#63
27 Apr 2001

USAF COUNTERPROLIFERATION CENTER

CPC OUTREACH JOURNAL

Air University
Air War College
Maxwell AFB, Alabama

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

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

Wednesday April 18 9:10 PM ET

CIA Official: N. Korea Probably Has Nuclear Arms

WASHINGTON (Reuters) - North Korea probably has one or two nuclear bombs and may also have biological weapons in addition to chemical weapons, Deputy CIA Director John McLaughlin said in a speech released on Wednesday.

While activity at North Korea's nuclear plant Yongbyon has been frozen by a 1994 accord known as the ``agreed framework," McLaughlin said ``we still cannot account for all of North Korea's plutonium."

``And, with an opaque regime in which the practice of denial and deception is embedded in national strategy, we still cannot say for sure that nuclear weapons-related work is not going on somewhere else," he said in a speech given at a conference at Texas A&M University late on Tuesday and released in Washington on Wednesday.

``Indeed, the North probably has one or two nuclear bombs -- and it may also have biological weapons alongside its chemical ones," McLaughlin said.

North Korea has held to its missile launch moratorium and has signaled interest in negotiating a missile deal with the United States, but at the same time its proliferation activities
``remain robust'' partly for political leverage, he said.
North Korea's No Dong missile and its variants have shown up in Iran and Pakistan, McLaughlin said.
``And it is busy at work on new models that could reach the United States itself with nuclear-sized payloads,'' he said….
http://dailynews.yahoo.com/htx/nm/20010418/wl/korea_usa_dc_1.html

April 20, 2001

Anthrax threat called into 4 banks

By Brad Buck
FLORIDA TODAY

Four Melbourne-area banks were closed Thursday - and their employees had to undergo some decontamination procedures - after a caller said currency at the businesses had been infected with the deadly bacteria anthrax.
About three hours after the 11:30 a.m. call, Brevard County sheriff's deputies determined there was no evidence of anthrax. "We have not discovered anything that would lend any credibility to the threat," sheriff's Cmdr. Mark Riley said. "We treated it as if it was a legitimate threat."
Anthrax - bacillus anthracis - is a highly infectious bacteria found in sheep and cattle. Expose humans to it, and it will kill them if they are not treated immediately….
http://www.floridatoday.com/news/local/stories/2001/apr/loc042001b.htm

US on alert for smallpox terror attack

By Jeremy Laurence, health editor

22 April 2001

The US government has ordered 40 million doses of smallpox vaccine from a British company in a sign of the growing alarm that terrorists could unleash lethal viruses in future battles against Western states.
The astonishing size of the contract - worth $343m (£200m) - highlights the fears on both sides of the Atlantic about the threat of biological terrorism. If a virus such as smallpox was released, the speed of modern communications could spread the infection all over the world in days…
http://news.independent.co.uk/world/americas/story.jsp?story=68020

London Sunday Times
April 22, 2001

French 'Weapons Grade' Exports To Iraq Blocked

By Stephen Grey, Brussels
Britain and America have accused France of mounting a billion-pound export drive to Iraq that they fear could help Saddam Hussein build weapons of mass destruction.
A confidential list of 6,000 contracts signed by Baghdad, obtained by The Sunday Times, reveals that French companies have agreed to supply Iraq with chemicals, refrigerated trucks and sophisticated pumps that British security sources believe could be used to make chemical weapons.

The planned exports - which under United Nations sanctions must be approved by the security council - also include fast computers and high-speed communications equipment that could be employed in making missiles.
British and American diplomats are blocking 117 French contracts worth £200m containing components thought to be of potential use in making missiles or chemical, nuclear or biological weapons. They are among 965 contracts being challenged from the 18-month period to February 2001. All but one challenge has been instigated by officials in London or Washington.
The exports are permitted under the "oil for food" programme set up in 1996 to allow Iraq to buy humanitarian aid from the proceeds of oil sales.
British security sources claim to have uncovered evidence that exports described as part of farming or school programmes were instead destined for the Iraqi military.
In February Britain blocked one such £200,000 contract claiming it contained high-technology valves that were "an essential component of ballistic missiles". The name and nationality of the exporting company were not clear.
Francis Maude, the shadow foreign secretary, accused Paris last week of ignoring the dangers of Iraqi rearmament. "The French are engaged in a massive export programme de-signed to enhance their economic power," he said. "But this should not be a signal for us to abandon these controls."
Of the £10 billion of contracts under consideration, the largest shares are accounted for by Egyptian companies (worth £1 billion) and by Russian firms (£975m). French exports, worth £972m, are viewed with the greatest concern, because many involve high technology.
The list shows £12m of contracts are with British companies as against £8m for American firms. According to the list, obtained in conjunction with Gulf States Newsletter, the contentious contracts include a £30,000 deal by Rohm & Haas France to supply Iraq with water treatment chemicals. It has been blocked as "dual use" - with military as well as civilian applications. The company says the chemicals are harmless.
Contracts involving other French companies that have been frozen include a £900,000 deal to supply chemicals for insecticide and a £4.6m deal for a sprinkler irrigation system.
Also affected are contracts worth £1m signed by Ensival, a Belgian pump manufacturer; they include one worth £20,000 that Britain claims could "provide Iraq with the ability to produce items of chemical weapons and of nuclear concern".
Ensival refused to comment last week, saying that "sensitive negotiations" were under way to have the suspensions lifted.
America is blocking a contract for "educational materials and equipment" from Elettronica Veneta in Italy on the grounds that it includes pressure controls and transducers that have "nuclear weapons applications".
Another £1.4m contract for transport equipment involving Energomachexport, a Russian firm, has been frozen because it contains detonators with "nuclear and missile potential". The company said there was "nothing nuclear or illegal in any way among our machines".
The dispute over exports coincides with a wider debate over whether sanctions on Iraq, imposed after its 1990 invasion of Kuwait, are still justified. "With infant mortality doubled in Iraq, these blockages have caused real suffering," said one French foreign ministry source.
Proceeds from authorised oil sales are paid into a UN account at a bank in Paris; 72% of the money is used to pay for imports and 25% goes towards compensating the victims of the invasion of Kuwait.

London Sunday Times
April 22, 2001

Israel Holds Bomb Scientist In Spy Scare

By Tony Allen-Mills, Washington

A senior Israeli military scientist who played an important role in the early development of Israel's nuclear weapons programme has been detained in Jerusalem.
Itzhak Yaakov, a retired brigadier-general and former chief of research and development for the Israeli Defence Force (IDF), is being questioned about his relationship with a Russian woman who may have had access to his work.
The Israeli authorities have imposed an injunction banning all reporting in Israel of proceedings against Yaakov, 75, who holds joint Israeli-American citizenship. He was detained by the defence ministry's special security department on March 28.

