



# THE DEFENSE MONITOR

*The Newsletter of the Center for Defense Information*

## Global Zero Commission Meets in Advance of Moscow Summit Outlines Step-by-Step Action Plan

ANDREW PORTOCARRERO, EXECUTIVE VICE PRESIDENT, WORLD SECURITY INSTITUTE

**THE INTERNATIONAL GLOBAL ZERO COMMISSION**, a group of political and military leaders from the United States, Russia and other key countries, held an intensive two-day meeting in Washington, D.C. on June 28-29, 2009 - where they presented a practical and comprehensive plan calling for the phased and verified elimination of all nuclear weapons over the next 20 years, and briefed senior Obama administration officials on their recommendations in advance of the July 6-8 Moscow Summit.

The televised press conference attracted worldwide media coverage, including more than 540 stories in media outlets in 32 countries and television appearances by Global Zero leaders on CNN International, PBS's "Charlie Rose," BBC TV, Al Jazeera, Australian Broadcasting Corporation, Canada Today, NHK Japan, Phoenix TV (Hong Kong), Xinhua News Agency (Beijing), CNBC, MSNBC, Reuters and Russia Today, among others. Moreover, the action plan generated public support from around the world. With the help of the online advocacy network Avaaz.org, in just

five days, more than 110,000 citizens from virtually every country in the world signed the Global Zero declaration.

Among the Global Zero Commissioners are former Ambassador Richard Burt, Chief U.S. Negotiator for the START 1 negotiations, former U.S. Senator Chuck Hagel, Russian President Dmitry Medvedev's advisor Igor Yurgens, and Russian Senator Mikhail Margelov. The Commission is part of the Global Zero initiative - an international, nonpartisan endeavor formed in response to the

growing threats of proliferation and nuclear terrorism and dedicated to achieving the phased, verified elimination of all nuclear weapons. Global Zero is spearheaded by a group of more than 100 leaders worldwide, including many who have worked at senior levels with issues of national security such as former heads of state, former foreign ministers, former defense ministers, former national security advisors, and more than 20 former top military commanders.

The press conference came following the April 1 meeting between



The political and military leaders of the Global Zero Commission host their press conference in Washington, D.C. on June 29, 2009.

Global Zero

### INSIDE

- 3 Gates is Right on the F-22**  
by Winslow Wheeler, Director, CDI Straus Military Reform Project
- 4 Chronology of North Korea's Missile Flight Tests**  
by Jenny Shin, CDI Research Assistant

» Please note that The Defense Monitor is now being published on a quarterly basis.



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[www.globalzero.org](http://www.globalzero.org)

Presidents Obama and Medvedev, in which they jointly announced a framework agreement for new reductions to U.S. and Russian arsenals. In advance of the Presidents' Moscow Summit, the Action Plan outlined the next set of steps toward the elimination of all nuclear weapons.

The Global Zero Commission's four-phased plan of action includes the key steps for the preparation, negotiation, ratification and implementation of a global zero agreement on effective measures for eliminating all nuclear weapons. The Plan remains a work-in-progress and Commissioners will meet again in Moscow this fall to conduct a hard-nosed, realistic and thorough examination of the critical conditions that must be met at each stage in the process. The key elements of the Action Plan include:

#### **Phase 1 (2010-2013)**

Following conclusion of the START replacement treaty, negotiate a bilateral accord for the United States and Russia to reduce to 1,000 total warheads each.

Prepare for multilateral negotiations.

#### **Phase 2 (2014-2018)**

In a multilateral framework, the United States and Russia reach agreement to reduce to 500 total warheads each (to be implemented by 2021) as long as all other nuclear weapons countries agree to freeze their stockpiles until 2018, followed by proportional reductions until 2021. The agreement includes:

A requirement that all countries with nuclear weapons sign and ratify the multilateral accord in order for it to enter into force;

A comprehensive verification and enforcement system, including no-notice, on-site inspections.

Strengthen safeguards on the civilian nuclear fuel cycle to prevent diversion of materials to build weapons.

#### **Phase 3 (2019-2023)**

Negotiate a global zero accord, which includes:

A schedule for the phased, verified, proportionate reduction of all nuclear arsenals to zero total warheads by 2030;

A requirement that all nuclear capable countries sign and ratify the global zero accord in order for it to enter into force;

Continued implementation of the verification and enforcement system.

