/wp-dyn/articles/A36157-2002Nov10.html

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New York Times
November 11, 2002

U.N. Set To Move In Quickly To Seek Iraq Nuclear Arms

By Julia Preston

UNITED NATIONS, Nov. 10 — United Nations atomic experts have finished detailed plans for a "full court press" of fast-moving inspections that will quickly uncover any major nuclear weapons program Iraq has undertaken in the last four years, according to Mohamed ElBaradei, the head of the nuclear team.

While Mr. ElBaradei said he was confident he would find "all large components" of nuclear weapons work in Iraq, he cautioned that his inspectors could face difficulties detecting smuggled nuclear materials and will need help from other governments. He said it could take several months to assess evidence the Bush administration has provided to support its claims that Iraq is trying to build a nuclear weapon.

"We are going to use every weapon in our diplomatic inspection arsenal to make sure that if there was any breach, we can detect it and detect it early," said Mr. ElBaradei, the director general of the International Atomic Energy Agency, in an interview Friday, when the Security Council unanimously approved a resolution giving the inspectors enhanced authority.

"We are going to be tough," he said. "We will not tolerate any cat-and-mouse."

Mr. ElBaradei will travel to Baghdad on Nov. 18 with Hans Blix, the head of the United Nations chemical, biological and long-range missile inspections team. The inspectors have been barred by Iraq since they withdrew in December 1998, on the eve of American and British bombing raids to punish Baghdad's failures to cooperate with the inspectors.

Bush administration officials have said they will be watching the inspectors' every move, ready to go to the Security Council to call for war against Saddam Hussein at the first sign that he is cheating or obstructing the inspectors' work. But while the United States and Britain, the co-authors of the resolution, see the inspections as a trigger for war, other Security Council members are hoping they will force Iraq to disarm and lead to peace.

Up to now, Mr. ElBaradei, who is based in Vienna, has stayed in the background as Mr. Blix talked to the Security Council and reporters, even though the two chiefs have equal authority. But as the inspections get under way, Mr. ElBaradei becomes a key figure for the Bush administration.

In a report in February 1999, the atomic agency said its inspections to that point "revealed no indication" that Iraq had a nuclear weapon or retained "any practical capability" to make fuel. Iraq is only allowed to have very limited amounts of radioactive isotopes for medical treatment and agricultural uses.

President Bush has charged that Mr. Hussein reactivated his nuclear program, employing many scientists and technicians and withholding key information about procurement and foreign assistance. Mr. Bush warned that if Iraq acquired fissile material, it could build a weapon within a year.

Mr. ElBaradei said he would arrive in Iraq with about 10 atomic experts, and a week later start building the team to about 25 inspectors. They will move quickly to revisit sites they examined previously, he said, to see whether old surveillance systems remain in place and to set up environmental sampling to test for radioactivity.
He said that he would need up to three months to set up a broader plan of work based on programs that Iraq declares and suspicions the inspectors may have about hidden activity.
He said that he and Mr. Blix expect to have latitude to make judgments about Iraq's cooperation, suggesting that their standards might be more flexible than the administration's.
The inspectors will not be alarmed by "a minor omission" in Iraq's weapons declaration, Mr. ElBaradei said. "We will be guided by the definition of material breach, which is really a major violation of the very purpose of the process."
Mr. ElBaradei said it is virtually impossible for Iraq to conceal an advanced nuclear weapons program, because it requires large industrial sites and emits radioactivity. But it will be hard for inspectors to discover if Iraq has smuggled in small amounts of uranium or plutonium.
"The difficult part would be if Iraq were to import nuclear material from abroad, across the border, that would be a real challenge to our system," Mr. ElBaradei said. He is appealing for intelligence data any country might have about black market nuclear trading with Iraq.
The atomic chief predicted that evaluating information provided by the Bush administration about Iraq's attempt to buy aluminum tubes, which the president cited as the most damning evidence of Iraq's nuclear ambitions, would be a complex job. While he is expecting more details from Washington, he said he did not yet know if the tubes went to Iraq, and he remained unsure if they were for nuclear development. "Our assessment is that they could have been used for conventional rockets in addition to being used for uranium enrichment," he said.
During the Security Council's heated negotiations over the resolution, Mr. ElBaradei, an Egyptian, reached out to the Arab world to defend the inspections, and conducted a long interview with Al Jazeera, the Arabic-language television station. "The Arab world must understand that there is a problem in Iraq, and it is not because Iraq is an Arab country," he said. "It is because Iraq has not fulfilled its obligations with regard to disarmament."
The new resolution, he stresses, has language — albeit deeply buried — that holds out the prospect to Baghdad of an end to economic sanctions within a year if Mr. ElBaradei and Mr. Blix give their approval. But Mr. ElBaradei expects his word to carry weight in the Middle East if he says that Mr. Hussein balked. "I think they will probably listen to me, because I will speak to them in their own language," he said.
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New York Times
November 11, 2002

