

# THE SUN *flower*

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On September 23, 1945, we anchored in Nagasaki Harbor, then loaded small boats with Marine troops, and transported them onto land. I spent four days in Nagasaki. As our boat was landing, I saw steel ships, burnt up and destroyed, in the water. Everywhere I looked everything was destroyed, melted. I also saw a horrible sight: many, many bloated bodies floating on the water. These were the bodies of dead Nagasaki citizens who had died in the days and weeks after the bomb was dropped. The Japanese people had disposed of them in the water. I could not believe what I saw! Even today I can still see the bloated bodies floating in the harbor.

To read the full text, please visit:

[http://www.wagingpeace.org/articles/2005/09/00\\_zaragoza\\_statement-atomic-veteran.htm](http://www.wagingpeace.org/articles/2005/09/00_zaragoza_statement-atomic-veteran.htm)

## **THE ABANDONMENT OF INTERNATIONAL LAW AFTER 9/11**

by Richard Falk\*

*Presentation to the Congressional Black Caucus Annual Legislative Conference 2005, Washington Convention Center, 801 Mt. Vernon Place, Washington D.C., 21-24 September 2005.*

The US Government has long adopted double standards when it comes to respecting international law, especially in the setting of national security issues. It promotes a generalized respect for the Rule of Law in world politics, is outraged by violations of international law by its enemies, and chooses selectively when to comply and when to violate. This pattern goes far back in American history, but it is convenient to take note of American violations of international law in the setting of the Vietnam War, as well as periodic interventions in Central and South America. I would argue that this pattern has long harmed America's global reputation and capacity for leadership, as well as worked against its own national interest.

It seems clear that the United States, and the American people, would have benefited over the years from a foreign policy carried out subject to the discipline of international law. If the US Government had abided by international law, the dreadful experience of the Vietnam War would not have occurred. More recently, an observation that will be discussed further below, upholding international law would have avoided the fiasco of the Iraq War. Contrary to popular belief, respecting the restraints of international law better serves the national interest than does an attitude, so

## *Perspectives*

### **STATEMENT OF AN ATOMIC VETERAN 60 YEARS AFTER THE ATOMIC BOMBING OF NAGASAKI**

by Eduardo Pablo Zaragoza, September 2005

My name is Eduardo Pablo Zaragoza and I am 79 years-old. I was born and raised in a coal mining community, Dawson, in Northern New Mexico. Life with my family was good. I had wonderful parents, and four sisters and two brothers, a harmonious family in every way. I liked school and excelled at sports.

In January, 1945, when I was 17 years-old, I joined the Navy. I served in the South Pacific on the USS Wayne, an attack amphibious transport. Our first destination was Guam, where we unloaded Navy personnel and Marines who were replacement troops. We then went on to Saipan, where we picked up the 3rd Battalion, 6th Marines of the 2nd Division, who were to be the occupation forces in Nagasaki.

prevalent since 9/11, that international law poses inconvenient obstacles on the path toward national security.

To read the full article, please visit: [http://www.wagingpeace.org/articles/2005/09/21\\_falk\\_abandonment-international-law.htm](http://www.wagingpeace.org/articles/2005/09/21_falk_abandonment-international-law.htm).

*\*Richard Falk, chair of the board of the Nuclear Age Peace Foundation, is the author of Religion and Humane Global Governance (Palgrave) and, most recently, The Great Terror War (Olive Branch). He is currently visiting professor of global studies at UC Santa Barbara.*

## Take Action

### **NUCLEAR FREEZE/INSTITUTE FOR DEFENSE AND DISARMAMENT STUDIES 25TH ANNIVERSARY CELEBRATION**

From 21-23 October, the anniversary of the Nuclear Freeze movement, the Institute for Defense and Disarmament Studies (IDDS), which launched the Freeze, is hosting a jam-packed celebration to educate and empower citizens everywhere. Please join keynote speaker Congressman Edward Markey (D-MA), Robert Jay Lifton, James Carroll, John Pike, Jonathan Schell, Helen Caldicott, William Sloane Coffin, Harvey Cox, Jonathan Dean, Clark Abt, Joseph Cirincione, Graham Allison, David Cortright, Susan Shaer, David Krieger, Freeze co-founders Randy Forsberg (IDDS Founder and Director), Randy Kehler and Pam Solo, and others. For more information and to register, please visit <http://www.idds.org/>.

### **URGE CONGRESS TO STOP DANGEROUS NUCLEAR WEAPONS AND ENERGY PROGRAMS**

Write and call your Senators and Representatives at 202-224-3121 and urge them to contact the Chairmen of the Energy and Water Appropriations Conference Committee, Senator Pete Domenici (R-NM) & Representative David Hobson (R-OH) and Ranking Members, Senator Harry Reid (D-NV) and Representative Pete Visclosky (D-IN).

Congress could save taxpayers nearly a billion dollars by simply agreeing to cuts already made in the House and Senate versions of the FY 2006 Energy & Water spending bill (H.R. 2419). The Chairmen of the Conference Committee, as well as the Ranking Members, have the most power over what cuts or increases survive in the final bill. Write and call your legislators and urge them to tell the Chairmen and Ranking Members to accept the House and Senate funding cuts to nuclear weapons and energy programs while preserving the House increases to environmental cleanup and nuclear warhead dismantlement.

Differences between the House and Senate versions of the Energy & Water spending bill must be worked out by a joint House-Senate Conference Committee. With the deficit over \$330 billion, it is imperative that Congress approve the \$1 billion in cuts to nuclear weapons and energy programs that were adopted earlier this year.

Budget cuts that we support include:

- \$4 million for research into a nuclear bunker buster that has the potential of a million casualties but would be unable to penetrate many of the deepest targets;
- \$7.6 million for a new plutonium bomb plant to mass-produce nuclear bomb triggers;
- \$25 million to increase the readiness to resume underground nuclear testing;
- \$146 million for constructing the National Ignition Facility for nuclear weapons research;
- \$303 million for plutonium fuel fabrication (MOX), a commercial reactor fuel;
- \$74 million from the Yucca Mountain nuclear waste repository;
- \$85 million for the Advanced Fuel Cycle Initiative, a dangerous and expensive return to reprocessing nuclear waste.

Budget increases we support include:

- \$115 million to dismantle nuclear warheads as pledged by the President following the Moscow Treaty;
- \$190 million to the environmental cleanup budget for sites to adhere to legal obligations for cleanup of contamination from U.S. nuclear weapons production.

To take action, please visit: [http://capwiz.com/wagingpeace/mail/oneclick\\_compose/?alertid=8067771](http://capwiz.com/wagingpeace/mail/oneclick_compose/?alertid=8067771).

For more information, read the Alliance for Nuclear Accountability's Radioactive Pork Report at <http://www.ananuclear.org/topten2005.html>.

## Disarmament

### **NORTH KOREA PLEDGES TO GET RID OF NUCLEAR WEAPONS, IAEA PASSES RESOLUTION**

On 30 September, the International Atomic Energy Agency (IAEA) passed a resolution rebuking North Korea for breaching the nuclear Non-Proliferation Treaty (NPT), but the resolution applauded the country for pledging to give up its nuclear weapons on 19 September. The resolution welcomes "the positive result" of the six-party talks that led to the breakthrough announcement but notes "with serious concern" North Korea's February 2005 announcement that it had manufactured nuclear arms and fuel-rod reprocessing activities that can make the fissile core of nuclear weapons. The resolution urges North Korea to resume cooperating with the IAEA in the "full and effective implementation" of the agency's safeguards, meant to prevent nuclear proliferation.

China and Russia both refrained from co-sponsoring the text in a reflection of their displeasure with a text focusing on US priorities. The document was adopted by consensus by the 139 member states present at the IAEA annual meeting, but the resolution has only symbolic value because the meeting has no enforcement powers.

During the last round of six-party talks in mid-September, delegates from North Korea, the US, China, Russia, South Korea and Japan reached a landmark accord in which North Korea pledged to abandon all its nuclear programs in exchange for economic aid and security assurances. In return, North Korea won recognition of its desire to keep its civilian nuclear program and a pledge to discuss its demand for a light-water nuclear reactor - after it meets international safeguards and rejoins the NPT. The agreement also bound all six nations to cooperate in the energy, trade and investment sectors and committed North Korea and the US to normalize relations. Additionally, the United States declared it had no intentions of attacking North Korea.

However, just hours after the agreement was reached, North Korea said it would not dismantle its nuclear facilities until it gets light-water reactors from the US, casting a shadow on the agreement. The US has rejected that demand.