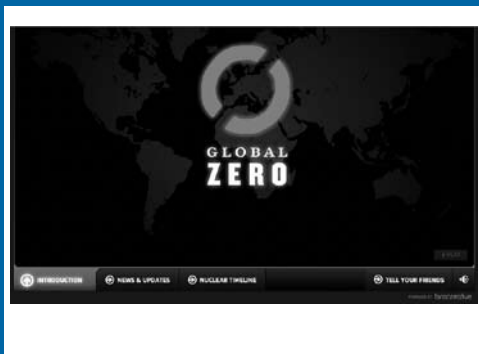
#### **Phase 4 (2024-2030)**

Complete the phased, verified, proportionate reduction of all nuclear arsenals to zero total warheads by 2030.

Continue the comprehensive verification and enforcement system.

The Commission will present the final plan at the Global Zero Summit February 2-4, 2010, which will convene 250 international leaders. Political support for Global Zero continues to grow – in June, Prime Minister Putin said that Russia would agree to eliminate its nuclear arsenals if all other nuclear weapons countries did as well. In July, G8 leaders announced their support of the Obama-Medvedev commitment to eliminate all nuclear weapons and called on all countries to “undertake further steps in nuclear disarmament.” ■

### **GLOBALZERO.ORG LAUNCHES NEW INTERACTIVE MAP**



Global Zero has launched an interactive map on its Web site, <http://www.globalzero.org>, which details the history of the nuclear story with a chronological timeline, along with recent news and updates.

The Global Zero multimedia map offers a compelling visual of the worldwide nuclear threat by charting the history of nuclear weapons development and proliferation.

It can be accessed at <http://www.globalzero.org/map>.

# Gates is Right on the F-22

WINSLOW T. WHEELER, DIRECTOR, CDI STRAUS MILITARY REFORM PROJECT

**CONGRESS IS BUSYING ITSELF** trying to overturn Secretary of Defense Robert Gates' decision to stop producing the F-22 fighter. But President Barack Obama has threatened to veto a spending bill for the entire Defense Department if it contains a single F-22 over the 187 now authorized.

Gates has said that, without a doubt, Obama should veto a bill that includes additional F-22s. The fact that there are doubts demonstrates the mess our defenses are in.

The House committee wants to make a down payment on 12 more F-22s in 2011; the Senate committee wants seven more in 2010.

The House passed its version of the bill on June 25 by a vote of 389-22. So Obama and Gates have a long way to go to show that they have the 145 or so votes they would need to sustain a veto.

Gates and Obama's case against the F-22 is reasonable but needs to be more comprehensive.

Gates has argued that not a single F-22 has flown in the wars in Iraq and Afghanistan. But there simply are no enemy air forces there.

Also, the F-22 is outrageously expensive. The 187 now authorized are costing the nation more than \$65 billion, almost \$350 million for each one.

More important, but so far undressed, is whether the F-22 is even a good fighter. Actually, it is a gigantic disappointment.

Its boosters advertise the F-22 as a technological wonder - which it isn't.

Its "stealth" characteristic is greatly exaggerated. And, while the F-22



U.S. Air Force

An F-22 is shown deploying flares.

is less detectable by some radar at certain angles, it is easily detectable to many types of radar in the world, including early Russian and Chinese models. Just ask the pilots of the two stealthy F-117 bombers that were put out of action by Serbs in the 1999 Kosovo air war using antiquated radar systems.

Worse, the F-22 depends on its radar and long-range, radar-guided missiles. Such "beyond visual range" radar-based air warfare has failed time and time again in war.

There are two problems. First, even the low probability of intercept radar in the F-22 is vulnerable to detection by enemies, especially with the proliferation of spread-spectrum technology in cell phones and laptops. The radar not only signals the F-22's presence to enemies but also acts as a beacon for their radar-homing missiles. While both the Russians and the Chinese specialize in such

missiles, our Air Force, in its exercises, insists that such capabilities do not exist.

Second, its aerodynamic performance, short-range missiles and guns are nothing special, which I observed at Nellis Air Force Base in Nevada when an F-16 "shot down" an F-22 in exercises.