Photonic Crystals In Uniforms

By Teresa Riordan

THESE may be lean economic times, but there is brisk demand for scientists who work on military projects.
One project is the $50 million contract the Defense Department gave earlier this year to researchers at the Massachusetts Institute of Technology. The goal is to build a sort of exoskeleton that among other things is supposed to give soldiers superhuman strength, protect them from biological and chemical weapons, and even help heal their injuries.
One of the researchers on the case is Yoel Fink, an assistant professor at M.I.T. Using, in part, technology he created, Mr. Fink and his team aim to embroider the supersoldier fighting uniform with polymer threads that — by selectively reflecting or absorbing different wavelengths of light — would silently flash an optical bar code. That way, for example, troops wearing specially tuned night-vision goggles would be able to distinguish between foe and friend during a night firefight.
The supersoldier project, officially known as the Institute for Soldier Nanotechnologies, has special meaning for Mr. Fink, who grew up in Israel and served in the army there.
"I spent three years of my life in the infantry," said Mr. Fink, who is now 36 years old. "It absolutely hits close to home because I know how vulnerable infantry soldiers are."
If two recently issued patents are any indication, though, Mr. Fink's ambitions extend beyond the battlefield.

Last month, Mr. Fink and several colleagues were granted United States Patent 6,463,200 for a fiber that steers light beams efficiently over long distances. The technology is being developed by OmniGuide, a start-up in Cambridge, Mass., that Mr. Fink co-founded and that recently secured $10 million in a second round of financing.

In August Mr. Fink received a more fundamental patent, Number 6,433,931, which broadly covers the use of certain polymers as photonic crystals — an innovation that Mr. Fink hopes will one day revolutionize optics the way the semiconductor revolutionized electronics.

As a tenure-track researcher at M.I.T. whose ideas are the foundation of a start-up company, Mr. Fink now seems a rising star. But when he first arrived at M.I.T. as a graduate student in 1995, he spent nearly a year and a half casting about for a project and a thesis adviser.

John D. Joannopoulos, a solid-state physicist at M.I.T. and expert on photonic crystals, did not take Mr. Fink into his laboratory. "He basically told me, `Look, I don't have any positions available,' " Mr. Fink said.

So when Mr. Fink came up with what he considered a revolutionary idea for building photonic crystals, he instead approached Edwin Thomas, a respected materials scientist at M.I.T. "I went to see him and said, `I want to talk,' " Mr. Fink recalled. Mr. Thomas said he could not talk because he was on his way to Greece.

Undaunted, Mr. Fink gave Mr. Thomas a copy of Professor Joannopoulos's book, to which Mr. Fink had stuck a yellow sticky note pithily outlining his idea. When he returned Mr. Thomas called Mr. Fink, eager to start working on the idea. Within a few weeks Mr. Fink had financing from the Air Force to pursue it.

For three months, Mr. Fink, Mr. Thomas and Tim Oyer, an M.I.T. patent lawyer, feverishly laid out a road map for developing the crystal. "We wanted to do with photons what people have been doing for years with electrons — to manipulate the flow of light in materials," he said.

Photons are the smallest known units of light, with both particle and wave properties. Photonic crystals allow for the manipulation of light.

Mr. Fink was by no means the only researcher trying to produce photonic crystals. "What struck me was that there wasn't a very good way to build these crystals," he said. "People were trying to build these structures by modifying semiconductor techniques."

While other researchers were trying to create photonic crystals by etching into silicon, Mr. Fink proposed a radically different idea: making a photonic crystal out of plastic.

The plastic he wanted to use was something called a block co-polymer, essentially a plastic made from two different types of polymers. Imagine one polymer as a string of pearls and the other polymer as a string of rubies, both of them loosely strung. Now imagine that when they are dropped into a jar and shaken, they self-entwine and pack themselves into a structure that repeats itself in a specific pattern — say, two rubies, four pearls, two rubies, four pearls and so on. "This a structure that forms itself," Mr. Fink said. "It doesn't require complicated processing."

In part it is this pattern, as well as the differing reflective qualities of the "rubies" and the "pearls," that gives this crystal such potential, Mr. Fink said.

Off the battlefield, how might life be different in the future if photonic crystals came to pass? Fashion mavens might leave the house in a turquoise outfit in the morning and retune the same outfit to tangerine when they went out to dinner. Optical communications systems might someday be woven into our clothing, making cellphones and hand-held devices seem like quaint artifacts of the early 21st century. And the innards of computers might rely as much on optics as on electronics.