The case has stunned Yaakov's friends in America, where he lived and worked until last September as chairman of a computer hardware firm with laboratories in Israel and Russia.
The general was portrayed by friends last week as a "naive old man" who may have behaved carelessly but would never have deliberately betrayed his country.
A spokesman for the US State Department said Yaakov would be entitled to American consular assistance, but had not so far applied for it.
Yaakov's friends described the case as a "Kafkaesque" example of Israeli "paranoia". Ever since Mordechai Vanunu, an Israeli technician, leaked de-tails of the country's nuclear programme to The Sunday Times in 1986, the government has gone to extraordinary lengths to stifle discussion of nuclear issues.
Vanunu was jailed for 18 years after a female Mossad agent lured him from London to Rome, where he was kidnapped and taken to Israel for trial. He spent 11 years in solitary confinement and Israel has ignored campaigns for his release.
Yaakov is believed to have been closely involved in the nuclear programme, both in his military role and as the former chief scientist at the ministry for industry. But his friends point out that he retired from the IDF almost 25 years ago.
It is unclear when or where he met the Russian woman, who has not been publicly identified; nor is it known why the authorities took an interest in her. Yaakov is understood to have been divorced from his Israeli wife many years ago.
After a successful business career, he resigned last year as chairman of Constellation 3D Inc (C3D), a New York-based company developing advanced optical data storage products. His successor as chairman was Professor Eugene Levich, an astrophysicist who earned a masters degree from Moscow University in 1968.
Levich was also a senior visiting fellow at the department of theoretical physics at Magdalen College, Oxford, and is an expert in C3D's patented laser technologies, which apply layers of fluorescent materials on CD-Rom discs, vastly increasing their storage capabilities.
Shortly after leaving the company, Yaakov cashed in more than $1m worth of shares. The company's chief counsel, Craig Weiner, said yesterday that the general had resigned because of a "difference of vision - he's from the old school and we're a new technology company".
A source close to the company said the general's arrest was "completely unrelated" to C3D technologies.
Since the Vanunu case, little has leaked to the public about Israel's nuclear development, but three years ago Avner Cohen, an Israeli academic who studied in Chicago and Boston, wrote a book on the history of the weapons programme, entitled Israel and the Bomb.
Cohen claimed that his work contained no classified secrets nor new information, but Israeli censors banned it anyway. It was eventually published in America.
Two weeks before Yaakov's arrest, Cohen returned to Jerusalem to speak at an academic conference. He told reporters that he had been visited by police and security officials and interrogated for 50 hours since his return. It is not known if there is a link between Cohen's book and Yaakov's arrest.
Although most Israelis take it for granted that their country is nuclear-capable, it has always refused to confirm or deny any activities involving its Dimona reactor in the Negev desert.
For Yaakov's friends, it is hard to imagine how a 75-year-old man who has not been associated with military secrets since the 1970s can have compromised national security, whether or not his friend was a Moscow Mata Hari. And far from stifling debate, the government's injunction is fanning ever wilder rumours.

Los Angeles Times
April 22, 2001
Pg. M2

Suppose They Gave A War And Nobody Knew

Consider Iraq, with its commitment to biological weapons. Might such a nation wish to strike anonymously by spreading an economically devastating disease?

By Charles Duelfer

WASHINGTON -- Could the United States be at war and not know it? The current outbreak of foot-and-mouth disease in the United Kingdom makes one wonder. Not about Britain's plight specifically: There's nothing to suggest that the epidemic there is an act of war. But consider how quickly and easily it has spread. Then consider a regime like Iraq's, which has demonstrated a commitment to developing biological weapons. Might such a nation find it advantageous to strike anonymously and biologically by spreading an economically devastating disease or a slow-acting toxin?

This is not an abstract question. The Iraqi regime insists that the economic sanctions imposed on it are nothing less than a genocidal attack by the United States and the United Kingdom. The regime has said it is still bravely fighting the Persian Gulf War, and that it will respond to the plight of the Palestinians. It is easy to dismiss these statements as pure bluster.

But let's remember that Iraq developed significant weapons capabilities and has a track record of using them. Iraq acknowledged using 101,000 chemical munitions in its war with Iran. The regime employed chemical weapons and possibly biological ones against Iraqi Kurds in the north. Iraq acknowledges that it conducted extensive research and produced a range of biological weapons and agents. Among the agents known to have been loaded into warheads are aflatoxin, a fungal toxin that can cause liver cancer, and wheat-cover smut, which destroys grain crops. Neither of these is a traditional weapon. Neither causes immediate death or the incapacitation of an enemy army. Their ultimate devastating effects are long term and difficult to trace, which could make them particularly appealing to a rogue nation wishing to avoid retaliation.

As a U.N. weapons inspector, I and others on the inspection team sent to Baghdad tried repeatedly to get the regime to explain its intentions for biological weapons. In September 1995, during a late night meeting with Iraqi ministers and generals, the Iraqis provided me with long explanations and a few presidential documents that raised more questions than they answered. Our experts tried to determine the ultimate fate of these programs, but were stonewalled. Still, we know that Iraqi researchers considered combining agents in various ways to either enhance effects or conceal intent. We know they looked into mixing tear gas with aflatoxin. Iraq has not explained why it conducted such experiments.

However, if a regime wished to conceal a biological attack, what better way than this? Victims would suffer the short-term effects of inhaling tear gas and would assume that this was the totality of the attack: Subsequent cancers would not be linked to the prior event. And if a slow-developing disease can't be linked to the event that triggered it, how can a country prevent such attacks? How can it respond?

Science may be able to address part of this problem. Subtle differences in varieties of biological agents can be analyzed and traced to certain regions. Other effects may have signatures that can be observed in victims. Christine Gosden, a professor of medical genetics at the University of Liverpool, has been conducting a program of research and humanitarian assistance in the northern regions of Iraq, where the population and environment may have been subjected to biological weapons, in addition to chemical ones.

The long-term genetic, health and environmental effects of these attacks are significant. Gosden's early work is beginning to suggest that it may be possible to trace discernible genetic effects back to the specific agents that caused them. The evidence suggests that Saddam Hussein's army used more than simply nerve agent and mustard gas against the Kurds. This kind of analysis could be invaluable in confirming and tracing chemical and biological attacks.

But it still won't be easy. Let's suppose that Midwestern farmers suddenly experience a damaging blight of wheat-cover smut. This might be an attack from Mother Nature. But it might also be a more sinister attack, one from Iraq or some other nation with a beef against the United States, the last superpower. Today, it would not be easy to say which.

Charles Duelfer is a guest scholar at the Center for Strategic and International Studies and former deputy chairman of the U.N. Special Commission on Iraq.

NEWS OF THE WEEK

CHEMICAL WEAPONS

April 23, 2001

Volume 79, Number 17

CENEAR 79 17 pp. 9

ISSN 0009-2347 [Previous Story] [Next Story]

TREATY ASSESSED

Experts chart challenges, solutions to implementing chemical arms accord

LOIS EMBER

The first in-depth look at the first four years of implementing the Chemical Weapons Convention reveals few successes, several failures, and some sobering trends.

"It's a very mixed picture with some encouraging developments, but overall the balance is negative," says Jonathan B. Tucker, editor of the study to be released this week by the Monterey Institute of International Studies. "There are a number of disturbing trends that, if not corrected, could seriously undermine the treaty as an instrument of chemical disarmament and nonproliferation."…

http://pubs.acs.org/cen/topstory/7917/7917notw1.html

NEWS OF THE WEEK

BIOLOGICAL WEAPONS

April 23, 2001
Volume 79, Number 17
CENEAR 79 17 pp. 9
ISSN 0009-2347 [Previous Story] [Next Story]

U.S. Nixes Efforts To Strengthen Treaty

LOIS EMBER

C&EN has learned that the Bush Administration has rejected the latest draft of a verification protocol intended to strengthen the Biological Weapons Convention (BWC). The draft, a compromise document nine years in the making, is supported by U.S. allies. Publicly, State Department officials maintain that the draft protocol is still undergoing high-level policy review. But stunned by ally reaction to U.S. withdrawal from the Kyoto protocol on global warming, U.S. officials are searching for a diplomatic way of announcing the rejection, possibly--but not likely--at a multilateral negotiating session this week. More likely, arms control experts think the U.S. will be pressured to make its decision public at the July negotiating session, the last before the BWC review conference in November when negotiators have to report progress. U.S. rejection may not scuttle future protocol efforts but will likely shift them into low gear.

Aviation Week & Space Technology
April 23, 2001
Pg. 31

Washington Outlook

Edited by James R. Asker

Report Cards

Pentagon apparatchiks are busy completing at least three major reports. The Defense Science Board is mulling precision targeting. Watch for it to recommend an acquisition program for a small-diameter bomb (once known as "the small smart bomb"). That would be a 6-in.-dia. weapon to beef up the firepower of stealth aircraft, which must carry ordnance internally. The board is also pondering how to negate proliferation of deeply buried targets in Iran, Iraq, Libya and North Korea. Finally, the Defense Dept. intends to report to Congress on May 1 about what to do regarding space-based radar now that the Discoverer 2 project is dead. The options include doing nothing, carrying out demonstration projects within five or eight years and two classified proposals.

Also on May Day, the Pentagon is expected to brief Congress on a study that addresses whether the Defense Dept. should begin advanced development of unmanned combat air vehicles by 2010. Air Force officials say the service would support accelerating UCAV programs with more money to meet the deadline and insist there are no technical

barriers. However, industry officials say the report is awful, because it argues the work can't be completed in time to meet such an aggressive target date.