A vote in Congress for more F-22s is a vote to decay our pilots' skills, shrink our Air Force at increasing cost and reward Congress's lust for pork. Congress's new defense bill should, indeed, be vetoed if a single F-22 is added. Pro-defense members of Congress will support that move. ■

..... Winslow T. Wheeler is the author of the new anthology "America's Defense Melt-down: Pentagon Reform for President Obama and the New Congress."

This article was first published by Politico on June 6, 2009.

# Chronology of North Korea's Missile Flight Tests

JENNY SHIN, CDI RESEARCH ASSISTANT

**N**orth Korea drew international criticism once again for firing a series of short-range missiles off its east coast. On July 2, 2009, North Korea test-fired four short-range missiles, which were followed by seven missiles launched on July 4, 2009. South Korean military officials reported that the test-firings on the U.S. Independence Day involved Scud and No Dong (or Rodong) ballistic missiles that flew about 240-310 miles off North Korea's eastern coast into the sea separating Japan and North Korea, according to South Korea's Yonhap news agency. The missile tests had been expected as North Korea declared a no-sail zone from June 25 to July 10 in order to conduct military drills, but South Korea and Japan called these military exercises a provocative act that violated a U.N. Security Council resolution barring the rogue nation from conducting missile-launch activities. Britain and France issued similar statements, while Russia and China called all sides to remain calm and urged North Korea to return to the six-party talks. These missile tests came after the U.N. Security Council imposed new sanctions prompted by North Korea's second nuclear test on May 25, 2009.



The April 5, 2009 satellite rocket launch from Musudan-ri, North Korea, as covered by North Korean television.

## **April/September 1984**

### **Hwasong-5 (Scud-B)**

In 1984, six tests of the Hwasong-5 missile, a reverse-engineered version of the Soviet Scud-B missile, were reportedly conducted with three successes and three failures in April and September. It was believed that missile production began in 1986 following these tests.

## **June 1990**

### **Hwasong-6 (Scud-C)**

North Korea conducted its first test launch of the Hwasong-6 missile, an indigenously made version of the Soviet Scud-C and an upgrade of the Hwasong-5 missile. Earlier reports suggested that the first test actually took place in May 1986, but these events were unconfirmed. The upgrade included an increase in the missile's range to nearly 600 km.

## **July 1991**

### **Hwasong-6 (Scud-C)**

The second test of the Scud-C was fired from a military base in Kangwon-do province. This test was also believed to have been a success and had a range of about 500 km.

## **June 1992**

### **No Dong (ND)-1**

The test of a No Dong-1 missile, an extended version of the Scud, had either failed or been cancelled, according to Japanese media. Development began during 1988-1989, with the first prototypes being completed in 1991. The missile was designed to have a potential range of 1,000 to 1,300 km.

## **May 29-30, 1993**

### **Hwasong-5, Hwasong-6, No-Dong 1**

At least one or two Hwasong-5 and Hwasong-6 missiles and one ND-1 missile were launched from the Musudan-ri launch facility. The missiles were apparently fired at a target buoy in Japan's direction, which Japan saw as a threat to its security. U.S. officials were unable to determine whether any of the missile tests were successful, but it was believed the ND-1 traveled 500 km and one Hwasong traveled 100 km.

## **May 31, 1994**

### **Anti-Ship Cruise Missile (ASCM)**

Officials from the Pentagon reported that North Korea had missed its target during a test of its cruise missile designed to target ships. U.S. officials stated the missile, which had a range of 85 to 150 km, was developed over 18 months and was an upgrade of China's HY-2 Silkworm missile.



**June 2, 1994**

**Anti-Ship Cruise Missile (ASCM)**

A second test of the ASCM was fired into the Sea of Japan but missed its target, according to a senior Pentagon official.

**March 30-31, 1995**

**Anti-Ship Cruise Missile (ASCM)**

The Japanese government reported that North Korea conducted another test of the ASCM as part of military exercises.

**May 23, 1997**

**Anti-Ship Cruise Missile (ASCM) (AG-1)**

North Korea test-launched a new ASCM called the AG-1 cruise missile from a mobile launcher in its first successful test. The firing of the missile was detected by a United States RC-135 Cobra Ball surveillance aircraft. The AG-1 was believed to have a longer range than the Silkworm of as much as 120 km with better guidance technology.