The US was particularly insistent that the IAEA resolution make no mention of the promise of a light-water reactor, which is less easily diverted to weapons use than other models but can still be harnessed for such aims. Instead, they wanted any resolution to focus on North Korea's commitment to ending the nuclear confrontation.

China is North Korea's last major ally and its chief source of food and other assistance. China's influence over North Korea regime remains pivotal. It has hosted four rounds of the six-party talks, boosting China's role as a peacemaker in the region.

*Source: Jahn, George, "U.S. Nuke Views on N. Korea Upheld by U.N.," Associated Press, 1 October 2005.*

## Nuclear Legacy

### **121 RUSSIAN NUCLEAR SUBS DESTROYED AS OF JULY**

On 22 September 2005, Alexander Rumyantsev, head of Russia's Atomic Energy Agency, said his country has dismantled 121 nuclear submarines as of July. According to Rumyantsev, "So far, 195 nuclear submarines have been decommissioned, and by the middle of 2005, 121 nuclear submarines had been dismantled and 34 remained operational." He added that the submarine dismantling process is nearing completion.

Russia takes apart 20 submarines each year. Rumyantsev said that his country contributes \$70 million each year to the process, matching foreign contributions.

*Source: "Russia dismantled 121 nuclear submarines as of mid-2005," RIA Novosti, 22 September 2006.*

### **NEW STUDY SHOWS NEW ZEALAND ATOMIC VETERANS SUFFERED GENETIC DAMAGE**

Dr. Al Rowland of the Massey University Institute of Molecular Bio-Sciences in New Zealand and colleagues overseas have been studying blood samples from veterans of nuclear tests in the 1950s, known as Operation Grapple. According to Dr. Rowland, New Zealand sailors suffered genetic damage from their exposure to radiation during nuclear tests held in the Pacific in the 1950s.

A total of 551 New Zealand Navy sailors witnessed nine nuclear tests in 1957 and 1958 at close quarters, wearing only white cotton hoods and dark glasses to protect themselves from the blasts. Only about 160 are still alive, and many died in their forties and fifties.

New Zealand, British and Fijian veterans have joined forces to try to win compensation from the British government which has steadfastly denied that servicemen were exposed to dangerous levels of radiation during the tests at Christmas Island, now part of the small island state of Kiribati.

According to Dr. Rowland, "The tests will not be completed for another 10 months but I can say I have seen evidence of genetic damage." Rowland is conducting the New Zealand government-funded study for the Nuclear Test Veterans Association.

Genetic damage from radiation has been linked to various cancers and other medical problems. Before starting the study Dr. Rowland had questioned if any genetic damage would show up more than half a century after the nuclear tests were conducted, but he said there was clear evidence of damage.

New Zealand Veterans' Association president Roy Sefton said the findings would be important in attempts by the New Zealand, Fijian and British veterans to win compensation. The veterans' case has been funded by Britain's Legal Services Commission which provides legal aid. However, after making the first of three agreed payments, the funding dried up, making it difficult for the veterans to continue their case.

Sefton stated, "The other thing is many of our people are old and some are very sick. A year is a very long time for them. We are worried their (British Ministry of Defence) aim is to hold us off long enough, so we will lose the will to continue."

A Television New Zealand documentary screened on 22 September 2005 said although the New Zealand sailors were told they would be 200 kilometers (120 miles) away from the nine blasts, sometimes they were as little as 80 kilometers (49.7 miles) away. Those still alive have suffered with a variety of illnesses including cataracts, skin problems, chronic arthritis, blood cancers and premature ageing. Research by a widow of an Operation Grapple veteran showed half of the children of the veterans had genetic defects, compared with 2.5 percent amongst the normal population. According to the documentary, half of pregnancies resulted in miscarriage or still births.

*Source: "New Zealand nuclear veterans suffer genetic damage: study," Agence-France Press, 23 September 2005.*

## ELBARADEI REAPPOINTED AS IAEA DIRECTOR GENERAL

On 26 September 2005, Dr. Mohamed ElBaradei was officially appointed to his third four-year term as Director General of the International Atomic Energy Agency (IAEA) during the IAEA's annual general conference in Vienna. The US had opposed ElBaradei's appointment, but lacked support for its position from other IAEA member states.

In related news, the IAEA also named a new Board of Governors, which includes two more Non-Aligned Movement countries than were on the previous Board. New members of the 35-nation Board of Governors include Belarus, Columbia, Cuba, Egypt, Greece, Indonesia, Libya, Norway, Slovenia, and Syria.

*Source: Jahn, George, "Iran's Nuclear Ambitions Expected to Mar Meetings," Miami Herald, 25 September 2005.*

## IAEA INSPECTORS DISCOVER NO EVIDENCE OF DIVERTED NUCLEAR MATERIALS IN IRAQ

On 23 September, the International Atomic Energy Agency (IAEA) reported that there is no indication that nuclear material in Iraq is being diverted for undeclared activities, following a two-day inspection by agency officials. According to an IAEA statement, "The material - natural or low-enriched uranium - is consolidated at a storage facility near the Tuwaitha complex, south of Baghdad. The inspectors found no diversion of nuclear material."

*Source: "No diversion of nuclear material found in Iraq-IAEA," Agence France Presse, 24 September 2005.*

## IAEA EXPERTS VISIT ABKHAZIA REGION IN GEORGIA

From 7-11 September, International Atomic Energy Agency (IAEA) experts inspected sites in the breakaway Abkhazia region of the former Soviet republic of Georgia.

Experts were expected to examine storage of radioactive substances at the Sukhumi Institute of Physical Engineering and the Research Institute of Experimental Pathology and Therapy. A meeting with Abkhazian President Sergei Bagapsh was also scheduled. This was the IAEA's third visit to Abkhazia and its first since 2002.

Sukhumi Director Anatoly Markoly stated, "All radioactive substances are stored properly, as the IAEA commission could see in 2002, and the terms of storage have not changes since then. The level of radiation at the institute and in Abkhazia does not exceed the norm."

*Source: "IAEA Experts Visit Abkhazia," Global Security Newswire, 9 September 2005.*

## DISARMAMENT AND NONPROLIFERATION DROPPED FROM MILLENNIUM PLUS FIVE SUMMIT FINAL DOCUMENT

The Millennium Plus Five Summit held at the United Nations in New York from 14-16 September, marked the 60th anniversary of the United Nations and the fifth anniversary of the Millennium Summit. It was supposed to be the launch of the most ambitious UN overhaul since its creation. However, UN delegates never solidly agreed to the disarmament and nonproliferation language during negotiations on the final document. While governments and nongovernmental experts complained that much of the substance in the document was weakened in the name of consensus, the section on "disarmament and nonproliferation" was the only key topic to be entirely dropped from the paper.

The first version in early June called on states to "pursue and intensify negotiations with a view to advancing general and complete disarmament and strengthening the international nonproliferation regime." It encouraged countries to strengthen the nuclear Non-Proliferation Treaty (NPT) and the biological and chemical weapons conventions. The section listed a number of specific steps that nations could take, including the entry into force of the Comprehensive Test Ban Treaty and negotiations over a Fissile Materials Cut-off Treaty. The text also "appeal[ed] to the nuclear weapons states to make concrete steps toward nuclear disarmament in accordance with Article VI of the NPT with the objective of eliminating all such weapons."

Seven nations, led by Norway, submitted alternative language in August to this section that would have sharpened nations' commitments to disarmament and nonproliferation. The proposal never was substantively discussed because US Ambassador John Bolton submitted to the negotiators an annotated version of the draft with hundreds of amendments. Many of those changes struck at the heart of the document, including his proposals for disarmament and nonproliferation, by deleting the word "disarmament" from the section and proposing language that dealt exclusively with the dangers posed by the proliferation of nuclear weapons.

The Bolton text also deleted references to the Comprehensive Test Ban Treaty, a proposal that the Additional Protocol to International Atomic Energy Agency safeguards agreements be called "the standard for compliance," and suggestions for a program of work for the Conference on Disarmament in Geneva.

Lawyers Committee on Nuclear Policy Executive Director John Burroughs said of the process, "The US approach was very provocative. This is best illustrated by the deletion of reference to the NPT's 'three pillars: disarmament, nonproliferation, and the peaceful use of nuclear energy' and the substitution of a reference to the NPT's role in preventing the further spread of nuclear weapons. This proposal went

in the face of a broad and deep international consensus that a viable nonproliferation regime requires progress on arms control/disarmament and a recognition of the right to non-weapons uses of nuclear power."