Washingtonpost.com
April 23, 2001
Dot.Mil

New Nukes

By William M. Arkin, Special to washingtonpost.com

The Pentagon is now daring to utter words that were suppressed during the Clinton years: new nukes.

Air Force Maj. Gen. Franklin J. "Judd" Blaisdell revealed at a Capitol Hill seminar on April 6 that exploration of a new "Minuteman IV" intercontinental ballistic missile has begun. Meanwhile, the Navy is calculating the longevity of its own submarine missiles and the need for a Trident III.

With a Congressionally mandated nuclear posture review, and a nuclear "study" constituted by Secretary of Defense Donald Rumsfeld barely beginning, one might think this talk signaled the ascendancy of nuclear forces in the U.S. arsenal. In fact, these blasts of honesty merely reflect the reality that if the United States is going to possess nuclear weapons in the future, current systems will eventually have to be replaced.

But some zealots are taking the opportunity to dust off proposals to develop "mini-nukes" for Third World combat. These advocates misread the Bush Pentagon and underestimate the degree to which their new found candor comes at a price. The military services are not likely to support spending lots of money on nuclear weapons because it will likely come out of their conventional weapons budgets.

Stagnation as Policy

The Clinton Pentagon conducted in its own nuclear posture review in 1994, concluding that they believed nuclear weapons would likely be with us forever. Thus the basic design of forces remained untouched, and a "hedge" force was built in reserve to ensure growth and resurgence were U.S.- Russian relations to sour.

Criticism of this de facto policy of nuclear stagnation mounted from all directions. Arms control advocates decried the absence of reductions and the lack of vision. Nuclear advocates denounced the contradiction of an avowed devotion to nuclear weapons while suppressing research and development of new weapons. But none of the flak had much impact.

Clinton's policy brilliantly turned nuclear weapons into a non-issue, though not necessarily by design. The American public largely forgot about nuclear weapons, at least American ones. And nuclear issues were more and more segregated, even within the U.S. military.

The Air Force, as the service most associated with nukes, has been most affected. The dominating days of the nuclear oriented Strategic Air Command are over. SAC was disestablished in 1991, replaced by U.S. Strategic Command (STRATCOM), a unified command of all the services. Today, STRATCOM lives or dies by nuclear weapons. The Air Force, on the other hand, is almost completely oriented towards warfare ala Iraq and Yugoslavia, and thus has a greater stake in denuclearization.

If some in the Air Force had their way, the hallowed design of the nuclear "triad," the force of land-based intercontinental missiles, strategic submarines, and heavy bombers which have been the core of U.S. nuclear forces since the 1960's, would get an update. B-1, B-2, and B-52 heavy bombers, which have shown their conventional military relevance in the Gulf War and Yugoslavia, would be unshackled from nuclear responsibilities.

According to officers on the air staff in the Pentagon, the new triad would include land- and submarine-based nuclear missiles as the first "leg," with missile defenses and non-nuclear forces as the second and third legs. New ways would be found to incorporate bombers armed with precision guided weapons, future "directed energy" weapons, and cyber-warfare techniques into the non-nuclear leg.

Resistance Ahead

Back in February, when about 60 nuclear specialists and contractors met in Crystal City, Virginia, just blocks from the Pentagon to kick off the Air Forces preparations for a nuclear posture review, there was much discussion about whether such radical redesigns were really going to happen.

Even representatives of Space Command, where there is a growing constituency for space weapons, did not use use the word "nuclear." "Nukes are not considered a usable viable weapon by anyone anymore," says a retired Air Force officer working under contract with Space Command. Various laboratory representatives did attend the meeting to market their new "mini-nuke," a low-yield nuclear weapon intended to "deter" rogue nation use of chemical or

biological weapons. Their efforts were notable because the pitch went against the now-dominant view that nuclear weapons should be further reduced in number and prominence.
Many arms control advocates are expressing alarm that the Bush team is pushing nuclear renewal and mini-nukes. But Dr. Steven A. Maaranen, a Los Alamos laboratory political scientist who has been appointed chair of Donald Rumsfeld's nuclear study, has consistently written about and espoused the view of the importance of conventional forces.
"If the United States pursues a course of action that requires some continuing reliance on nuclear weapons," Maaranen wrote in a National Research Council study in 1997, "[it] should do its utmost to retain an adequate conventional force posture and superior conventional force technology." The United States should try to place nuclear weapons in the background, Maaranen said, adding that "few would disagree that conventional forces will play a greater part in deterrence in the future."
In a talk given at Los Alamos last December, Maaranen again expressed approval for the "silent role" nuclear weapons have assumed since the end of the Cold War, saying that the threat posed by North Korea and Iran has been overstated. This is not the kind of argument that is used to justify the development of mini-nukes.
Given the cost of the Bush administration's coveted missile defense system, hundreds of billions of dollars in nuclear expenses looms over the horizon. The "bill payer" for missile defenses and nuclear renewal, Air Force officers lament, will be conventional military capabilities. In that, nuclear advocates will face strong opposition from the new dominant thinkers in the military services.

Inside The Navy
April 23, 2001
Pg. 1

Navy Wants To Counter Cruise Missiles 200 Miles Away From Ships

The Navy is pushing hard for funding in the 2001 Quadrennial Defense Review of an advanced missile and upgrades to E-2C aircraft that would enable ships to shoot down incoming cruise missiles at distances of up to 200 miles, far more than a single ship is able to do now.
During a briefing with reporters last week that included a laundry list of programs to which the Navy would devote extra money if provided the funds, a service official said the Navy wants to field an over-the-horizon surface-to-air cruise missile by fiscal year 2010 or 2012. The ability to guide a ship-fired version of a Standard Missile onto a fast-moving target hinges on the missile receiving targeting data from an airborne sensor, in this case envisioned as an enhanced E-2C Hawkeye.
The service official said adding the Radar Modernization Program (RMP) to the E-2C will cost about $2.5 billion, and developing and producing a new version of Raytheon's Standard Missile will add about another $1 billion. Despite the substantial cost of making it happen, though, the official said the Navy is seriously interested in the program and is lobbying for funding during Navy program and budget reviews, and the QDR.
The E-2C RMP has been in the works for several years but has yet to be robustly funded. In addition to the Cooperative Engagement Capability going on all new Hawkeyes, those in the modernization program would get a new radar that replaces the current APS-145 and enables them to track targets over land and in cluttered littoral environments. E-2Cs, the Navy's primary early-warning planes, now can track targets only over open water, which precludes their use in helping a ship-launched missile hone in on an enemy's missile as it cruises just over the earth's surface or over close-to-shore littoral areas.
The Navy is investing hundreds of millions of dollars in programs to strike land-based targets from sea, including the Tactical Tomahawk and Land Attack Standard Missile, and its Standard Missiles can engage ballistic missiles at great distances. In addition, Navy ships can take out anti-ship cruise missiles, but only once they crest the horizon and head toward a ship, which gives operators only a few critical seconds to lock-in on them and deliver a counter missile.
That's where the over-the-horizon missile comes in. The Navy official said using Navy ships to attack cruise missiles up to 200 miles away would entail drastic changes to the fleet's concept of operations, and it could free up other Aegis-equipped ships to perform missions other than defending themselves and their sister ships against cruise missiles. One possible new mission for some of the ships is an enhanced role in ballistic missile defense, which,