**Aug. 31, 1998**

**Taepodong (TD)-1**

North Korea tested a three-stage Taepodong-1 to reportedly place a satellite into orbit. U.S., Japanese and South Korean officials saw the event as a test of a long-range missile that failed but showed North Korea's capabilities to develop multi-stage missiles. During the test, the first and second stages separated approximately 300 km and 1,380 km respectively from the launch site. The third stage, which came as a surprise to intelligence analysts, failed right before reaching orbit. Satellite photographs showed that TD-1 consisted of the ND-1 as the first stage and the Hwasong-6 as the second stage. On Sept. 24, 1999, North Korea imposed a moratorium on itself on long-range missile flight tests after testing the TD-1.

**Feb. 24 / March 10 / Oct. 20, 2003**

**Anti-Ship Cruise Missile (ASCM) (AG-1)**

A series of ASCM missile tests were conducted in 2003. The missiles involved a KN-01 or Seersucker short-range missile and a modified version of North Korea's ASCM.

**March 8, 2006**

**Anti-Ship Cruise Missile (ASCM)**

Two short-range missiles were fired in the direction of China.

**July 4-5, 2006**

**Taepodong-2**

A series of short- and medium-range missiles, including one long-range Taepodong-2 ballistic missile, were launched. The TD-2 failed 40 seconds after the launch, but was believed to have an estimated range of 3,600 to 4,300 km..

**Oct. 9, 2006**

**Underground Nuclear Test**

The U.N. Security Council held an emergency meeting following North Korea's nuclear test. Resolution 1718 was unanimously adopted and imposed a series of sanctions. The Resolution demanded that North Korea not "conduct further nuclear tests or launch ballistic missiles."

**May 25 / June 7 / June 27, 2007**

**Anti-Ship Cruise Missile (ASCM)**

On May 25, ASCMs, with a range of 100 to 200 km were test-fired. The missiles were either modified Silkworm or KN-01 missiles. On June 7, two ASCMs were test-launched; June 27, three short-range missiles were fired as confirmed by Pentagon officials. At least one of the missiles involved a KN-02, a new solid-fueled missile with an improved precision strike ability and a range of 120 km.

**March 28 / May 30, 2008**

**Anti-Ship Cruise Missile (ASCM)**

North Korea launched a three-stage rocket in what North Korean officials said would place a satellite into space. According to NORAD and USNORTHCOM, "stage one of the missile fell into the Sea of Japan. The remaining stages, along with the payload itself, landed in the Pacific Ocean" and "no object entered orbit." On April 14, North Korea quit the six-party talks in response to the Security Council's condemnation of the rocket launch and threat of sanctions.

**April 5, 2009**

**Taepodong-2**

North Korea launched a three-stage rocket in what North Korean officials said would place a satellite into space. According to NORAD and USNORTHCOM, "stage one of the missile fell into the Sea of Japan. The remaining stages, along with the payload itself, landed in the Pacific Ocean" and "no object entered orbit." On April 14, North Korea quit the six-party talks in response to the Security Council's condemnation of the rocket launch and threat of sanctions.

**May 25, 2009**

**Underground Nuclear Test / Short-range missiles**

North Korea claimed it had conducted a "successful" nuclear test. According to the U.S. Geological Survey, the detonation created a magnitude 4.7 tremor, compared to the 4.1-mag. seismic event from the first nuclear test. At least six short-range missiles were fired into the sea off its east coast over three days following the nuclear test. On June 12, 2009, the Security Council unanimously voted to impose new sanctions.

**July 2-4, 2009**

**KN-01 Short-range missiles / Scud-C, Scud-ER / No Dong (Rodong)**

Four short-range missiles and an additional seven missiles were fired on July 2nd and July 4th, respectively. A South Korean military official stated that the four missiles fired on July 2nd were KN-01 missiles that traveled approximately 60 miles before dropping into the sea. The July 4th launches reportedly involved two Scud-C missiles, two new Scud-ER missiles, and three medium-range No Dong missiles. Yonhap News Agency reported that these missiles traveled 240-310 miles before dropping into the sea. The U.N. Security Council "condemned and expressed grave concern" over North Korea's activities.



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Pictured above, clockwise from back left are Kendall Scott, Christopher Gooch,  
Noorulain Khawaja, Joy Kazadi, Kelly Mallahan, Matthew Padilla, Caitlin Clarke,  
Elyssa Emsellem and J.C. McCray.