According to conference delegates, once the US proposals were tabled, other nations that had held back their objections now felt free to introduce amendments that were unacceptable to other states. Speaking about the negotiations in general, Bolton said on 13 September that the "line-by-line amendments" were necessary because it was important to be "very frank with the other delegations on the amendments we wanted to see. Indeed, I think other governments were waiting for the opportunity, and should have that opportunity, because this is not a text dictated by nameless, faceless text writers."

The only reference to nuclear weapons comes in the section on terrorism, in which the document calls for the early entry into force of the International Convention for the Suppression of Acts of Nuclear Terrorism. That treaty, completed this spring, was opened for signatures on 14 September. Russian President Vladimir Putin and US President George W. Bush were the first heads of state to sign.

In related news, actor Michael Douglas also criticized the UN over its failure to reach an agreement on nuclear weapons. Douglas visited the UN on 21 September, International Peace Day, and called on the US and other states to show leadership on nuclear disarmament. He said the UN should be "completely embarrassed" for not addressing the issue at the Millennium Plus Five summit. Douglas said, "We could not come up with any wording or phrasing regarding the issues of nuclear proliferation. Hopefully the silence of that is going to be embarrassing and awkward enough for enough countries to go back and re-evaluate and see if we can't come up with a plan." He also said nations contemplating nuclear arms programs should not be placated with aid. Douglas stated, "But I personally feel that a lot of this got out of control when we (the US) ignored some basic treaties that have taken years and years to create."

*Sources: Wurst, Jim, "Nonproliferation, Disarmament Matters Dropped From U.N. Summit Document," Global Security Newswire, 14 September 2005; "Douglas Tackles UN on Disarmament," BBC News, 22 September 2005.*

## COMPREHENSIVE TEST BAN TREATY STILL WAITS FOR ENTRY INTO FORCE

On 23 September 2005, the conference on the Entry Into Force of the Comprehensive Test Ban Treaty ended with member countries pledging in a final document that they "will spare no efforts and use all avenues" to encourage further ratifications and to "sustain the momentum generated by this conference" to keep it on the national agendas "at the highest political level." However, a small group of countries still refuse to ratify the treaty.

The final document noted the concern of many of the member states that the treaty has not come into force nine years after it was opened for signature. The treaty cannot come into force until it is ratified by the required 44 states which had nuclear research or power facilities when it was adopted in 1996. To date, only 33 of the 44 have done so. Most notably, the US, China, Egypt, Israel and Iran have failed to ratify the treaty.

"We call upon all states which have not yet done so, to sign and ratify the treaty without delay," the declaration said, echoing an appeal made by UN Secretary General Kofi Annan at the opening of the conference.

Participants also stressed the importance of building up an effective, global verification regime to ensure compliance with the treaty when it comes into force. According to the final document, "We agree that in addition to its essential function, the CTBT verification system currently being built would be capable of bringing scientific and civil benefits, including for tsunami warning systems and possibly other disaster alert systems."

Meanwhile, progress has been made on the technical side of the treaty regime. The treaty has an operating verification system even while the pact itself is not in force. A network of 321 stations for the monitoring of seismic, hydroacoustic, infrasound and radionuclide events is planned to cover the entire planet - from the surface to the air and beneath the earth and seas. Ambassador Tibor Toth, chief of the Preparatory Commission for the Comprehensive Test Ban Treaty Organization, said that 217 of the 321 stations have been installed - 115 over the last two years. He said most of the geographic gaps in system were in South Asia and Africa.

The treaty, which bans any nuclear blasts for military or civilian purposes, was signed in 1996 by 71 states, including the first five nuclear powers. The CTBT now has 176 member states.

North Korea, India and Pakistan have not signed the treaty. Both India and Pakistan have carried out nuclear tests since 1996, while North Korea has threatened to do so.

On 26 September, Pakistan announced that it will abide by its "solemn pledge" that it would not be the first country in the region to resume nuclear tests, but declined to respond to UN Secretary General Kofi Annan's call to all countries to sign the CTBT. Pakistan Foreign Office Spokesman Naeem Khan stated, "In this region we will not be first to resume the tests. It is a solemn commitment."

*Source: "Key signatories urged to ratify Nuclear test ban treaty," Agence France Press, 23 September 2005; "Pak not to resume nuclear tests, PTI, 26 September 2005; Wurst, Jim, "Nuclear Test Ban Conference Ends With Treaty's Entry Into Force Still a Distant Goal," Global Security Newswire, 26 September 2005.*

## RADIOACTIVITY IN TOOTH ENAMEL USED FOR FORENSIC DATING

Radioactive fallout from the atmospheric nuclear tests is now being used by forensic scientists to estimate the age of a person at the time of death more precisely. By looking at the amount of radioactive carbon-14 in tooth enamel, scientists can predict a person's age to within roughly 1.6 years.

Because the level of carbon-14 in the atmosphere significantly increased when nuclear testing began in 1946, quickly becoming uniform worldwide, scientists can compare the amount of carbon-14 in tooth enamel to records of how much was in the atmosphere to get an accurate time of when the tooth was formed.

Previously, forensic scientists studied people's skeletal structure and tooth decay to determine their age, a process that was accurate to about 5 to 10 years.

The radioactive carbon-14 technique is currently being used to help identify people who died in the Indian Ocean tsunami last year. Forensic experts are also offering to use it to determine the age of unidentified victims of Hurricane Katrina.

*Source: "Evidence of Nuclear Test Found in Tooth Enamel," Reuters, 14 September 2005.*

## TOP US ARMS CONTROL OFFICIAL SAYS "AXIS OF EVIL" CONTAINMENT IS HALF-COMPLETE

According to Assistant Secretary of State for Arms Control Stephen Rademaker, the US has defused the nuclear weapons threat posed by half of the "axis of evil" countries.

"The Iraq dimension has been addressed. The Libya dimension has been addressed. We are left with Iran and North Korea," Rademaker said at a panel discussion at Georgetown University.

Rademaker was referring to President George W. Bush's infamous labeling of Iraq, Iran and North Korea as the "axis of evil" in a speech in 2002. Rademaker said he includes Libya in the group due to subsequent revelations about the country's WMD programs. Rademaker further portrayed the "axis of evil" list as a guide to countries that might transfer nuclear weapons to terrorists.

Former US State Department WMD specialist Robert Gallucci, who is dean of Georgetown's Foreign Service School and who moderated the discussion, disputed Rademaker's implication that Iraq has been a nuclear threat comparable to the other three countries. He also said the Iraq war was detrimental to US interests because it convinced North Korea of the need for nuclear weapons to deter a possible US attack.

*Source: Fiorill, Joe, "Half of 'Axis of Evil' Agenda Complete, Says Top US State Department Arms Control Official," Global Security Newswire, 20 September 2005.*

## COMPANY SEEKS TO PROFIT FROM RECYCLED RADIOACTIVE NICKEL

An American subsidiary of a Canadian firm is seeking to build a factory in Paducah, Kentucky to clean and recycle 9,700 tons of radiologically contaminated scrap nickel at the Paducah Gaseous Diffusion Plant.

According to Chemical Vapour Metal Refining USA (CVMR) President Mike Hargett, the company has developed a process that can remove all traces of radioactive isotopes from the nickel. Hargett said the process has been verified by three independent labs. CVMR is owned by a Toronto company called Chemical Vapour Deposition Manufacturing.

A Department of Energy mandate in 2000 currently bars the company from removing scrap metal from any of its plants. CMVR will try to convince the DOE to lift the ban, according to Hargett. He said that, to reassure the public, CVMR wants to track products in which the nickel is used.

Among the potential commercial uses of the nickel are light-weight, long-lasting nickel batteries and nickel plating molds used by car manufacturers.

*Source: Walker, Joe, "Paducah PACRO Still After Contaminated Nickel Offer to Refine Old Nickel," The Paducah Sun, 22 September 2005.*

## IRAN USES POP MUSIC TO RALLY SUPPORT FOR NUCLEAR PROGRAM

In recent days, Iran's state-run airwaves have been buzzing with two new tunes apparently designed to rally public support for the clerical regime's increasingly tense stand-off with the West over its nuclear ambitions.

The first song, entitled "Oriental Sun, Nuclear Science," is sung by Ali Tafreshi to a backdrop of military-style marching music. The second similarly catchy tune is "Nuclear Know-How" by Reza Shirazi. Both songs extol the wonders of a "great and powerful Iran" which has destroyed "the arrogance of the oppressors" and "defends its independence by using science."