depending on the Bush administration's decisions on missile defense, could become a much more prominent mission area for the sea service.
John Pike, director of the nonprofit national security think tank GlobalSecurity.org, said extending ships' ability to defend against cruise missiles "doesn't take any great leap of imagination," given the service's zest for CEC and farther-reaching defenses.
"It sounds like a natural extension of Cooperative Engagement Capability," he said, adding that in theory it could help the service extend the "bubble" of protection now offered to ships.
Traditionally, Pike said, the Navy has focused on getting close to land targets so its ships can shoot "the archer rather than the arrow" and knock out launch sites before they have a chance to release missiles. The concept of turning more attention to hitting missiles while in flight "has no obvious holes" in it, Pike said.
In addition to the over-the-horizon missile and development of the RMP for the E-2Cs, the Navy official said the service would like to either speed up or begin development of the following programs, if extra money is provided. He said the Navy has briefed the proposals to members of the secretary of defense's staff and other Pentagon officials when asked how the service would spend several extra billion dollars if the money was not earmarked for ship or aircraft purchases:
* The Phalanx Close-in Weapon System Block 1B. It will cost about $400 million to modify every ship's CIWS mount, and the program could be sped up with extra money in the near term, the official said;
* The Rolling Airframe Missile, Block I, whose full operational capability could be accelerated by three years to FY-07;
* The Nulka ship-launched decoy system;
* Surface ship defenses against torpedoes;
* A special access surface program that is classified and about which details were not made available;
* The Advanced Deployable System, an undersea network of acoustic sensors to detect enemy submarines. The official said it could be accelerated by two years;
* The Acoustic Rapid Commercial-off-the-shelf Insertion (ARCI) program for subs, which the official said could be accelerated by four years with additional funding;
* An advanced, multimission unmanned undersea vehicle that can carry modular payloads;
* The Advanced Land Attack Missile, which the official said is "clearly in the air" and a "jump ball" in terms of is funding status;
* Tactical Tomahawk, which is funded but could be bought at a more rapid rate;
* The conversion of SSBN Ohio-class submarines to the new SSGN land-attack submarines, if the Pentagon decides to pursue that program;
* More F/A-18E/F Super Hornets could be bought to fill an inventory gap until the Joint Strike Fighter arrives, and fielding of the plane's Active Electronically Scanned Array and Advanced Targeting Forward-looking Infrared Radar could be sped up;
* A replacement for the EA-6B now termed the Airborne Electronic Attack aircraft;
* A supersonic strike missile that reaches speed of Mach 3 and travels 500 nautical miles;
* Navy Area Theater Ballistic Missile Defense could reach initial operational capability in FY-04, and the Theater TBMD program could be funded for production and not just research and development, the official said.
The service's "wish list" totals about $10 billion, which the official said is not much money over several years when compared to the bills faced in shipbuilding and aircraft procurement.
-- Christian Bohmfalk

Washington Post
April 24, 2001
Pg. 21

Hard Times, Scary Choices In Russia

By Richard Morin and Claudia Deane
In the 1940s and '50s, Russia's 10 "nuclear cities" were places of relative privilege in the former Soviet Union. Scientists living in these isolated, nameless towns not found on any map were rewarded for their work on nuclear weapons development with good wages and access to scarce consumer goods.
That was then.

Now, six in 10 nuclear experts earn less than $50 per month, and roughly the same number have to moonlight to get by, according to a groundbreaking survey of 500 specialists working in the nuclear cities. The survey was commissioned by the Carnegie Endowment for International Peace.
"If you're a top manager at Los Alamos, you make about 100 times more than you make if you're a top manager in Russia," said Jon Wolfsthal, an associate in Carnegie's Non-Proliferation Project.
"Their economic hardship dramatically increases the risk that they will be forced to sell their skills or materials at hand to the highest bidder," Wolfsthal and Alexander Pikayev wrote in the report's introduction.
More than one in 10 experts said they would like to work outside Russia, and 6 percent said they would move "any place at all." What would they do once they got there? "What they do best, which is make weapons," Wolfsthal said.
Aside from the risk of secret-saturated scientists settling in dangerous places such as Iraq or North Korea, there is the problem of whether there would be anyone left to mind the nuclear store. Private business is proving to be an irresistible lure for many specialists, and migration to the nuclear cities is on the wane.
The report, authored by Russian sociologist Valentin Tikhonov, is available on Carnegie's Web site (www.ceip.org) and will be officially released in early May.

International Herald Tribune
April 25, 2001

Geneva Push On Biological Arms Accord

By Elizabeth Olson, International Herald Tribune
GENEVA -- An effort is under way to break a six-year deadlock in negotiations to create a global inspection system to detect and deter cheating on international agreements that outlaw biological weapons.
Tibor Toth, the Hungarian diplomat who is chairman of the talks, submitted a compromise draft as dozens of countries started three weeks of negotiations to thrash out the divisive details of any inspection regime. The proposal is aimed at getting agreement by November, when the countries that signed the 1972 Biological Weapons Convention are due to hold their fifth review conference in Geneva.
Some 143 countries, including the United States, have ratified the pact, which bans the development, production and stockpiling of bacteriological and toxic weapons. The four-page treaty was the first to ban a category of arms, but it included no safeguards against cheating.
Looming over the effort to get a verification scheme has been the threat that rogue states could use living organisms for widespread destruction. Iraq was found by a United Nations inspection team to have worked with a range of toxic agents, including anthrax and botulism.
Iraq and the former Soviet Union both signed the treaty. Moscow secretly made biological weapons until former President Boris Yeltsin made the program public in 1992 and pledged to end production. But germ-warfare research is suspected in a dozen countries, including China, Iran, Libya, North Korea and Syria. Israel, which has not signed the treaty, is also believed to have such research.
Last June, then-President Bill Clinton repeated the call he first made in his 1998 State of the Union address for a new policing mechanism, noting that "one of the greatest threats to American and global security is the danger that adversary nations or terrorist groups will obtain or use chemical or biological weapons."
But his administration's position was beset by conflict among departments, including the Pentagon, which was leery of "challenge" inspections for military installations. The Bush administration is reviewing the U.S. position on an inspection program, and diplomats here said no progress in the Geneva talks was likely until that was finished.
Conflicts tying up verification of biological weapons center on the scope and intrusiveness of on-site inspections, which the pharmaceutical and other industries have opposed as endangering their corporate secrets. Also at issue have been differences over technology transfer and export controls.
Over the last six years, negotiators have arrived at a 250-page draft, which has more than 1,000 brackets indicating points of disagreement. Mr. Toth's effort, which runs to more than 200 pages, would require states to declare the existence of some of their facilities engaged in biotechnology, and those could be inspected. His text also provides for investigations into suspected clandestine biological weapons programs and suspected use of biological weapons.

April 25, 2001

U.S. may miss deadline to destroy chemical weapon stockpiles

Associated Press

The United States lags far behind schedule in destruction of its chemical weapon stockpiles and will be unable to meet a 2007 deadline set by an international treaty, according to an internal Army memo.

The memo, made public Wednesday by the watchdog organization Chemical Weapons Working Group, said the United States could require up to 11 extra years to rid itself of all the weapons.

Marilyn Daughdrill, spokeswoman for the Army's Program Manager for Chemical Demilitarization, verified the memo's authenticity but said it represents a worst-case scenario.

Congress ordered the military to begin destroying America's 31,496 tons of nerve agents, mustard gas and other chemical weapons in 1986. In 1997, the Senate ratified the international Chemical Weapons Convention, which demands that all such weapons to be destroyed by 2007. Countries are allowed to seek five-year extensions.

A report last year by the General Accounting Office, the investigative arm of Congress, faulted the Army's management of the $15 billion chemical weapons destruction program. The GAO also found the United States probably would not meet the 2007 deadline.

Defense Daily
April 26, 2001
Pg. 7

Bush Mulls Near Term Aegis Components For Missile Defense

By Kerry Gildea

Defense Secretary Donald Rumsfeld recently briefed President Bush on a missile defense option that includes a naval component aimed at placing Aegis destroyers off the coast of South Korea, industry and congressional sources said.

Bush was presented with several options for proceeding with a comprehensive missile defense architecture, sources said. However, the final decision regarding these options is still up in the air, they added. An announcement on part, or all, of the missile defense plan is expected to surface within the next two weeks.

The comprehensive system is sure to have some level of allied participation and leave the door open for expanded sea- and space-based components in future architectures, sources said. Whether the naval component will be incorporated at this stage is still being decided, they added.

One naval option consists of two Aegis destroyers positioned up to 31 miles off the coast of Korea. The destroyers would be equipped with Raytheon's [RTNA/RTNB] Standard Missile.