Professor Fink has since won over Professor Joannopoulos, who ultimately became his thesis adviser and whom he now considers a mentor. But he acknowledged that though it had been proved experimentally, his self-assembling plastic photonic crystal project was still a long way from reality.

"It's a very beautiful idea," Mr. Fink said. "What's keeping us from flying with it right now is that we need a clever chemist — which I am not — to synthesize the polymer."

Mr. Fink says the first application to come out of his research is likely to be a light-transmitting fiber for a highly secure military communications network for the military. The main patron for his research, after all, is the Defense Department.

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New York Times
November 11, 2002

A Missile Shield Appeals To A Worried Japan

By James Brooke

TOKYO, Nov. 10 — Alarm over North Korea's missile and nuclear weapon programs is pushing Japan toward joining the United States in trying to develop a missile defense program, officials and analysts here say.

"We should exert efforts to get the program to leave the research phase as soon as possible," Japan's Defense Agency chief, Shigeru Ishiba, told a Parliament committee last week, urging faster work with the United States on a program that uses missiles to intercept other missiles.

With parts of Japan only 350 miles away from North Korean territory, many Japanese have recently felt a surge in insecurity. First, North Korea admitted to a visiting American diplomat that it maintains a secret nuclear bomb program. Then, last Tuesday, a North Korean Foreign Ministry spokesman reacted to a breakdown in talks with Japan by saying that North Korea was "reconsidering" the moratorium on missile tests that it adopted after it test-fired a rocket over Japan in 1998.

"The impact of the news from North Korea has been strong," Masashi Nishihara, president of the National Defense Academy, Japan's interservice military college, said on Friday. "North Korea has reversed its positions. That justifies us to move forward to develop missile defense, and to eventually deploy it."

In a poll conducted a week ago for the liberal daily Asahi Shimbun, 95 percent of 2,068 Japanese respondents surveyed said they were "concerned" about North Korea's nuclear program.

On Friday, Yomiuri Shimbun, a conservative daily, ran a headline that said, "U.S. to Press Japan to Build Missile Shield." But in a briefing for the news media, the reported instrument of pressure, Douglas J. Feith, the under secretary of defense for policy, said there was no need for a heavy sales job.

"You don't have to pressure Japan for Japanese to realize that Japan is facing a serious threat of missile attack," he said, referring to North Korean capabilities. "There are missile arcs that one could draw that clearly cover Japan. That's what makes the missile threat very serious."

The Pentagon says North Korea has about 100 Rodong missiles with a range of about 1,000 miles that are capable of hitting all major Japanese cities. Chinese officials estimated last month that North Korea had at the most five nuclear weapons.

Asahi Shimbun said the United States was moving missile surveillance units to Japan. On Oct. 21, an RC-135S Cobra Ball reconnaissance aircraft equipped for tracking ballistic missiles arrived in Okinawa from the United States, it said. Ten days later, the Invincible, a ship equipped with advanced radar to monitor mid- range missiles, visited Okinawa for the first time, it added.

American officials declined to address the reports, saying they do not comment on military operations.

Japan is already conducting research on antimissile technology, which the United States hopes to deploy in 2008. But, wary of provoking China, the long-established nuclear power of Northeast Asia, Japan had planned to delay until 2004 any decision on taking part in field trials. Mr. Ishiba, who took over as Japan's defense minister last month, has pushed for a commitment, though Prime Minister Junichiro Koizumi has remained noncommittal.

Within Mr. Koizumi's coalition government, a pacifist party, New Komeito, played a central role two weeks ago in winning elections for governing party candidates. New Komeito is reportedly preventing Mr. Koizumi from sending warships to the Arabian Sea to support American military operations.

"Our premise is that North Korea will sincerely implement agreements in the Pyongyang declaration and we want the North to sincerely maintain the declaration," Mr. Koizumi said on Tuesday, referring to the statement that he and North Korea's leader, Kim Jong Il, signed on Sept. 17 in North Korea's capital. The declaration upholds the Korean peninsula as free of nuclear weapons.

Japan now demands that North Korea dismantle its nuclear bomb program before receiving Japanese aid. Japanese officials met recently with Pakistani officials, hoping to learn details of North Korea's technology. Last month The New York Times reported that Pakistan supplied North Korea with nuclear bomb-making equipment. Pakistan has denied the report.

"The final aim of North Korea is to obtain economic aid — the key thing is money," Shunji Taoka, a defense affairs writer for Asahi Shimbun, said on Friday. Referring to the billions of dollars in aid that Japan has offered North Korea, he added, "Japan's Foreign Ministry has a rare chance to be a major player."