The songs, produced by Iran's state television and radio apparatus, have been getting good airplay - and are also accompanying TV clips of atomic facilities used to praise the "young engineers who have succeeded, without the help of foreigners, to develop the Iranian nuclear program."

*Source: "Nuclear tunes blast on to Iran's airwaves," Agence France Press, 3 October 2005.*

## NUKES FOREVER: US SENATORS PROTEST REDUCED ICBM FLEET

As the final Peacekeeper intercontinental ballistic missile (ICBM) was being deactivated during a ceremony at F.E. Warren Air Force Base 19 September 2005, eight US Senators were preparing a letter to Defense Secretary Donald Rumsfeld stressing the usefulness of the US missile fleet in the post Cold War era.

50 Peacekeeper ICBMs, the only squadron of Peacekeepers deployed in the US, have been deactivated since the retirement program began in 2002 when US officials determined the missiles were no longer needed with the end of the Cold War and the demise of the Soviet Union. Credit was given to the missile during the ceremony for winning the Cold War and deterring all-out nuclear war.

Meanwhile eight senators who make up the Senate ICBM Coalition met and drafted a letter to Defense Secretary Donald Rumsfeld urging the Department of Defense (DoD) to support the 2002 Nuclear Posture Review's conclusion that 500 nuclear armed Minuteman-3 missiles will be necessary through the year 2020.

The letter, signed by Senators Kent Conrad (D-North Dakota), Byron Dorgan (D-North Dakota), Mike Enzi (R-Wyoming), Craig Thomas (R-Wyoming), Max Baucus (D-Montana), Conrad Burns (R-Montana), Robert Bennett (R-Utah), and Ken Salazar (D-Colorado) was delivered to Rumsfeld on 21 September 2005 and comes before the DoD finalizes its Quadrennial Defense Review (QDR), which may reconfigure the nation's missile forces. The eight Senators are from states intimately familiar with the Minuteman-3, home to either missile silos or thousands of engineers who work at missile manufacturing and maintenance plants.

A portion of the letter reads, "In the next several weeks, the Department of Defense will finalize the Quadrennial Defense Review (QDR), which is considering possible changes to our nation's ICBM force under the rubric of 'tailorable deterrence.' According to press reports, these include re-MIRVing the Minuteman force, reducing the number of nuclear-armed missiles, and shifting some ICBMs from nuclear to conventional warheads. Some of these developments raise troubling issues for the nation and may set us on a dangerous road to dismantling the nuclear triad."

*Sources: "Burns Attends ICBM Summit Discusses Future Military Strategies," Lexis Nexus, 21 September 2005; "United States Should Maintain Current Nuclear Missile Level, Senators Tell Defense Department," Global Security Newswire, 22 September 2005.*

## IAEA REPORTS INCREASE OF ILLICIT TRAFFICKING OF NUCLEAR MATERIALS

According to the Illicit Trafficking Database report released by International Atomic Energy Agency (IAEA) on 27 September 2005, the number of illicit trafficking and other unauthorized activities involving nuclear and radioactive materials in 2004 increased significantly compared to prior years.

Countries reported 121 incidents to the agency, according to the report, which covers the theft of nuclear and radioactive materials from 1993 to 2004. Approximately 77 incidents were reported in 2003, the report states, and approximately 57 were reported in 2002. The IAEA attributed the rise in reported trafficking, theft and other incidents to better reporting by the 81 countries involved. The increase in 2004 is the first since 2000. However, since 1993, incidents have been trending downward.

According to the IAEA report, there has been only one reported incident involving trafficking of weapon-grade material since 2003. An individual was caught attempting to smuggle 170 grams of highly enriched uranium across the border of the former Soviet republic of Georgia.

Anthony Wier, a research associate at the Belfer Center for Science and International Affairs at Harvard University said that while 170 grams is not enough nuclear material for a weapon, the incident illustrates the vulnerabilities of nuclear materials. Wier stated, "The theft and potential smuggling of nuclear material ... that can be used in a nuclear weapon isn't a hypothetical risk." He also said that this is the first mention of an incident involving such a large amount of highly enriched uranium in a trafficking report.

Since 1993, the agency has tracked 196 incidents involving plutonium, uranium, and thorium. Only 18 of the incidents involved highly enriched uranium or plutonium, and just a few of these involved kilogram quantities of weapon-usable materials. However, the IAEA warned that small quantities of weapon-usable materials seized were likely samples of larger supplies that may not be secure. Two hundred and twenty incidents of theft of low-grade nuclear materials in the form of natural and depleted uranium, reactor fuel pellets and thorium were reported between 1993 and 2004. The IAEA said these incidents indicate gaps in nuclear material security. Finally, the IAEA reported 424 incidents from 1993 to 2004 of radioactive sources that could be used by terrorists.

To read the full report, visit:

[http://www.iaea.org/NewsCenter/Features/RadSources/PDF/itdb\\_31122004.pdf](http://www.iaea.org/NewsCenter/Features/RadSources/PDF/itdb_31122004.pdf)

Source: Francis, David, "IAEA Reports Increase in Nuclear Incidents," *Global Security Newswire*, 28 September 2005.

## SWITZERLAND TO EXTRADITE FORMER RUSSIAN ATOMIC ENERGY MINISTER TO US

Switzerland's Justice Ministry announced on 3 October that it has decided to extradite Russia's former nuclear minister to the US on charges of stealing up to \$9 million that was intended to improve security of nuclear plants. Russia has been fighting the US extradition request for Yevgeny Adamov out of fear that he could reveal nuclear secrets while facing the charges in the US.

Adamov has accepted extradition only to Russia and has 30 days to appeal to the Swiss Supreme Court. He announced he was going on a hunger strike to press for extradition to Russia or his release.

On 2 May 2005, Swiss authorities arrested the nuclear physicist on a US warrant while he was visiting his daughter in Bern. A federal grand jury in Pittsburgh has since indicted him on charges of conspiracy to transfer stolen money and securities, conspiracy to defraud the US, money laundering and tax evasion. US authorities suspect Adamov of embezzling Department of Energy (DOE) funds and diverting them into private projects in the United States, Ukraine and Russia.

Adamov was appointed Atomic Energy Minister in 1998 by then-Russian President Boris Yeltsin, but came under criticism in connection with corruption allegations and his proposal to import nuclear waste to Russia for reprocessing. He also angered US authorities when he shrugged off their objections to Russia's assistance to Iran's nuclear energy program.

In 2001, the anti-corruption committee of Russia's State Duma, or lower house of parliament, accused Adamov of illegally setting up companies inside and outside Russia, including a consulting firm called Omeka registered in Monroeville, Pennsylvania. Adamov was dismissed from his post in March 2001 as part of a Cabinet reshuffle engineered by President Vladimir Putin one year after taking office. After leaving the minister's post, Adamov joined the Dollezhal Institute and worked on projects to improve safety at Russia's 11 Chernobyl-type reactors still in operation.

Source: "Swiss to extradite Russian ex-nuclear minister to U.S.," *Associated Press*, 3 October 2005.

## Missiles and Missile Defense

### US LAUNCHES EXPERIMENTAL MILITARY SATELLITE INTO LOW EARTH ORBIT

On 22 September 2005, the US successfully launched the Space Test Program-R1 (STP-R1) satellite into low Earth orbit from the Vandenberg Air Force Base in California. The STP-R1 satellite, also known as Streak, is operated by the Defense Advanced Research Projects Agency (DARPA) and was built by General Dynamics C4 Systems/Spectrum Astro Space Systems in Gilbert, Arizona.

According to a DARPA spokesperson, "Streak is a technology demonstrator whose objective is to demonstrate rapid response, short mission life, low Earth orbit space technologies and gather information about the low Earth orbit environment."

According to DARPA, Streak is the first satellite mission to study the low Earth region. Information released by DARPA indicates Streak is fitted with two instruments - an ion gauge and an atomic oxygen sensor. The cost of the Streak mission, which is expected to last one year, is classified.

A Minotaur rocket lifted Streak, a 920-pound payload, into orbit just after sunset creating a twilight phenomenon that occurs when missiles are launched just before sunrise or shortly after sunset, visible across hundreds of miles in the southwestern US.

*Sources: Wallace, Nora, "Rocket launch may light up Thursday evening," Santa Barbara News Press, 21 September 2005; Ray, Justin, "Rocket launch paints sky with breath-taking scene," Spaceflight Now, 23 September 2005.*

## US SUCCESSFULLY TESTS ICBM

On 14 September 2005, the US successfully tested an unarmed Minuteman-3 Intercontinental Ballistic Missile (ICBM). The missile was fired from Vandenberg Air Force Base, traveled 4,200 miles in 30 minutes, and struck a target at the Ronald Reagan Test Site on the Kwajalein Atoll in the western chain of the Marshall Islands. It was the last planned Minuteman-3 test for 2005.