Earlier this month, Raytheon officials told Defense Daily they had informed the Navy leadership that the Navy Theater Wide (NTW) system could be ready for a much earlier deployment if the administration decided to accelerate it for the missile defense plan (Defense Daily, April 11). Raytheon has incorporated special features in its Standard Missile-3 (SM-3) test missiles, which are being built for the NTW, so they could be easily deployed if the Pentagon leadership decides to use it sooner.

The NTW uses a SM-3 designed to provide an exoatmospheric, theater-wide defense against medium- and long-range ballistic missiles. The SM-3 has a lightweight exoatmospheric kill vehicle warhead nose cone.

The lower-tier Navy Area program uses Raytheon's Standard Missile-2 Block IVA. The SM-2 Block IVA is designed to provide defense against aircraft, cruise missiles and tactical ballistic missiles within the atmosphere. Some sources believe if the administration selects a near-term naval component for missile defense it may opt to use the SM-2 Block IVA, which has completed more of its testing program than the SM-3.

Under one option being considered, the SM-2 Block IVA would be used in conjunction with modified software that could destroy a boosting North Korean Taepo Dong ballistic missile. This system would use Linebacker engagement software and the current Lockheed Martin [LMT] Aegis Spy IB radar battle management system, sources said.
Rear Adm. Rodney Rempt, assistant chief of naval operations for missile defense and director of surface warfare, told reporters in March that the Pentagon should consider placing early warning radar systems on ships to complement any ground-based sensors for missile defense (Defense Daily, March 7). Though the Navy supports putting a land-based radar site at Shemya, Alaska, for missile defense, Rempt said the service also thinks it makes sense to put radars aboard ships.

Stars and Stripes Omnimedia
April 26, 2001

Smallpox Vaccine Purchase Spurs Homeland Defense Discussion

By Jim Geraghty, Stars and Stripes Pentagon Correspondent
(Stars and Stripes Omnimedia is a privately owned news source and is in no way affiliated with the U.S. government.)
Fears of bio-terrorism have prompted the U.S. government to order 40 million doses of vaccine against smallpox--a disease supposedly eradicated more than 20 years ago. The federal Centers for Disease Control and Prevention awarded a $343 million contract to Peptide Therapeutics, a small British biotechnology company, in September.
The CDC plans to hold the new vaccine in reserve, to be used only for the control of smallpox in the event of a confirmed case of infection. Delivery to CDC headquarters in Atlanta is slated to begin in mid-2004.
Over the past 40 years, there have been 121 incidents worldwide involving biological agents. The most devastating and high-profile incident was the use of sarin nerve gas six years ago in an attack by a Japanese terrorist organization in which 12 people were killed and 5,000 injured.

A 'Crowd Disease'

Smallpox is considered a "crowd disease" because it only spreads between humans, and requires a large, dense population in order to survive. Like other such diseases, smallpox spreads outward from urban areas into non-immune communities until it eventually reaches areas where the population is too thin to allow it to spread further. Once smallpox runs out of new host bodies, it dies out. But if a virus like smallpox were released and a quarantine not put into place quickly, the speed of modern travel and communications could spread the infection throughout the world in days.
Smallpox is spread by "droplet infection," the droplets being body fluids, such as the moisture which escapes when a person sneezes. A single human sneeze releases up to 5,000 droplets, each with the potential to carry viruses.
Smallpox can be transmitted by other forms of physical contact. The smallpox virus remains active on corpses for up to three weeks, and thus can spread from a dead to a living host though body fluids. If the smallpox virus is deposited onto warm, damp items such as clothing or blankets, it can remain infectious for up to a year.

'Non-Executive Planning'

Prevention of chemical or biological attacks and responses to them were the focus of the Homeland Defense conference held Thursday in Washington, D.C. The recent CDC deal with Peptide Therapeutics was addressed by Dr. Anna Johnson-Winegar, deputy assistant secretary of defense for chemical and biological defense.
"When I asked them how they decided on 40 million doses of smallpox vaccine, and how did they get the number, they responded, 'Well, that's all the money we had," Johnson-Winegar said. "That's the sort of non-executive type of planning that we're not used to at DoD."
Much of the conference concerned the complications of coordinating military and civilian responses. Rep. Curt Weldon, R-Penn., a member of the House Armed Services Committee, criticized members of the emergency response team equipment industry for not taking a more active role in informing and persuading Congress of the seriousness of the threat.
"You've got to be there to fight with us, not just be there to take the dollars," Weldon said. "If the industry groups would get engaged, it would have the same clout as the law enforcement community."
Johnson-Winegar brought up discussions with her military counterparts in Israel, who decided several years ago to provide a mask for every citizen.

"It represented a major investment for their government," she said. "I asked an Israeli general, 'How do you enforce this?' He said to me very clearly, 'We have had Scud missiles land right here in Tel Aviv. We know the potential is there. These people are motivated.'" Johnson-Winegar pointed out that American citizens have a different mindset.

Cooperation Lacking

Weldon said he believes there is not enough cooperation between the Defense Department and civilian agencies, but that the situation is improving. He said a significant issue is funding for civilian agencies.

"The military on its own has become more responsive to the local fire and EMS community, so they're moving in the right direction," Weldon told The Stars and Stripes. "Thank goodness we have enlightened military leaders who looked at that role on their own. We at the federal level need to give the resources to the locals, so that when the military goes in and does training or provides their expertise, the locals have the funds to back it up with the long-term resources they need."

"It's like the D.C. Fire Department--they can't even afford boots for their firefighters. You give them equipment for weapons of mass destruction, but their budget doesn't allow them to maintain what they already have."

Inside The Pentagon
April 26, 2001
Pg. 1

Chemical Reaction

Sen. Mitch McConnell (R-KY) said during a Senate Appropriations defense subcommittee hearing yesterday that Defense Secretary Donald Rumsfeld should include an "honest evaluation" of the chemical demilitarization program in his review of Pentagon programs and policies.

"There is no question in my mind that the need for improved management and accountability will become crystal clear," he said.

The hearing convened to discuss the state of the Army-led program charged with destroying the nation's chemical weapons stockpile by April 2007.

Citing the program's struggles with cost and schedule overruns, McConnell said, "If General Washington had run the Continental Army the way our [chem demil] efforts have been managed, it is an absolute certainty that we would still be sipping tea and crumpets."

Inside The Pentagon
April 26, 2001
Pg. 1

Bioport Prepares To Address FDA's Anthrax Vaccine Plant Concerns

BioPort, the Pentagon's sole supplier of anthrax vaccine, expects to submit a package of information by late summer or early fall to the Food and Drug Administration addressing concerns raised by regulators about the company's renovated Lansing, MI, manufacturing plant, according to Bob Kramer, the company's president and chief operating officer.

The submission, called an amended biologics license application (BLA) supplement, sets in motion a process that could lead to FDA approval of the Lansing facility later this year. The Defense Department has said it will immunize service members against anthrax only with FDA-approved vaccine.

"We will submit an amended BLA supplement to the FDA that will include everything that we committed to correct and respond to" from FDA inspections conducted in November 1999 and October 2000, Kramer told Inside the Pentagon in an April 16 interview.

Kramer declined to offer an opinion as to when FDA would conclude its review of the BioPort submission. "They will go through their normal review process," he said. "It could be a matter of months; it could take six months. It's

completely up to them to go through their own internal review process, and they will have to do another pre-approval inspection" of the BioPort plant.

Industry officials contacted last week also turned down requests to predict how quickly BioPort could get BLA approval. The FDA at press time (April 25) declined to comment on how long the approval process would take once data is obtained from BioPort.

BioPort purchased the Lansing, MI, plant from the state of Michigan in 1998; the state had previously produced FDA-licensed vaccine there for military use. FDA inspections -- in 1993, 1994, 1995 and 1996 -- revealed "significant deviations" from agency standards at the facility, and another, in 1998, uncovered stability, sterility and validation problems with the vaccine production process (ITP, March 26, 1998, p1).

Because of those problems, and to expand production capacity after the Defense Department announced plans for a mandatory anthrax vaccination program in December 1997, the Lansing plant was renovated. The project kicked off another round of inspections by FDA officials to make sure vaccine produced there meets standards for safety, sterility and potency. Approval of the company's BLA submission depends on addressing concerns raised in those inspections.