But if forced into a corner, North Korea might resort to a familiar negotiating tactic: provoking a crisis. It might test a new rocket engine, test-fire a new generation rocket or expel International Atomic Energy Agency inspectors, Scott Snyder, Korea representative for The Asia Foundation, a United States government-supported group, said. "They will try to use a crisis to escalate things, and they can do it," he said.

A cartoon published here last week showed Kim Jong Il as a panhandler, holding a sign that read, "Will not bomb for food."

Several high-level American officials have been visiting Japan. Last Thursday, it was Gen. Peter Pace, vice chairman of the Joint Chiefs of Staff. James A. Kelly, the assistant secretary of state for Pacific and East Asian

affairs, met here on Saturday with his Foreign Ministry counterparts from Japan and South Korea. The Kyodo news agency reported today that Mr. Kelly predicted to Japanese officials that next year Congress would stop financing for oil shipments to North Korea.
"Will Japan go nuclear?" Hau Boon Lai, a columnist for The Straits Times of Singapore, asked, echoing regional concerns that Japan is considering building nuclear bombs.
But aversion to nuclear arms runs deep here. Mr. Nishihara of the defense academy said, "I have not seen any arguments that Japan should go nuclear."
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New York Times
November 12, 2002
Pg. 1

Iraq Said To Try To Buy Antidote Against Nerve Gas

By Judith Miller

Iraq has ordered large quantities of a drug that can be used to counter the effects of nerve gas, mainly from suppliers in Turkey, which is being pressed to stop the sales, according to senior Bush administration officials.
The officials said the orders far outstripped the amount Iraq could conceivably need for normal hospital use, and they said Turkey had indicated in talks with the State Department that it was willing to review the matter.
"If the Iraqis were going to use nerve agents," an official said, "they would want to take steps to protect their own soldiers, if not their population. This is something that U.S. intelligence is mindful of and very concerned about."
Iraq has ordered, mainly from a Turkish company, a million doses of the drug, atropine, and the 7-inch autoinjectors that inject it into a person's leg, the officials said.
It is not clear how much, if any, of the drug has actually been delivered.
Atropine is highly effective at blocking such nerve agents as sarin and VX, both of which Iraq has acknowledged having made and stockpiled. Iraq claims to have destroyed those stockpiles, but American intelligence agencies doubt it has done so.
One official said Iraq had also placed orders for another antidote for chemical weapons, obidoxime chloride.
Officials said hospitals and clinics around the world commonly stocked atropine to resuscitate patients who have had heart attacks. As a result, atropine was not included on a list of thousands of "dual use" items that the United Nations Security Council members drafted in May that inspectors must review more carefully before they can be sold to Iraq.
The bulk purchases of autoinjectors and atropine, however, have raised concerns among chemical weapons experts, intelligence analysts and senior White House officials, who argue that atropine to counter heart attacks is normally given intravenously and in much smaller doses. Obidoxime chloride is not used at all for that purpose, one expert said.
All this, the officials and experts say, illustrates how hard it is to control dual-use products — those that have civilian purposes, yet also can strengthen a country's military. That is true even when the seller is an ally, they said.
The United States renounced the use of nerve agents and other chemical weapons in the 1997 Chemical Weapons Convention, pledging not to use such weapons in war, and saying it no longer has them in its arsenal. But the American armed forces do carry atropine and autoinjectors in first-aid kits in case of attack.
Iraq has not ratified the treaty that bans the production, stockpiling and use of chemical weapons. It used chemical weapons during its war against Iran in the 1980's and to suppress dissent among its own Kurdish citizens in the north.
White House officials have recently considered the Iraqi orders at meetings, and the State Department has tried to stop the sales through discussions with Turkey in the last two months. One official said Turkey, a NATO member and staunch American ally, had agreed to review the orders and consider the request.
In a telephone interview, Turkey's ambassador to Washington, O. Faruk Logoglu, said he was unaware of such discussions. But he added that they might well have been conducted by American Embassy and Turkish officials in Ankara, the Turkish capital, bypassing his embassy.
Administration officials declined to identify the Turkish supplier, but one official characterized the company as an important regional producer of bio-defense products and equipment with international customers.
"Atropine and autoinjectors are common products," an official said.