Unlike most Minuteman test launches, the launch command for this flight was issued from an E-6B aircraft. According to US officials, the test was designated Glory Trip 189GM and its purpose was to verify, validate and improve the nation's intercontinental ballistic missile force. According to US officials the Minuteman-3 is a key component to continued global stability.

*Sources: "US Conducts Successful Minuteman ICBM Test," Global Security Newswire, 14 September 2005; [SpaceArchive.info](http://SpaceArchive.info).*

## RUSSIA REPLACING MISSILE SYSTEMS

On 16 September 2005, Russia finished dismantling a rail-base missile system at the Strategic Missile Troops central repair plant in Bryansk. Official US inspectors were on hand throughout process. Colonel General Nikolay Solovstov, Commander of the Russian Strategic Missile Troops, said railroad-based missile systems were being taken out of the inventories of the Strategic Missile Troops because it is simply impossible to continue extending the service life of the missiles. This is the seventh facility of its kind to be dismantled in 2005; two more will be scrapped before the end of the year.

On 20 September, the Russian Defense Ministry confirmed it had destroyed aging Topol missile launchers at its

Pibanshur ICBM dismantlement facility in the Udmurt Republic. According to the Russian Defense Ministry, "The elimination, which began 5 September in keeping with the procedures envisaged by the START treaty, was carried out under the control of a US inspection group. Nine Topol launchers at the end of their useful life were eliminated during this period. In all 18 Topol launchers have been eliminated since the start of the year."

The dismantled Topol missile launchers are being replaced with the Topol-M, Russia's newest and supposedly most accurate ICBM. The Topol-M is a mobile or silo-based, single-warhead missile with a range of 10,000 kilometers (6,000 miles). Russian Defense Minister Sergei Ivanov said the first mobile ground based regiment will enter combat duty in the Strategic Missile Troops in late 2006.

On 27 September 2005, a new submarine-launched SS-NX-30 Bulava missile was successfully test-launched by the Dmitry Donskoi nuclear submarine in the White Sea. Ivanov said Russian armed forces will begin receiving the new Bulava missile, which is a submarine-launched version of the Topol-M missile. The 27 September test was the first ever of the new Bulava missile.

Russian President Vladimir Putin also announced the development of a new generation of missiles on 27 September. Speaking live on television, Putin said, "We are developing and will deploy new strategic high-precision systems that have no rivals across the globe. These hypersonic systems will be capable of changing the course and altitude. They will be practically invulnerable, including to air defense systems."

On 30 September, another submarine launched ballistic missile, the RSM-50 Stingray (SS-N-18), was test launched. The missile was fired by the Svyatoy Georgiy Pobedonosets (St. George the Victorious), a Russian nuclear submarine from the Sea of Okhotsk to the Kanin Nos cape in the White Sea.

*Sources: "First regiment armed with Topol-M to enter duty in 2006 - Ivanov," Interfax, 29 August 2005; "Russian Strategic Troops Scrap Another Railroad Missile Launching Facility," 17 September 2005; "Russia Scraps Old Topol ICBM Launchers," Global Security Newswire, 21 September 2005; "Russia to deploy new hypersonic missile systems - Putin," Ria Novosti, 27 September 2005; "Russian submarine carries out test launch of ballistic missile," ITAR-TASS, 30 September 2005.*

## US INSTALLS SEVENTH MISSILE "DEFENSE" INTERCEPTOR IN ALASKA

On 18 September 2005, the seventh ground based missile "defense" interceptor was emplaced in a missile silo at Fort Greely, Alaska. In addition, two interceptors were placed at Vandenberg Air Force Base, California in 2004. It has been three years since the Missile Defense Agency (MDA) has successfully flight tested the ground-based interceptor. The interceptors are part of the Ground Based Midcourse

Defense program, aimed at defending against long-range ballistic missile attacks.

The interceptor, manufactured by Boeing, is a three-stage, solid fuel booster with a 155-pound kill vehicle. Boeing Missile Defense Systems Vice President and General Manager Pat Shanahan said, "The continued emplacement of interceptors at Fort Greely expands our missile defense capability and further expands the protection of the nation against the ballistic missile threat." Shanahan's comments are made despite the failed December 2002, December 2004 and February 2005 interceptor tests, leaving the ground based missile interceptor unproven.

In related missile defense news, the US tested the upgraded Cobra Dane L-band large phased array radar at Eareckson Air Force Station, Shemya Island, Alaska. Built in 1977 and originally designed to collect data on Soviet missile tests near Kamchatka and the Pacific Ocean, Cobra Dane was recently upgraded and integrated into the US missile defense system. The test occurred on 26 September 2005 when a US C-17 aircraft launched a long-range ballistic missile over the Pacific, 1,300 kilometers (800 miles) from Shemya Island. According to officials, Cobra Dane successfully tracked the incoming missile's trajectory across the Pacific. Data relayed from the radar was used at various command centers to aim interceptor missiles, though no interceptors were fired.

Sources: Gronlund, Lisbeth, "Fire, aim, ready," *Bulletin of the Atomic Scientists*, 31 March 2005; "Ninth Boeing Ground-based Midcourse Defense Interceptor Emplaced," *Boeing Press Release*, 21 September 2005; "US tests missile defense radar," *People's Daily Online*, 27 September 2005.

## INDIA AND PAKISTAN SIGN ADVANCE NOTIFICATION OF MISSILE TESTS AGREEMENT

On 3 October, India and Pakistan signed an agreement for advanced notification of ballistic missile tests. According to statement released by India, "The agreement entails that both countries provide each other advance notification of flight tests that it intends to undertake of any surface-to-surface ballistic missile. India has now handed over a draft memorandum of understanding on measures to reduce the risks of accidental or unauthorized use of nuclear weapons under the control of both countries."

Source: "India, Pakistan Sign Missile Agreement," *Associated Press*, 3 October 2005.

## JOINT MISSILE "DEFENSE" COSTS TRIPLE FOR JAPAN

The cost to develop a joint next-generation US-Japanese missile "defense" system has tripled to nearly \$3 billion according to figures reevaluated by US officials. Washington initially asked Japan to cover half the \$1.1 billion project until its completion in 2011. When the development period was extended to the year 2014, US officials recalculated the esti-

mate based on previous weapons projects and came to a figure close to \$3 billion.

Source: "Cost of Joint Missile Defense System Triples: Report," *Agence France-Presse*, 25 September 2005.

## UTAH SENATOR JOINS NEVADA IN OPPOSING YUCCA MOUNTAIN

On 20 September 2005, Senator Bob Bennett (R-Utah) reversed his position on Yucca Mountain from the Senate floor, announcing his opposition to the creation of a central repository for the nation's nuclear waste. Bennett had been a long-time supporter of the White House's nuclear waste disposal policies. In 2002, Bennett joined Senator Orrin Hatch, Utah's other Republican senator, in voting to overrule the Nevada governor's veto of the Yucca Mountain project. Bennett took the position in 2002 that if nuclear waste could be stored in Nevada, the Private Fuel Storage (PFS) project on the Goshute Reservation would no longer be needed.

While speaking from the Senate floor Bennett said, "However much the idea of a single repository may have made sense decades ago, it's now clear that it does not make sense and we need to move in some future direction." The future direction Bennett referred to was the one proposed by Nevada Senators Harry Reid (D) and John Ensign (R). The Nevada proposal will keep waste from being shipped through 43 different states to Yucca Mountain from more than 60 of the nation's nuclear plants, and urges federal officials to consider reprocessing the waste.

What brought Bennett around? Quite possibly Bennett now opposes nuclear waste storage at Yucca Mountain (and in Utah) because the Mormon Church, based in Utah and politically influential, came out in opposition of the PFS project on the Goshute Reservation.

In related Yucca news, the US Department of Energy has warned the US Geological Survey (USGS) to expect a 90% cut in funding for the Yucca Mountain project in 2006. Such a large cut in funding will force the USGS to reassign more than 50 employees and contractors working on the project. USGS spokeswoman Barbara Wainman said, "This is pretty serious when you think about losing all the institutional knowledge and expertise needed...This effectively would end our Yucca Mountain project."