A pre-approval inspection took place in 1999 between Nov. 15 and 23. In a "483" report that summarized results of that inspection, FDA officials said the manufacturing process for making anthrax vaccine "is not validated" (ITP, Dec. 16, 1999, p1).

Last October, the plant was inspected by the FDA's Team Biologics, a group of investigators who specialize in reviewing good manufacturing practices for vaccine manufacturers. The team's subsequent 483 report, dated Oct. 26, 2000, identified problems with the company's filling suite and questioned the sterility of products filled there, among other things (ITP, Nov. 16, 2000, p3). The filling suite was not part of the renovation to the anthrax vaccine production facility.

In the meantime, DOD was faced with a shortage of vaccine, which led Pentagon officials to dramatically scale back the vaccination program in July. Vaccine administration was suspended for all troops except those deploying for an extended time to high-risk regions (ITP, July 20, 2000, p1). Then-Deputy Defense Secretary Rudy de Leon expressed hope at the time that the program would be back on track by January 2001.

Last November, a BioPort source told ITP that the company expects to garner FDA approval for anthrax vaccine as early as this month. "We're still on track to get FDA approval in the second quarter of calendar year 2001," the source said. "Once approved, production could begin within a matter of weeks."

Typically, it takes 18 to 24 months to approve a BLA, company officials say. BioPort submitted its original BLA on Aug. 31, 1999.

But company officials reassessed how long it will take to get BLA approval in the wake of the Team Biologics inspection.

"Back a year ago, certainly before the Team Biologics inspection in October, we were anticipating that we would be able to submit everything to the FDA identified in the November 1999 inspection . . . in the first part of this year and potentially have the approval sometime in the second quarter of this year," Kramer said.

After last year's inspection, the company focused on addressing concerns with the filling suite, which meant a delay in when the company could fully address all the concerns raised in plant inspections, he added.

The thorniest issue raised in the November 1999 inspection was the need to validate the process for making anthrax vaccine, company officials say. In the past few years, FDA has refocused its efforts on ensuring good manufacturing practices among vaccine producers through process validation. The goal has been to place vaccine makers under the same kind of scrutiny -- for good manufacturing practices -- traditionally reserved for drug makers.

"The FDA realized that not just BioPort, but all other vaccine manufacturers, have never gone through extensive process validation," Kramer said. "They have done that with drug manufacturers but not vaccine manufacturers. So what they asked us to do as a result of the November [1999 pre-approval inspection] was to conduct process validation, which to their way of thinking, and we agree, ensures consistency of manufacturing batch after batch, dose after dose."

Going through process validation is time-consuming, Kramer says, because "of our fermentation process. Normally, from beginning to end it will take approximately four-and-a-half months to manufacture a lot of product. And because of the lengthy manufacturing process, when we were instructed to conduct process validation on a step-by-step basis, it takes time."

Process validation requires more than 30 protocols and technical studies that must be completed in a specific order. "We have essentially completed all the 30 protocols and technical studies; we have successfully executed all of those requirements to conduct process validation," according to Kramer. "We're now in the process of packaging all the data to support that . . . in order to submit to the FDA later this summer."

BioPort plans to address concerns raised last year about its filling suite by outsourcing the work, Kramer said. The company's filling suite is an "older facility and does not have state-of-the-art equipment," he added.

"In the last two-and-a-half years, we have identified the need to have a redundant filling capability in addition to our own facility to have a second method of filling our product for risk mitigation," Kramer said. "And we had established a strategy a couple of years ago to have a contract filler [as] the redundant provider of filling capacity for BioPort.

"With the Team Biologics inspection in October 2000, and the questionable sterility assurance in our filling facility, we decided to basically decommission our filling facility and aggressively pursue a contract filler as the primary filling solution for our product," he continued.

"It's not that we will not do any more work" on the BioPort filling suite, Kramer added. "We will not fill product in that facility until such time as we have completely addressed all FDA compliance issues."

BioPort has selected and signed a contract with another company to serve as BioPort's contract filler, but Kramer would not divulge the name of that company at this time. A company spokeswoman told ITP this week that BioPort wants to bring its new contractor up to speed on public affairs issues associated with such a high-profile contract. BioPort could announce the contract award next week.

Kramer did say that the contract filler is not located in Lansing. In addition, the contractor is "an independent, third-party manufacturer, and they have their own dedicated facility that we will be sending our product to in bulk form. . . . So they will not be using our facility; we will be sending product to their facility," he said.

"We are in the process of qualifying or validating their capability to fill our product," Kramer said. "It's an extensive process, as all FDA compliance requirements are, and we are aggressively working with this third party to qualify them [as] our filler."

The steps taken to get BioPort's BLA approved are separate from the FDA's process for qualifying the contract filler, the spokeswoman said.

While working on addressing the agency's concerns about the production plant, BioPort is making anthrax vaccine under guidelines of studies "we went through for process validation," she said last week.

"The purpose of that is . . . to be able to qualify and validate our contract filler and [to make sure] the product will be used for [military] purposes as soon as we get FDA approval," according to Kramer. "When approval comes, we won't have to wait four-and-a-half months to then have product."

But critics of the Pentagon's anthrax vaccine program are less confident than Kramer about the prospects of FDA approving BioPort's BLA for the Lansing plant. Congressional sources who oppose the program say concerns linger about BioPort potency tests using guinea pigs, and getting FDA approval for the contract filler just adds another obstacle to winning full FDA approval for anthrax vaccine production.

BioPort "continues to find more problems than they solve," one of the congressional sources said last week. "They're chasing the time line for approval over the horizon. I don't think they'll ever even catch it."

In an April 17 interview, Lawrence Halloran, staff director and counsel for the House Government Reform national security, veterans affairs and international relations subcommittee, said the main problem is that BioPort is trying to put an antiquated, 1960s to 1970s-era manufacturing process through a modern regulatory approval process. "It won't work," he said. "It's like trying to put an Edsel through a modern emissions inspection."

The subcommittee's chairman, Rep. Christopher Shays (R-CT), is one of the most vocal opponents of the DOD anthrax vaccine program. Last year, he led a group of lawmakers who called for suspending the mandatory program (ITP, June 1, 2000, p1).

The BioPort spokeswoman expressed confidence this week that issues surrounding potency tests with guinea pigs are being resolved. "We acknowledge we've had issues, but we're on target to submit in May the data FDA needs to look over the methodology for using [guinea pigs] for potency tests," she said.

The Pentagon's use of anthrax vaccine has been attacked on a number of fronts. Some critics of the vaccination program argue that the vaccine -- produced before the Lansing plant was renovated -- is unsafe and has caused widespread adverse reactions among service members. Others say the vaccine is not supported by enough peer-reviewed scientific literature to justify its use in the services (ITP, April 13, 2000, p1). Some lawmakers say the anthrax program has hurt DOD recruiting and retention efforts and expressed concerns about the legal basis for mandatory vaccinations (ITP, April 20, 2000, p1).

On the other hand, DOD maintains that the anthrax vaccine, licensed by the FDA for decades, is both safe and effective. Pentagon officials also say it is one of the most thoroughly studied in history.

Last May, Charles Cragin, then-principal deputy assistant defense secretary for reserve affairs, said that of all those who have taken the vaccine, only 31 have required hospitalization. And of those 31, only six have been determined by an independent panel of experts convened by the U.S. Department of Health and Human Services to have

illnesses caused by the anthrax vaccination. The six service members were granted waivers from receiving future anthrax vaccinations, he said.
-- Keith J. Costa

Washington Times
April 27, 2001

Inside The Ring

By Bill Gertz and Rowan Scarborough

North Korea-Iran spat

New shipments of North Korean missile components and technology are being held up -- but not because of any covert U.S. counter-proliferation efforts.

U.S. intelligence officials said a dispute broke out over a letter of credit between Iran´s missile-building defense organization and the North Korean government. The disagreement was detected by U.S. intelligence agencies in the past two weeks.

North Korea sent its last shipment of missile parts by Il-76 transport planes in late February from Sunan International Airport north of the North Korean capital of Pyongyang. The earlier shipment, first disclosed by The Washington Times on April 18, included documents and missile components that U.S. intelligence officials believe are intended for Iran´s medium-range missile program.