Administration officials said the contracts demonstrated deficiencies in the system put in place last summer to simplify the shipment of aid to Iraqi civilians under the United Nations "oil for food" program. Secretary of State Colin L. Powell extolled the new system as "smart sanctions."
Under the previous system, shipments of food, medicine and other goods that Iraq said were for civilians were routinely delayed for months while Security Council members and United Nations weapons inspectors pored over contracts to determine whether the sales could strengthen Iraq's military.
The new system adopted in May allows for the sale and shipment of most goods without extensive review unless they are on the list put together by the United States, Russia, France, and other Security Council members. It took almost a year for negotiators to develop the list, because the United States wanted it to be as comprehensive as possible, while Russia and France, both large exporters to Iraq, lobbied for a shorter list.
The United States has yet to conduct a formal assessment of the new system, now just a few months' old. But officials said in interviews that they feared that Iraq was already exploiting omissions from the list.
American officials said it was becoming obvious that some items that should have been included, like the atropine and autoinjectors, had been omitted.
Iraq's military capabilities, "though far less impressive than they were before the 1991 gulf war, are becoming better through such purchases every day," a senior administration official said. "And we're seeing that the traditional mechanisms for controlling the transfer of such items — export controls, border patrols, and other sanctions — are still porous."
Technically, the list can be reopened for changes every six months, but administration officials said the State Department was reluctant to do so. "If we try to add items to that list," an official said, "Russia and France will demand that other items be subtracted from it, and we'll be back again to square one."
But the Pentagon is more willing to seek a change, officials said. If any Security Council member does want to change the list, the deadline to do so is late this month.
Dave Franz, a former director of the Army's bio-defense lab at Fort Detrick, Md., and Frederick R. Sidell, a chemical agents expert who worked at the Army Medical Institute of Chemical Defense, agreed that Iraq's orders raised concern because there were virtually no peaceful uses for that much atropine. "The Iraqis must know that we are not going to use such agents against them, because we don't have chemical weapons," Dr. Franz said.
Dr. Sidell said obidoxime chloride was not used for anything in the United States. Furthermore, autoinjectors contain five times the amount of atropine normally administered intravenously to treat malfunctioning hearts.
http://www.nytimes.com/2002/11/12/international/middleeast/12NERV.html

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USA Today
November 12, 2002

Inspectors Have Plan For Flushing Out Illicit Weapons

By Tom Squitieri, USA Today
The clues are everywhere in the search for banned Iraqi weapons of mass destruction and the facilities that could make them.
New tree lines, which might have been planted to hide utility feeds to secret production plants. Interviews with Iraqi defectors that allude to weapons development. Ground cover that suddenly vanishes, suggesting that something toxic was tested there. Paperwork in far-off foreign offices that documents the sales of items used in weapons production.
"This is not well known, but we went around the world and talked to (vendors) about what they sold to Iraq," says Tim McCarthy, who made 14 inspection trips to Iraq from 1994 through 1998. "In the end, it was our own analysis and nose for this kind of stuff that led us down investigative paths."
That kind of detective work will be an imperative first step as United Nations weapons inspectors prepare to re-enter Iraq for the first time in four years. Last Friday's U.N. Security Council vote to restart inspections under the threat of a U.S. invasion gives inspectors only until February to hunt for prohibited weapons — far less than the year or more some former inspectors say it would take to do a thorough job.
To give themselves a head start, U.N. officials are seeking access to commercial and government satellite photography. They are also asking for direct intelligence reports from U.S., British, and other nations' spy agencies. Finally, they are reviewing news media reports on leaked intelligence data, defector interviews and trade visits and other business activities with Iraq.
Inspectors will follow some general steps as they search for clues:

*Review documentation for imports and exports, commands issued to the Iraqi military, and production orders to factories. Called a "documentary archeology," that sort of preliminary detective work can point to whether new facilities have been built and where they are operating. Many of the records can only be found by pawing through reams of papers.
*Scan photos to look for new power or telephone lines, or for changes in vegetation that could be signs of secret new facilities that might not otherwise be visible.
*Interview laboratory technicians and factory workers. This is a long-shot tactic but it can be helpful when the person being interviewed slips up and provides important information. That is a one-time bonus, because someone can be severely punished for saying anything useful to an inspector. U.S. officials managed to include language in the U.N. resolution that gives inspectors the right to take interview subjects and their families outside Iraq to minimize the danger to them, but whether the inspectors will actually be able to do that is unclear.
*Insist that Iraq provide documentation for unsubstantiated assertions, such as claims that certain weapons have been destroyed. Previously, Iraq was successful in shifting the burden of proof to inspectors, arguing that the inspectors could not show Iraq was lying.
Inspectors refine a search depending on whether the weapons and facilities they're looking for are chemical, biological or nuclear.
In the case of chemical weapons, inspectors look for large-scale facilities. They hunt for training ranges where shells carrying chemical weapons may have been tested, as traces of chemicals should remain. High-tech hand-held detectors can sometimes sniff out traces of chemical or biological activity.
Searching for biological weapons development is more difficult. The facilities are not as large or as obvious, and weapons development can be hidden in labs used for legitimate purposes, such as making vaccines.
In those cases, inspectors will examine circumstantial evidence, such as the amount of security at a lab or who is on a lab's staff. Inspectors will also look for signs that products from the labs have been tested at facilities not relevant to civilian use, such as plants that make bombs or artillery shells. Inspectors will also be suspicious of the outdoor testing of aerosol sprays or the use of crop-dusters.
Raymond Zilinskas made two three-week inspections in 1994 for biological weapons and facilities. He visited 62 sites in Iraq — from the biology laboratory at Baghdad University to dairies and beer fermenting plants — to identify equipment that could be used in a biological weapons program.
Once his team found such equipment, they marked it with special self-adhesive tags that contained 300,000 beads of glass per square centimeter. Any movement of the tag would result in the beads breaking, indicating the equipment had been shifted. Once the tags were in place, future inspectors could visit the facilities and go down a checklist to detect any changes.
Inspectors hunting for nuclear weapons have an important edge: For years after any test, radioactivity leaves a "signature" that can be detected with Geiger counters or similar devices.
The short time inspectors will have to work means they should avoid sites most likely to be quagmires, former inspectors say. Atop that list are Iraqi leader Saddam Hussein's many presidential palaces.
"They are very large, and having made such a big thing about inspecting them, it will now be very difficult to do a cursory inspection," former inspector David Kay says. "You could be in one of those for weeks and never find anything."
http://www.usatoday.com/news/world/2002-11-11-inspect-usat_x.htm

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Washington Times
November 12, 2002

Nuclear capability becoming easier

By Ralph Joseph, The Washington Times
ISLAMABAD, Pakistan — A prominent Pakistani nuclear scientist who has criticized his nation for developing nuclear weapons says he doubts North Korea needs Pakistan's help to make its own atom bombs.
Pervez Hoodbhoy, a professor at the Quaid-i-Azam University, said: "Nuclear technology is not very difficult. In a few years, almost every country in the world is going to have it."
His remarks follow reports that Pakistan supplied North Korean with equipment, including centrifuge machines used to make weapons-grade uranium in exchange for rockets and missile technology.
President Pervez Musharraf denied the reports.

Mr. Hoodbhoy, who has criticized his own country and India for their game of nuclear brinkmanship in the recent military standoff, conceded that U.S. officials had a seemingly plausible theory of a Pakistani-North Korean exchange in the 1990s.
"You know, the Pakistani Ghauri missile is based on the North Korean Nodong," he said.
It was conceivable that Islamabad paid for the missile technology by supplying Pyongyang with uranium-enrichment technology, but the nuclear programs of the two countries are so small that it would be easy for both sides to hide any collaboration. "Only those who are involved would know," he said.
North Korea recently shocked the world by admitting to U.S. officials that it had begun refining bomb-grade uranium in violation of a 1994 agreement to give up nuclear weapons.
Mr. Hoodbhoy said there are sources other than Pakistan for the North Koreans to acquire uranium-enrichment technology. "There are the Chinese, for example," he said.
An Indian analyst, meanwhile, suggested that Pakistan had earlier acquired its uranium-enrichment technology by stealing it from the Russians.
B. Raman, director of the Institute of Topical Studies in Chennai, India, said in an article reprinted in the Lahore newspaper the Weekly Independent that a Pakistani intelligence operative, retired Maj. Gen. Sultan Habib, "had distinguished himself in the clandestine procurement and theft" of nuclear material while posted as defense attache in the Pakistani Embassy in Moscow from 1991 to 1993.
Mr. Raman does not provide his sources but said Gen. Habib was later "posted as ambassador to North Korea to oversee the clandestine nuclear and missile cooperation between North Korea and Pakistan."
http://www.washtimes.com/world/20021112-17129695.htm

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New York Times
November 12, 2002