Sources: "DOE proposes spending cuts for Yucca Mountain scientists," *Associated Press*, 14 September 2005; Spangler, Jerry, "Bennett reverses: He's foe of Yucca," *Desert Morning News*, 21 September 2005; "Utah Senator Backs Plan to Keep Waste Out of Yucca," *Global Security Newswire*, 21 September 2005; "Yucca Mountain: Bob Bennett's right to throw in with Nevada," *The Salt Lake Tribune*, 23 September 2005.

## JAPAN ANNOUNCES SURPRISE NUCLEAR SAFETY INSPECTIONS

Beginning in 2006, Japan's Nuclear and Industrial Safety Agency (NISA) will begin surprise inspections of the country's nuclear plants. Under the proposed inspection plan, employees of electric power companies will not be allowed to accompany the inspectors during their examinations of the plant, giving inspectors complete freedom to check safety systems and plant security. Currently, NISA inspects once every 13 months, requiring the plants to shut down, and provides the exact date and location of the inspections to the plant's operator and allows plant employees to accompany the inspectors.

These measures come amidst calls for more safety measures as accidents at Japanese nuclear plants have increased over the years due to cost-cutting, failed communications, and incompetence. For example, on 16 September 2005, the Tokyo Electric Power Company announced it will suspend operations of the No. 1 reactor at the Fukushima Daiichi plant because of irregularities with a pump that circulates coolant water. Also, on 30 September, the Mihama nuclear power plant was urgently shut down when engineers discovered irradiated water leaking from two locations in the coolant system.

Japan's nuclear power industry plans to introduce a system in 2006 where third-party inspectors monitor the operations of a nuclear plant year-round. These inspections will be led by the Japan Nuclear Technology Institute, an independent organization established by the country's nuclear industry in April 2005. This plan provides an incentive for plant operators to open their doors to third-party inspectors as preferential treatment will be given to plants with a management and safety system supervised by third-party monitors.

*Sources: "Tepco to suspend Naraha reactor," The Japan Times, 17 September 2005; "Surprise checks set for N-plants," The Asahi Shimbun, 17 September 2005; "Irradiated water leakage stops Japanese reactor," ITAR-TASS, 30 September 2005.*

## US OFFERS REACTOR FUEL TO COUNTRIES THAT FOREGO ENRICHMENT AND REPROCESSING

US officials are preparing up to 17 tons of highly enriched uranium for use in nuclear power plants for countries that agree not to develop uranium enrichment or plutonium reprocessing programs as part of an International Atomic Energy (IAEA) verifiable assured fuel supply agreement. US Energy Secretary Samuel Bodman pledged the fuel in a televised statement on 26 September 2005 at the annual IAEA General Conference. Bodman stated, "Through this arrangement, I believe we can advance our common goals of fighting proliferation while expanding the use of nuclear power around the globe."

The fuel, which will be available in 2009 and enough to power ten reactors, will be donated to create a bank of reactor fuel available to countries that would otherwise have to develop their own fuel programs - programs which could be disguised for covert nuclear weapons production.

The assured fuel supply program was first suggested by IAEA Director General Mohamed ElBaradei, who was re-elected to a third four-year term at the annual IAEA General Conference on 26 September. The cornerstone of ElBaradei's plan is the notion that the supply of reactor fuel must be guaranteed and free from political influence. Without guaranteeing the supply of reactor fuel, a country will be unlikely to give up its enrichment or reprocessing programs.

On 27 September 2005, Russian Minister for Atomic Energy Alexander Rumyantsev supported the US initiative. Rumyantsev said that Russia is ready to join the US in creating a bank of uranium fuel, insisting the IAEA develop and regulate the program. Rumyantsev recalled the current US-Russia bilateral agreement where Soviet-produced highly enriched uranium is repatriated from reactors around the world. According to reports on 28 September, nearly 14 kilograms of such uranium was recovered from a research reactor in the Czech Republic and transferred to Russian control. Under the current bilateral agreement, 269 pounds of enriched uranium has already been collected from reactors in Serbia, Romania, Bulgaria, Libya, Uzbekistan and Latvia.

*Sources: "US Offers N-Fuel to Stop Proliferation," Pakistan Herald, 26 September 2005; US Department of Energy; "Russia Ready to Join US-Led Uranium Fuel Bank," Agence France-Presse, 27 September 2005; "Enriched uranium taken from Czech reactor," United Press International, 28 September 2005.*

## INDIA TO RECEIVE US, CANADIAN AND FRENCH NUCLEAR TECHNOLOGY

On 26 September 2005, Canada's Minister of Foreign Affairs Pierre Pettigrew and Indian Minister for External Affairs Natwar Singh issued a joint statement in which Canada agreed to resume supplying nuclear-related dual-use items to Indian civilian nuclear facilities. Both parties agreed to work under International Atomic Energy Agency (IAEA) safeguards and in accordance with the requirements of the Nuclear Suppliers Group's dual-use guidelines. The agreement is alarming because India remains outside of the nuclear Non-Proliferation Treaty. Furthermore, the first Indian nuclear weapon test used plutonium that was manufactured in a reactor provided by Canada.

The Indo-Canadian pact follows a pattern of nuclear cooperation agreements that began July 2005 when Indian Prime Minister Manmohan Singh secured an agreement with US President George W. Bush to receive US civilian nuclear technology. Similar negotiations between Singh and French President Jacques Chirac took place on 12 September 2005 and a joint declaration after the talks announced the intention of the two countries to "work toward the conclusion of

an agreement on bilateral cooperation in the nuclear field." During the talks, India agreed to purchase six highly advanced French Scorpene submarines, supposedly the world's stealthiest attack submarine, for \$2.1 billion.

*Sources: Georges-Picot, Emmanuel, "India, France to Negotiate Nuke Pact," Associated Press, 12 September 2005; "India to buy 6 Scorpene submarines," Rediff India Abroad, Press Trust of India, 12 September 2005; "Canada to supply nuclear reactors to India," Press Trust of India, 26 September 2005.*

## US ENERGY CONSORTIUM SELECTS NEW NUCLEAR SITES

On 22 September 2005, NuStart Energy, the largest US nuclear energy consortium, selected two sites for possible construction of new nuclear plants, Grand Gulf Nuclear Station, near Port Gibson, Mississippi and Bellefonte Nuclear Plant near Scottsboro, Alabama. The selection signals NuStart's plan to apply for a Construction and Operating Licenses (COL), continuing the process of bringing a new generation of nuclear plants online within the next ten years. According to a poll by the Pew Research Center, six in ten people surveyed oppose the increased use of nuclear power. If approved and constructed, the plants would be the first new nuclear energy reactors in the US in more than three decades.

GE Energy and Westinghouse Electric Company are participating with NuStart as Reactor Designers and Manufacturers. The reactor designs under consideration by NuStart are GE's Economic Simplified Boiling Water Reactor (ESBWR) and Westinghouse's Advanced Passive 1000 reactor. The next generation designs are touted as safer, more cost-effective to operate and faster to build. The reactors reduce the number of pumps by 35% and valves by 50%, which increases reliability and reduces maintenance and operating costs.

NuStart, formed in 2004, is comprised of 11 US energy companies committed to building a new generation of nuclear plants in the US. NuStart is participating in a 50-50 cost sharing program that is part of the Department of Energy's Nuclear Power 2010 initiative.

Some NuStart partners have announced they will pursue licenses for new reactors outside of the framework established by the consortium. Entergy, the nation's second largest operator and a leader for the next generation of nuclear energy in the US, announced it would act on its own and develop an application for a new reactor at its Waterford plant in Louisiana, the same plant shut down on 27 August 2005 before being struck by hurricane Katrina.

*Sources: Lester, Will, "Poll: 8 in 10 Want Drivers to Drop SUVs," Associated Press, 15 September 2005; Herbert, H. Josef, "Proposed Sites Narrowed for Nuclear Plant," Associated Press, 22 September 2005; Wald, Matthew, "Energy Group Plans to Build Plants in Gulf States," The New York Times, 23 September 2005.*

## NUCLEAR WASTE CONTAINER ACCIDENT IN TRANSIT

On 22 September 2005, an empty nuclear waste container tipped over at the CSX Frontier Rail yard in Buffalo, New York. The container was being shipped from the Idaho National Laboratory, where it had been emptied of used nuclear fuel from a Navy warship, to the Portsmouth Naval Shipyard in Kittery, Maine. The container tipped over when the train hauling it sideswiped another train in the yard. Officials reported that the container was undamaged and there was no release of radiation.