Washington Post
April 27, 2001
Pg. 13

Bush To Push Missile Shield, Nuclear Arms Cuts Next Week

By Thomas E. Ricks and Mike Allen, Washington Post Staff Writers

President Bush plans a major speech next week in which he will announce plans for a missile defense system but try to reassure allies by tying the shield's deployment to reductions in the U.S. nuclear arsenal, officials said yesterday.

The officials said Bush's speech will hew to his campaign promise to develop a missile defense to "guard against attack and blackmail." Bush also had promised to maintain the "lowest possible number" of nuclear weapons and destroy the rest.

Bush has mentioned the missile shield only in passing since taking office, and the budget he released earlier this month did not earmark money for it. The speech will renew his commitment to the plan but acknowledge the objections from Europe and Russia about his plans.

Overseas leaders have complained that the system could relaunch the arms race by destroying the framework for nuclear control. In Europe, where Bush has infuriated leaders with his rejection of the Kyoto global warming treaty, officials fear that deployment of an anti-missile shield would sour their ties with Russia.

Development of a missile defense eventually would become a violation of the 1972 Anti-Ballistic Missile Treaty, which bans such systems, and some administration officials say privately that it is inevitable that the United States will abrogate that treaty.

The president isn't expected to take that step in his speech, advisers said. Before the administration announces that it is breaking out of the ABM Treaty, it wants to devote major efforts to bringing along major U.S. allies.

There are practical reasons for that diplomatic work. To operate as conceived, a missile defense system would require the United States to operate huge radar stations in Britain and Greenland.

A Pentagon official said the two-pronged approach of tying the missile defense system to arms reductions is intended in part to assuage Russian concerns about the shield.

The president is expected to announce steps to broaden the Pentagon effort to develop missile defenses beyond the Clinton administration's emphasis on intercepting missiles in space, when they are midway through their flight, another administration official said.

The most significant in the short term is likely to be spending on ways of knocking down missiles soon after they are launched. This area of missile defense, called "boost-phase intercept," is likely especially to benefit the Navy, which operates sophisticated Aegis warships that can track hundreds of aircraft and missiles simultaneously.
In addition, Bush is expected to say he wants to increase research and development spending on "terminal" defenses, systems that knock down missiles after they have reentered the atmosphere.
Defense experts call this varied approach a "layered defense" system. Its advantage is that it offers several chances to intercept an enemy missile. One of its major disadvantages is that it is expensive. For example, just the Aegis warships in the boost-phase intercept part of the system cost about $1 billion apiece.

New York Times
April 27, 2001

Chemical Weapons Ban May Suffer For Lack Of Dues From Treaty's Parties

By Judith Miller

The international organization charged with verifying the 1997 treaty that bans chemical weapons is in debt and may be forced to cut inspections in half this year because the United States and other key parties to the treaty have not paid their way, arms control experts said Wednesday.
Ron G. Manley, director of verification for the Organization for the Prohibition of Chemical Weapons, which is charged with implementing the treaty and ridding the world of chemical weapons, said in an interview that the United States, Russia and other member states were largely responsible for the financial crunch by failing to pay their annual assessments on time and failing to reimburse the group for inspections and other activities.
As a result, he said, the organization — which is based in The Hague, spends about $60 million a year and employs about 500 people — ran a deficit of $4 million in 2000, and expects a shortfall this year of $5.5 million.
Mr. Manley said that even with belt-tightening and other economies, the group would probably be able to conduct only 60 to 80 of the 140 inspections planned for this year.
Earlier predictions about the budget crisis were far more dire. In an internal memorandum in January, José M. Bustani, the organization's director general, warned that his group would only be able to conduct 25 inspections of chemical plants this year.
Mr. Manley discussed the budget crisis and other problems confronting the organization in an interview and at a conference Wednesday in Washington that debated the record of the treaty, which was circulated for signatures in 1993 and entered into force in 1997. The conference was sponsored by the American branch of Green Cross International, a nongovernmental group based in Geneva and headed by former Russian president Mikhail S. Gorbachev.
Meanwhile, a report on the chemical weapons treaty by the Monterey Institute of International Studies, scheduled to be released yesterday, concludes that while the treaty can claim "significant accomplishments" in recruiting new member states, identifying weapons stockpiles and beginning to destroy them, the United States, during the Clinton administration, undermined the treaty in several important ways.
Jonathan B. Tucker, the editor of the 72-page report, said that the treaty had yet to fulfill its promise "in large part because of a lack of U.S. leadership."
Analysts who contributed to the study agreed that the Clinton administration diluted the treaty by, among other things, creating unilateral exemptions to its terms and failing to demand inspections in countries like Iran, which it has accused of violating the treaty.
The previous administration, concluded Amy E. Smithson, a chemical weapons expert and senior associate at the Henry L. Stimson Center in Washington, "made a mockery" of the treaty by establishing what she called "a separate set of rules for the United States." For instance, Congress gave United States presidents the right to refuse an inspection on grounds that it could "pose a threat" to national security and provided that samples collected during inspections on American soil had to be analyzed by laboratories in the United States. Washington was also three years late in declaring a list of America's chemical factories that could be inspected, the authors noted.
The report criticizes Russia's implementation of the treaty as well. Alexander A. Pikayev, a scholar at the Carnegie Endowment's center in Moscow, concludes that even if Moscow finds enough money to fulfill its pledge to destroy the 40,000 metric tons of chemical weapons it admits to having produced, which Mr. Tucker calls the world's largest

stockpile, Russia might still be "unable to meet its obligations under the treaty." Because of its financial plight and delays in its chemical weapons destruction program, Russia missed the deadline to eliminate one percent of its chemical weapons stocks by April 29, 2000.
John D. Holum, the undersecretary of state for arms control in the Clinton administration, disagreed with the report's conclusions, saying the Clinton team had fought hard, if somewhat belatedly, for the treaty's ratification. The administration was forced to accept the unilateral exemptions to the inspection system to win ratification, he said. In response to the assertion of failing to pay dues on time, Mr. Holum said the United States angered most international organizations by paying dues not in January, when they are due, but at the beginning of the fiscal year some nine months later.
An official in the Bush administration who asked not to be identified said the administration strongly supports the Chemical Weapons Convention and its implementation.
The official — noting that the United States still pays the highest dues of the 143 states that have signed and ratified the treaty — said the administration was "working hard" to find money to reimburse the Organization for the Prohibition of Chemical Weapons for verification activities. He said that Congress had provided no money for this purpose in fiscal 1999 or fiscal 2000.
The official also noted that the administration had paid about two- thirds of its 2001 assessment. "It is not our intention to undermine this treaty," he said.

Business Week
May 7, 2001
International Outlook

Rogue States: Why Washington May Ease Sanctions

Should the U.S. overhaul or even lift economic sanctions on rogue states such as Iran, Libya, and Iraq? A major battle will take place in Washington in the coming months over just this issue.
The fight pits powerful interests such as the pro-Israeli lobby and the U.S. oil industry against each other. And it is sure to preoccupy the Bush Administration and Congress. The Administration is currently reviewing both U.S. energy needs and its policy on sanctions. Congress is expected to vote this summer on whether to renew the five-year-old Iran-Libya Sanctions Act, which penalizes U.S. and foreign companies that invest in the two countries' energy sectors. The law expires on Aug. 5. Meanwhile, because of eroding support, the U.N. is likely to revise its tough sanctions policy toward Iraq.
ALL BETS ARE OFF. The issue poses a dilemma for the Bush Administration. Vice-President Richard B. Cheney, former CEO of oil equipment giant Halliburton Co. (HAL), has long considered U.S. sanctions policy ineffective. Richard N. Haass, recently appointed chief of the policy planning office at the State Dept., has also called for gradually easing sanctions on Iran in exchange for better behavior.
But any Administration or congressional decision on sanctions will be tightly bound with the politics of the targeted countries. Iran is the most immediate problem. Presidential elections are scheduled there for June 8. President Mohammad Khatami, who has been fighting to introduce reforms in the Islamic Republic, hasn't yet announced his candidacy. If he runs and loses, all bets are off. But if he runs, wins, and strengthens his position, the U.S. would be in a better position to ease sanctions--especially if Khatami makes a conciliatory gesture such as renouncing terrorism. The American Israel Public Affairs Committee, a Washington-based lobby, would do its best to block such a shift in policy before a clear change in Iran's conduct, however.
Libya and Iraq are also troublesome. Tripoli has declined to pay damages for the infamous Pan Am 103 bombing, even though a Libyan was convicted for the incident. Saddam Hussein refuses to admit U.N. weapons inspectors to Iraq.
Even so, pressure from business is intensifying. "American farmers, workers, and companies have sacrificed without any progress toward U.S. foreign policy objectives," wrote Donald A. Deline, Halliburton's director of government affairs, to Senate Majority Leader Trent Lott (R-Miss.) on Apr. 18.
The reason business argues for an overhaul: massive leakage in the sanctions regime. In March, for example, Japan's state-owned aid bank ponied up 85% of the financing for a $3 billion oil deal with Iran, a move aimed at paving the way for rights to develop part of the country's Azadegan oil field. South Korea wants to bid on $5.5 billion in energy construction projects in Iran.