Next Step In Smallpox Effort: Drug For Vaccine Side Effects

By Donald G. McNeil Jr. and Lawrence K. Altman
MARIETTA, Ga. — It may not be obvious, but as he reclines in a suburban Atlanta plasma center with a needle in one arm and a fresh smallpox vaccine scar on the other, Michael Kuring is on the front line of the war on terrorism.
"I dare any parent — my kids have not been vaccinated — I dare any parent to look at the consequences of what could happen, and not get involved," said Mr. Kuring, who sees it as his patriotic duty to roll up his sleeve twice a week and let his antibody-rich blood drain through a plasma-extraction machine. "You almost can't not answer the call."
For this former soldier turned Staples Office Supply account manager, the front is on an obscure but crucial salient of the war.
The Bush administration, which is considering whether to vaccinate millions of Americans against smallpox, cannot go forward until it produces enough antidote to the vaccine's side effects.
Smallpox vaccine — made from vaccinia, a cousin to smallpox that is grown in cows — is among the most dangerous of vaccines. It often produces temporary fevers and sore, swollen arms. In a small but unpredictable number of cases, however, the vaccinia pox itself runs wild and leaves its victims scarred, blinded or sometimes even dead.
The only tested antidote is vaccinia immune globulin, or VIG, but until this month, the nation had only 600 to 700 doses.
That is where people like Mr. Kuring come in: the antidote must be made from the blood of people vaccinated in the last two months, while a flood tide of newly minted antibodies is coursing through their veins.
Until recently, there were only a handful of potential donors.
Routine smallpox vaccinations for children stopped in 1972, and the military stopped in the late 1980's, so the only ones with current vaccinations were laboratory technicians working with the world's remaining stocks of smallpox or related viruses.
Now, after hastily signing up two companies to make more, the government, which may vaccinate up to 500,000 health workers and 500,000 people in the military, is opening up this bottleneck a bit.
By year's end, the government should have about 5,000 doses of VIG in hand.
Theoretically, that would be enough to allow at least 40 million people to be vaccinated.

Making enough to vaccinate all 280 million Americans safely could take two years, based on the most pessimistic estimates of need. But no one knows exactly how much is needed because experts do not know how many bad reactions will occur or how effective efforts will be to screen out the people most likely to have them — pregnant women, people with compromised immune systems, people with a history of eczema or other rashes.

In 1968, two separate studies found one life-threatening reaction per 67,000 vaccinations and one per 20,000. But in 1968, far fewer Americans had immune systems weakened by AIDS, cancer chemotherapy or organ transplants, and eczema was less common.

The military's supplier said it was told to assume one serious reaction per 8,000 vaccinations. Asked about that, Dr. Raymond A. Strikas, an epidemiologist working on smallpox vaccination protocols for the Centers for Disease Control and Prevention, said, "Given the uncertainties here, that may not be a bad estimate."

VIG is no miracle drug. It was invented in the 1950's and never tested in rigorous clinical studies. Case surveys from the 1960's suggest that it can cut deaths from severe vaccination eczema by two-thirds and stop the spread of new sores. But it seemed to have no effect on vaccinia necrosum, in which tissue around the site dies in ever-enlarging circles. The condition, rare in the 1960's, can kill immuno-suppressed people, whose numbers have grown sharply. VIG also seemed not to help brain inflammation complications.

But the government wants more because "you don't have anything else," said Dr. Anthony S. Fauci, director of the National Institute of Allergy and Infectious Diseases.

Dr. Fauci said the government was investigating cidofovir, a drug licensed for use against another virus. But it would be reserved for the most severe cases if VIG failed. Cidofovir is toxic and untested against vaccinia in humans.

The two companies that received rush VIG orders were the DynPort Vaccine Company of Frederick, Md., which has a longstanding contract to supply vaccines for smallpox, botulism, plague, anthrax and tularemia to the military, and the Cangene Corporation of Winnipeg, Canada, which makes antibody products that protect babies with dangerous Rh mismatches, pregnant women exposed to chickenpox and people exposed to anthrax and hepatitis B.

DynPort had a head start, and has not yet needed to recruit donors because it has a large stockpile of frozen plasma from soldiers vaccinated years ago, said Dr. David Smith, DynPort's principal scientist.

The plasma is tested for H.I.V., hepatitis and other pathogens, and is then "fractionated" using a combination of ethanol and salt concentrations to yield a few drops of antibodies, which are proteins.

DynPort has already produced enough VIG to treat 660 severe reactions, Dr. Smith said. Dr. David Clanton, a DynPort senior scientist, said the company had tested its new antidote on volunteers and found that even a dose five times as great as normal produced "no adverse effects."

Cangene, by contrast, has a bigger contract but a less urgent time frame. It is to produce up to 100,000 doses for the United States civilian population over five years. Lacking a pool of frozen plasma, it is seeking about 10,000 volunteers like Mr. Kuring to be inoculated for smallpox and then bled twice a week for two months. Plasma is spun off their blood and their red cells are returned to them.

The plasma goes to Winnipeg, where Cangene uses a newer chromatography process, pouring it through layers of beads that filter out everything but the antibodies. Other purification steps are added, including solvents that destroy the lipid shells of viruses like H.I.V. or West Nile.

Now that the company has contracts affecting the war on terrorism, it has "big-time security from a Canadian viewpoint," said John Langstaff, Cangene's president. He declined to let any part of his operation be photographed.