*Source: Thompson, Carolyn, "Empty Nuclear Waste Container Tips Over," Associated Press, 22 September 2005.*

## MORE PROBLEMS AT HANFORD NUCLEAR SITE

On 23 September 2005, about 600 workers were sent home early from the construction site of Hanford nuclear plant's new waste treatment plant after a worker in an excavated hole cut a gas line without ensuring there was no propane in the line. The incident is the latest in a string of problems with the project, which is managed by Bechtel Corporation.

Earlier this summer, construction was halted indefinitely on a large portion of the project because of seismic problems, rising costs and delays, resulting in some 650 workers being laid off.

The plant is being built to turn millions of gallons of radioactive waste into glasslike logs for permanent disposal in a nuclear waste repository. The waste, left over from Cold War plutonium production, is currently stored in 177 underground tanks on the Hanford site.

According to a Bechtel spokesperson, the line cut by the worker held only residual propane. Had more propane been in the line, the worker could have been killed. Propane, which is heavier than air, would have settled at the bottom of the hole, possibly asphyxiating the worker.

Earlier in the week, one worker was shocked when a metal pole was driven into the ground and touched a buried electrical line. Another worker failed to shut off one of three conveyor belts - assuming it was already off - while sampling gravel at the construction project's plant for making concrete. No one was seriously injured in the incidents.

Agency officials have repeatedly refused to say how much the new price tag - already at \$5.8 billion - will rise or when the plant may open. Billions of taxpayer dollars already have been spent, yet the project is only about 30 percent complete. The operating deadline also has been pushed back three times from the original deadline of 1999, with another delay likely.

Last year, Bechtel halted construction for a safety awareness day after several accidents. The US Department of Energy (DOE) has levied fines against and withheld part of

the fee for Bechtel over safety concerns, although the project's injury statistics have improved in recent months.

In related news, the DOE has also sent two letters to Bechtel expressing concern over the poor quality of the company's in-process construction work at the Hanford nuclear reservation.

One of the letters complains that the structural steel design of the Analytical Laboratory at Hanford's vitrification plant does not meet commercial building standards used nationwide. Specifically, the design did not meet requirements for compression load limits, connection details, and column strength, among other standards. Work to correct the design will put construction on the Analytical Laboratory about three months behind the contract schedule and seven months behind the contractor's schedule for completion of the project.

According to Bechtel spokesman John Britton, "We did not catch it nearly as early as we should have."

The second DOE letter laments "an apparent significant decline in quality" related with the welding and welding inspection of Bechtel's construction work on a massive plant which would convert millions of gallons of radioactive waste into a stable glass form for permanent disposal.

The waste for the facility is currently being held in underground tanks, left over from past production of plutonium for the nation's nuclear weapons program. A recent earthquake study demonstrated that key parts of the plant might not withstand a severe earthquake, prompting construction to slow on the buildings at the plant.

Sources: "Construction Workers Sent Home Early from Hanford Plant Site," Seattle Post-Intelligencer, 23 September 2005; "Hanford Lab Building Lags Behind," Tri-Valley Herald, 15 September 2005.

## Nuclear Laboratories

### LOS ALAMOS AND LAWRENCE LIVERMORE NATIONAL LABORATORIES COMPETE TO COMPLETE RELIABLE REPLACEMENT WARHEAD

Scientists at Los Alamos National Laboratory (LANL) in New Mexico and Lawrence Livermore National Laboratory (LLNL) in California are working with colleagues at other US nuclear weapons production plants to design a Reliable Replacement Warhead, a warhead to replace ones from the Cold War-era.

LANL and LLNL are working separately to complete their designs. Whereas Cold War-era nukes were designed to maximize yield and minimize warhead size, the RRW will focus on "reliability, cost and environmental concerns, and longevity," according to an article in the journal *Inside Defense*.

Congress approved the RRW program last year when it earmarked \$9 million under the fiscal year 2005 Consolidated Appropriations Act. The effort to secure the funding was spearheaded by House Energy and Water Development Appropriates Subcommittee Chairman David Hobson (R-Ohio). For fiscal year 2006, the Bush administration requested \$9.4 million for RRW. House and Senate appropriators working on their respective energy and water spending bills have approved \$25 million for the effort, but the bills must still be finalized in a conference committee in the coming weeks.

National Nuclear Security Administration (NNSA) officials are emphasizing that the RRW is not a new weapon but a warhead replacement for existing weapons. According to some NNSA officials, one of the goals of the RRW effort is to introduce a design that can be certified without undergoing any nuclear tests.

The RRW project is also focused on training the next generation of weapons designers by giving them a chance to work on a new device from scratch. Joseph Martz, LANL's project director and "capture manager" for the RRW said, "The old hands... are tutoring the newcomers."

LANL and LLNL officials have visited other sites in the US nuclear weapons complex - the Kansas City Plant in Missouri, Y-12 Plant in Tennessee, Pantex Plant in Texas, and the Savannah River Site in South Carolina - to gather their input on the project. Currently, the LANL and LLNL teams are effectively competing, but each team will get a chance to view both designs in March 2006.

The last new nuclear warhead designed and deployed for the stockpile - coming up on 20 years ago - was the W-88, which was placed on submarine-launched missiles.

For more information on the Reliable Replacement Warhead program, read a fact sheet prepared by Nuclear Watch New Mexico at:  
<http://www.nukewatch.org/facts/nwd/RRWFS071205.pdf>.

Source: Costa, Keith J., "Los Alamos Eyes Easier Production Process for Replacement Warhead," *Inside Defense*, 29 September 2005.

### LANL FIRE PROTECTION PROGRAM EARNS SAFETY BOARD REBUKE

In early September, the Defense Nuclear Facilities Safety Board issued a report stating that Los Alamos National Laboratory's (LANL) fire safety program is "deficient." Among problems identified in the report are insufficient staff, insufficient budget, and lack of a comprehensive plan.

According to the report, "Although LANL and [the National Nuclear Security Administration (NNSA)] have increased their attention to fire protection and taken some actions to improve fire protection, resolution of issues has been piecemeal."

Activists say the fire safety problems are particularly irksome

### NAPF 22ND ANNUAL EVENING FOR PEACE

On 29 October, the Nuclear Age Peace Foundation will hold its 22nd Annual Evening for Peace. This year, we will present Daniel Ellsberg with our Distinguished Peace Leadership Award for his strong and courageous stances against war, militarism and nuclear weapons. He has played a pivotal role in promoting governmental accountability and transparency as it relates to US foreign policy. We will also present the Honorable Douglas Roche, O.C. with a Lifetime Achievement Award for his steadfast commitment as chair of the Middle Powers Initiative to a nuclear weapons-free world. Helen Thomas, the longtime Dean of the White House Press Corps, will be joining us to interview the two honorees. The event will take place in Santa Barbara, California. For information on tickets and to make reservations, please call the Foundation at (805) 965-3443 or visit [http://www.wagingpeace.org/menu/programs/public-events/evening-for-peace/2005/22nd-evening\\_pre.htm](http://www.wagingpeace.org/menu/programs/public-events/evening-for-peace/2005/22nd-evening_pre.htm).

### NEW FOUNDATION BOOK: HOLD HOPE, WAGE PEACE

The Nuclear Age Peace Foundation is pleased to announce the publication of a new book entitled *Hold Hope, Wage Peace*, an inspiring collection of essays that will rouse you to take action for the creation of a more just and secure world. This compendium of inspiration and information by international peace leaders includes a foreword by eminent journalist Walter Cronkite and articles by Nuclear Age Peace Foundation President David Krieger, famed primatologist Jane Goodall, Rev. Theodore Hesburgh, Soka Gakkai International President Daisaku Ikeda, Nobel Prize Laureate Mairead Corrigan Maguire, Body Shop founder Anita Roddick, historian Howard Zinn, and many others!

There is a Zen saying that one chops wood and carries water before enlightenment; and after enlightenment one chops wood and carries water. In other words, the basics don't change with enlightenment. The thesis of this important book is that the basics for building a more decent world are holding hope and waging peace, and that these do not change.

In his foreword, Walter Cronkite writes, "Hopelessness translates into inaction; it translates into surrender to what is feared to be the inevitable. We must all be thinking about what can be done to assure a human future on our planet."

Don't miss out! Pre-order your copy of *Hold Hope, Wage Peace* today for only \$15.95 plus \$4.00 shipping and handling. The book can also be purchased in bulk orders of 100 or more copies for a special rate.

following the Cerro Grande fire at Los Alamos in 2000. Joni Arends, Executive Director of Concerned Citizens for Nuclear Safety in New Mexico, stated, "It is inexcusable that five years later so few improvements have been made. Where is the accountability?"