Although a review of sanctions policy is under way, Administration officials are reluctant to discuss how they plan to square their goals on energy and foreign policy. One way may be to move from broad prohibitions on trade to narrower curbs on items for building weapons of mass destruction such as nuclear technology. Secretary of State Colin L. Powell has proposed such "smart sanctions" for Iraq. Former National Security Adviser Robert C. McFarlane has advised the Administration that such an approach could also work for Iran and Libya. "I'm optimistic the sanctions regime will be changed," he says.

Signs are growing that the Bush Administration would like to go that way. But it will have to be prepared to take a lot of short-term heat for eventual economic gain.

By Stan Crock in Washington, with Chester Dawson in Tokyo

Inside The Air Force
April 27, 2001
Pg. 1

'Grim' State Of DOD Homeland Defense Requires New Budget Priorities

The Defense Department faces a daunting task in responding to a serious and growing homeland defense threat that demands greater resources and attention, the Defense Science Board asserts in a new report.

Nuclear weapons proliferation, cruise missiles, cyber-warfare, biological attacks and other "asymmetric" threats likely to be favored by adversaries require a greater Pentagon emphasis on homeland defense, the DSB contends. This requires layered, non-traditional protection -- and homeland defense funding should be increased even if it comes at the expense of other military systems and priorities, according to the report.

U.S. military dominance makes the nation a target for asymmetric attack, it adds, and there is no shortage of options for adversaries. "Biological, chemical, and information technologies are very inexpensive and widely available. The trend is toward lower cost, higher performance and even wider availability," the DSB determined.

Threats to U.S. interests can no longer be effectively addressed by concentrating on perimeter defenses, which were the focus during the Cold War, the report asserts. Accordingly, changes in the way DOD conducts and prioritizes defensive information operations, unconventional nuclear warfare defense, biological weapon defense and intelligence for civil support are needed, according the overview of the 2000 DSB summer study, "Protecting the Homeland," which was recently cleared for public release.

The overview is volume one of DSB's homeland defense report. Volume two outlines the threat and response to information warfare (see related story), while volumes three and four, detailing nuclear and biological threats and responses, have yet to be released.

Homeland threats are "different," states the DSB, which "sees a more fundamental need for the DOD and the Intelligence Community to restructure their investment balance. . . . Greater emphasis should be placed on these emerging threats to the homeland than is evident in today's budget allocation. The Department and the Intelligence Community must re-think this investment balance -- which is always hard in a large bureaucracy," the report states.

The board notes that in the fiscal year 2001 budget, roughly $264 billion was devoted to "deterring regional conflicts to protect allies, friends and American interests," while only $3 billion was allocated to protecting the "homeland against biological, chemical, information and unconventional nuclear attack."

Reprioritization is needed because homeland defense is not a mission that should simply be added to existing DOD responsibilities, an approach that would undervalue the threat, the task force states. Homeland threats "are equated in peoples' minds with 'terrorism,' and 'terrorism' is viewed more as an irritating, annoying mosquito bite than as a true threat to the homeland," it adds. "This is not the case."

Outlining the "gravity of the problem," the DSB says at least 20 nations are "developing tools to attack computer-based infrastructure." Meanwhile, "The Internet actually provides a superb command and control system, which was part of its original intent," the report continues. "The United States has become a relatively fragile, complex, interdependent society, which can lead to vulnerabilities that are not fully understood."

Further compounding the problem is DOD reliance on commercial telecommunications systems. The department "leases the vast majority of those services from private industry, which for economic reasons tend to use the most cost-effective option rather than the most secure," the report sates.

DOD has not prioritized information defenses properly, the DSB task force contends. "Too much money and time is being spent on the lower-level threats to the nation's networks (e.g., hackers), and not enough on figuring out how to protect information systems from state and terrorist warriors who understand how to exploit compromised data," the report reads.

Among the improvements needed for information security are better defensive systems at every point in the Global Information Grid; better training, retention and screening of technology professionals; and expanded "red teaming" to probe for weaknesses in DOD networks, the report states.

Unconventional nuclear weapon attacks, those not coming by Russian missile, are the biggest risk but are also the most preventable, the task force notes. This is because the United States has comparatively well-developed crisis prevention and interdiction capabilities.

Nonetheless, according to the DSB task force, "the ability to protect against [a nuclear] attack is sorely lacking. This point is increasingly disconcerting given the magnitude and time-scale of devastation associated with a successful attack."

The report states the greatest nuclear threat comes not from terrorists but from state actors, adding that a "primary target for such a threat would be our military's warfighting infrastructure." The threat continues to grow because "more than 1,500 tons of weapon-grade materials in Russia [are] under loose control," and smaller nuclear weapons could be carried and concealed in a backpack or truck.

To offset this nuclear threat, the report recommends that DOD work to limit the availability of nuclear materials; upgrade the ability to "attribute" a nuclear attack because attribution acts as a deterrent; and deploy "protection systems built from existing technology to key military targets."

Defense Department responses to biological warfare threats are not sufficiently advanced, the report states, even though Russia has created enough anthrax to "kill the world's population four times over" and the U.S. healthcare system's ability to deal with mass casualties is suspect.

"This nation does not have an effective, early capability to assess the BW threat, and, as a consequence, cannot prevent such a crisis," the report found. "The task force paints a grim picture of the effectiveness of biological warfare. For example, an attack on a city with 100 kilograms of bioagent would kill one to three million people." It is much harder for the United States to monitor BW development than it is to track nuclear weapons programs.

The board recommends that DOD create an automatic database and diagnosis tool for biological threats so that if an outbreak occurs, the department would quickly become aware of the threat and could notify other relevant agencies. Further, investment in vaccine research and development should be accelerated, DSB recommends. The recommended biological weapon response "would require an investment of $3.2 billion over the [fiscal year 2002] future years defense plan," the task force estimates.

The report also notes that a high-level office is needed to assume responsibility for the homeland defense mission, which is currently spread among disparate government agencies. The report shies away from suggesting who should take the lead, however, saying its studies "do not address the assignment of roles and missions for employing [the needed] capabilities."

Air Combat Command is currently attempting to consolidate the homeland defense command and control mission, Inside the Air Force reported earlier this month (ITAF, April 6, p1).

Homeland defense C2 capabilities are spread among numerous Air Force systems, and ACC feels the nation will be challenged by "the increasing capabilities of 'states of concern' and non-state actors employing asymmetric strategies." The command is preparing a concept of operations for North American homeland defense command and control to create a "coherent picture of the operating environment" by consolidating dispersed information. The goal is for the relevant facts to be quickly forwarded to commanders performing homeland defense missions or responding to attacks.

Overall, DSB is aware that its recommendations may be difficult to implement, noting that critics may say, "Here is the Defense Science Board again making recommendations to spend money, and there is just no money," the report states. The task force, however, "believes that this situation must be regarded as something quite different."

"This is not a case of 'yet another aircraft to go along with the many aircraft we now have.' These threats are different," the board writes.

-- Adam J. Hebert