To find all those donors, Cangene subcontracts several "specialty plasma" companies. The Serologicals Corporation, a 32-year-old company with headquarters in Norcross, Ga., is the biggest, with 13 clinics in 7 states drawing blood from people "stimulated" with injections to produce antibodies to rabies, hepatitis, mononucleosis or herpes.

So far, it has found 1,300 VIG donors through advertising and word of mouth. All donors must have been vaccinated against smallpox as children, and have the scars as proof. They are screened for all diseases that disqualify blood donors, and for skin problems.

No donors have yet had bad reactions, said Dr. Barbara Slade, medical director of Serologicals.

Each is paid $100 a week, but four donors interviewed in Marietta said money was not a factor. Mr. Kuring, Ralph McKinstry, Albert Casanova, all veterans, and Kathy Eagye, who has a master's degree in public health, said they wanted to help protect others. Ms. Eagye, however, did confess that she so feared a smallpox attack that she volunteered partly to get revaccinated.

Because touching the vaccination site or the bandage can infect someone else with the vaccinia virus, potential donors cannot live with anyone at high risk for complications — anyone pregnant, under 1 year old, with unexplained rashes or with a weakened immune system.

Mr. Kuring, who first became a specialty plasma donor after a friend's child died of an Rh factor reaction, said he was very careful not to let his three children touch his new vaccination site. "For the two weeks till it healed, I let my wife snuggle with them and put them to sleep," he said.
That does not mean that scientists can anticipate every worry.
"I have two dogs, and I love them," Mr. McKinstry said. "I was concerned, so I asked. I was told it shouldn't affect them at all."
Listening to this conversation, Dr. Slade mused: "Hmm, dogs. . . . I never thought about that one. I don't see any reason why they wouldn't be O.K."
The donors are given waterproof bandages and, to change them, must wear latex gloves, bag them and return them to the plasma center.
"Easy," said Mr. Casanova. "It's pretty much a no-brainer to change a bandage."
http://www.nytimes.com/2002/11/12/health/policy/12VACC.html

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U.N. Discusses Germ-Warfare Plan

Mon Nov 11,10:26 AM ET
By ALEXANDER G. HIGGINS, Associated Press Writer
GENEVA (AP) - A 146-nation conference looked for new ways Monday to reduce the threat of germ warfare, meeting for the first time since the United States scuttled a plan to enforce the 1972 Biological Weapons Convention.
The group agreed to consider a proposal on holding annual meetings to discuss what nations could do on their own or together short of changing the treaty. But they acknowledged the U.S. opposition would keep the document from setting out strong enforcement measures.
"I am aware that the proposal is not likely to fully satisfy many or even any delegation," Tibor Toth, chairman of the conference, said of the proposal. "This is a rescue operation."
It was the first time the group had met since last December, when talks were suspended for a year when the United States backed away from a draft proposal on enforcing the global ban.
"Everyone in the conference is walking on eggshells," Indian Ambassador Rakesh Sood told The Associated Press. He said Toth's proposal was carefully worded to avoid offending any country.
Officials said it was crucial to keep world attention focused on the threat of biological weapons. Discussion topics under the proposal would include improving national control of microorganisms and toxins, enhancing international response to suspicious outbreaks of disease and adopting a code of conduct for scientists.
"The very worst thing that can happen is that this thing is not discussed at an international level," said Patricia Lewis, director of the U.N. Institute for Disarmament Research.
The Biological Weapons Convention has never had serious enforcement measures because the threat was not believed to be high when it was drafted. But that changed with rising concerns that Iraq would use biological weapons during the Gulf War (news - web sites).
At the end of meetings last year, the United States shocked other nations when it said it wouldn't support stringent enforcement, including inspections, because it didn't want to give away defense or commercial secrets. It said inspections probably wouldn't be able to detect violations anyway.
Washington invests more than $1 billion a year on its program to defend against biological weapons.
Experts say Iraq is not the only country suspected of having a germ warfare program. The United States says a dozen or more nations have such programs.
The United States says they include Iran, Libya, Sudan, Syria, Cuba and North Korea (news - web sites). He declined to name other countries but suggested the United States has better relations with them and prefers to pressure them privately.
The Federation of American Scientists and seven other organizations announced Monday that they were creating a global monitoring network to watch for violations of the treaty because of the treaty countries' failure to adopt an enforcement system.
The project aims to follow in the footsteps of other efforts against land mines and small arms.
"For the first time, compliance with the bioweapons ban will be monitored comprehensively and objectively," a statement said.
http://story.news.yahoo.com/news?tmpl=story&u=/ap/20021111/ap_on_re_eu/un_biological_ban_6

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