*Source: "Fire Protection Program at LANL Deficient," CCNS News Update, 7-14 September 2005.*

### LANL BEHIND SCHEDULE ON NUCLEAR WEAPONS "RELIABILITY" TESTING

A federal review released on 21 September 2005 found that Los Alamos National Laboratory (LANL) is behind schedule for conducting tests to ensure nuclear weapons "reliability." The tests are a part of the Department of Energy's (DOE) Stockpile Stewardship Program.

Department of Energy Inspector General Gregory Friedman stated in the report, "Los Alamos did not complete hydrotests as scheduled in support of NNSA's (National Nuclear Security Administration) Stockpile Stewardship Program."

LANL budgets over \$20 million a year for testing of W76, B61, and W88 weapons. However, the lab completed only six of 15 tests scheduled from 2002 through 2004. Six of the tests have been delayed for up to two years, and the final three remain incomplete as of April 2005. The report found that LANL is likely to fall further behind its testing schedule in coming years as it cannot keep up with the number of planned tests.

According to LANL spokesman Kevin Roark, recommendations made by the DOE Inspector General have been implemented over the past two years. NNSA managers responded to the audit saying that while testing fell behind in 2002 and 2003, all tests scheduled in 2004 were conducted until former director Pete Nanos ordered laboratory work to be shut-down due to safety and security concerns.

*Source: "Los Alamos Late on Nuclear Stewardship Testing," Global Security Newswire, 26 September 2005.*

### UNIVERSITY OF CALIFORNIA'S LLNL MANAGEMENT CONTRACT OFFICIALLY EXTENDED

On 26 September 2005, the US Department of Energy (DOE) finalized a two-year extension of the University of California's contract to run the Lawrence Livermore National Laboratory. The contract will now run through September 2007.

The DOE announced its intention to extend the contract in June 2004. The extension allows contract competitions for the DOE's two national nuclear weapons labs, Lawrence Livermore and Los Alamos, to be held separately.

*Source: Mason, Betsy "UC's Lawrence Livermore Contract Extended Two Years," San Jose Mercury News, 26 September 2005.*

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## Resources

### NO MORE HIROSHIMAS BY JAMES KIRKUP

James Kirkup first heard of Hiroshima when the American atomic bomb was dropped there in 1945. He describes Hiroshima as "that place that was to become a universal symbol of man's inhumanity towards his fellow-men." In 1955, after seeing an exhibition of realistic paintings on the horrors of the atomic bombings by two Japanese artists, he wrote the poem, "Ghosts, Fire, Water." In 1959, he moved to Japan and taught English literature. In Japan, he had the chance to visit Hiroshima and Nagasaki, and continued writing poems that are included in this book. Kirkup's poems are intense, haunting and piercingly honest. First published in Japan in 1983, No More Hiroshimas is the republished UK version. To order a copy of No More Hiroshimas, please visit:

<http://www.spokesmanbooks.com/James%20Kirkup's%20Hiroshimas.htm>.

### GLOBAL STOCKS OF NUCLEAR EXPLOSIVE MATERIALS

Global Stocks of Nuclear Explosive Materials has been updated by the Institute for Science and International Security. The report is an estimate of global inventories of nuclear explosive materials, mostly plutonium and highly enriched uranium. The complete report is available online at: [http://www.isis-online.org/global\\_stocks/end2003/tableofcontents.html](http://www.isis-online.org/global_stocks/end2003/tableofcontents.html).

### THE NORTH KOREAN PLUTONIUM STOCK MID-2005

On 7 September 2005, the Institute for Science and International Security released a report entitled The North Korean Plutonium Stock Mid-2005. The report provides a concise analysis of North Korea's history of plutonium production. Backed by new satellite imagery, it appears North Korea is preparing a new 50 megawatt reactor capable of

producing enough plutonium each year for ten nuclear weapons. The complete paper is available online as a PDF download at: <http://www.isis-online.org/publications/dprk/dprkplutoniumstockmid05.pdf>.

### NUCLEAR CLEANUP: PRELIMINARY RESULTS OF THE REVIEW OF THE DEPARTMENT OF ENERGY'S ROCKY FLATS CLOSURE PROJECTS

On 23 September 2005, the Government Accountability Office released Nuclear Cleanup: Preliminary Results of the Review of the Department of Energy's Rocky Flats Closure Projects. The GAO last reported on cleanup efforts at Rocky Flats in February 2001. In that report, it concluded the project was running over cost and behind schedule. The 23 September 2005 report finds the opposite - that cleanup efforts are ahead of schedule and running under budget. Cleanup at Rocky Flats is slated to finish in October 2005. The complete report is available as a PDF download from: <http://www.gao.gov/new.items/d051044r.pdf>.

## Quotable

*"The Cold War was won, and the Peacekeeper helped win it."*

Ronald Sega, Undersecretary of the US Air Force  
Remarks made during the deactivation of the final Peacekeeper missile  
20 September 2005

*"Today, as we look at New Orleans and the whole Gulf Coast incredulously, we can't believe the devastation we see, devastation caused by a natural disaster, Hurricane Katrina, but a crude nuclear weapon, if it goes critical, could do damage hundreds, even thousands of times worse. This is no idle threat... Osama bin Laden has called Al Qaida's acquisition of WMDs nothing less than a religious obligation... So we're in another arms race today. They race to acquire these weapons, and I race to stop them. Our national security is based on the premise that the United States should do everything - everything we can - to avert such a catastrophe on the fastest possible timetable."*

US Representative John Spratt (D-SC)  
Remarks made at a news conference on Democratic National Security Strategy  
16 September 2005

*"You can't go to war and win without space."*

Lance Lord, US General and Commander of US Air Force Space Command  
Remarks made during an interview with the Washington Times  
22 September 2005

*"Our biggest challenge, and our biggest failing, is on nuclear non-proliferation and disarmament. Twice this year - at the NPT review conference, and now at this Summit - we have*

*allowed posturing to get in the way of results. This is inexcusable. Weapons of mass destruction pose a grave danger to us all, particularly in a world threatened by terrorists with global ambitions and no inhibitions. We must pick up the pieces in order to renew negotiations on this vital issue, and we should support the efforts Norway has been making to find a basis for doing so."*

Kofi Annan, UN Secretary General  
Annan's address to the 2005 World Summit at the United Nations  
14 September 2005

*"Libya made a historic decision to get rid of its weapons of mass destruction and I think that it is paying off for Libya in the sense that American companies are there, that we are having this meeting and that we are talking about how to continue and push forward our relationship. It has been a good thing for the world and for the international community to see the leadership of Libya and your leader making this historic decision, and a decision that was taken for peace."*

US Secretary of State Condoleezza Rice  
Remarks made during a meeting with Libyan Foreign Minister Abd al-Rahman Shalgam  
17 September 2005

*"We had very extensive diplomatic preparation for the NPT review conference. And the fact is that in the five-year run-up to that review conference, with three preparatory conferences over the five-year period, at the end of the three preparatory conferences the parties had not even been able to agree on an agenda. Five years of preparation: no agenda. The question of the outcome of the conference depended on disagreements over the highest priority and the greatest threats to the non-proliferation regime. We believe that the greatest threat to the nonproliferation regime was proliferation, rogue states that were pursuing strategic decisions to acquire nuclear weapons capabilities that had to be stopped. Other countries insisted that the real problem in the world was the United States and the allegedly inadequate efforts by the United States for nuclear disarmament...We thought our disarmament record was quite good and we were prepared to defend it, and we did. So that the notion that there was inadequate preparation or that somehow it was a problem largely caused by the United States I think was simply not correct. It is a fact that the nonproliferation regime is under pressure, but not from us."*

John Bolton, US Permanent Representative to the United Nations  
Remarks made during testimony in a House Committee on International Relations hearing  
28 September 2005

*"Canada is abandoning its 40- to 50-year traditional diplomatic approach in how to deal with the dangers of nuclear weapons...What we are witnessing is a major sea change in attitudes towards nuclear proliferation...[India is being] rewarded with recognition as a nuclear-weapon state."*

Lloyd Axworthy, Former Canadian Minister of Foreign Affairs  
During an interview with The Globe and Mail on Canada's new nuclear partnership with India  
26 September 2005

*"This decision is a slap in the face to all of the other countries that have toed the line on nonproliferation."*

Peggy Mason, Former Canadian Ambassador for Arms Control  
During an interview with The Globe and Mail on Canada's new nuclear partnership with India  
26 September 2005

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