



USAF Center for Unconventional Weapons Studies (CUWS) Outreach Journal

Issue No. 1141, 14 November 2014

Welcome to the CUWS Outreach Journal! As part of the CUWS' mission to develop Air Force, DoD, and other USG leaders to advance the state of knowledge, policy, and practices within strategic defense issues involving nuclear, biological, and chemical weapons, we offer the government and civilian community a source of contemporary discussions on unconventional weapons. These discussions include news articles, papers, and other information sources that address issues pertinent to the U.S. national security community. It is our hope that this information resource will help enhance the overall awareness of these important national security issues and lead to the further discussion of options for dealing with the potential use of unconventional weapons. **All of our past journals are now available at http://cpc.au.af.mil/au_outreach.aspx.**

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FEATURE ITEM: *"Independent Review of the Department of Defense Nuclear Enterprise."* Review led by Larry D. Welch, General, USAF (Ret) and John C. Harvey, Jr., Admiral, USN (Ret); for the Honorable Charles T. Hagel, Secretary of Defense, Pentagon; 2 June 2014, 60 pages.

<http://www.defense.gov/pubs/Independent-Nuclear-Enterprise-Review-Report-30-June-2014.pdf>

The Independent Review Team examined the nuclear deterrent mission in the Departments of the Navy and Air Force and sought to identify leadership, organization, investment, morale, policy, procedural, and/or other shortcomings that are adversely impacting the mission. The Review visited six Navy and seven Air Force nuclear field activities, multiple support organizations, and the headquarters organizations. The team also reviewed findings and recommendations from relevant previous reports and ongoing investigations including several recent Defense Science Board reports on nuclear issues and the Air Force Blue Ribbon Review of Nuclear Weapons Policies and Procedures.

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The Los Angeles Times – Los Angeles, CA

Aging Nuclear Arsenal Grows Ever More Costly

By Ralph Vartabedian and W. J. Hennigan

November 8, 2014

Pipes, tanks and other equipment rust in the humid Southern air. Leaky roofs leave puddles on factory floors. Abandoned buildings are scattered across an 800-acre site contaminated with hundreds of tons of mercury.

If this were a factory making cars in Detroit or steel in Pennsylvania, it would have long ago been shuttered.

But this is the Y-12 National Security Complex, a linchpin of the Energy Department's nuclear weapons complex, responsible for making thermonuclear assemblies for hydrogen bombs.

The 1940s-era plant is part of a weapons program that has become increasingly costly to operate because of aging equipment, deteriorating facilities and soaring overhead costs. At its root, it is bloated and mismanaged, say former Energy Department officials, outside experts and members of Congress.

The nation's nuclear weapons stockpile has shrunk by 85% since its Cold War peak half a century ago, but the Energy Department is spending nine times more on each weapon that remains. The nuclear arsenal will cost \$8.3 billion this fiscal year, up 30% over the last decade.

The source of some of those costs: skyrocketing profits for contractors, increased security costs for vulnerable facilities and massive investments in projects that were later canceled or postponed.

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"We are not getting enough for what we are spending, and we are spending more than what we need," said Roger Logan, a senior nuclear scientist who retired in 2007 from Lawrence Livermore National Laboratory. "The whole system has failed us."

The Defense Department's fleet of submarines, bombers and land-based missiles is also facing obsolescence and will have to be replaced over the next two decades, raising the prospect of further multibillion-dollar cost escalations.

Now the Obama administration is moving forward with a plan to modernize the strategic weapons system over the next decade, an effort the Congressional Budget Office estimates will cost \$355 billion. That comes as the Pentagon is under pressure to reduce its budget, and outside experts warn that the modernization could reach \$1 trillion over the next 30 years.

"Simply stated, there is no plan for success with available resources," said Norman Augustine, a former Pentagon and defense industry official who is leading a review of the Energy Department's bomb program.

U.S. nuclear weapons strategy rests on a triad of delivery systems — bombers, submarines and land-based missiles — developed early in the Cold War to deliver warheads anywhere in the world.

The three legs of the triad were designed to ensure that even in a massive surprise attack, at least one leg would survive to deliver a retaliatory strike.

Today, elements of the systems are virtual museum pieces. An example is the B-52. One of the massive gray bombers recently sitting on a tarmac at the Global Strike Command at Barksdale Air Force Base in Louisiana rolled off Boeing Co.'s assembly line in 1960 — during the Eisenhower administration.

Under current plans, B-52s will probably fly another 26 years. By the time the bomber retires, it will be 80 years old — older than any strike aircraft ever flown in military service.

The other legs of the nuclear triad are 450 1960s-era Minuteman III missiles based in silos in Wyoming, Montana and Nebraska, and 14 Ohio-class submarines from the 1980s that are also nearing the end of the design life of their nuclear propulsion systems.

The nuclear warheads that these vehicles carry are maintained at the legacy sites of the Manhattan Project. Although it is significantly smaller than in its Cold War heyday, the Energy Department industrial complex stretches from South Carolina to California with more than 40,000 employees.

The department has three scientific design laboratories, a site for underground experiments the size of Rhode Island and an assembly factory on the flatlands of West Texas, despite the fact the government hasn't designed, built or tested a new nuclear warhead in decades.

When the U.S. stockpile reached its peak in 1967 with 31,255 warheads and bombs, it cost \$7 billion annually in today's dollars to build and maintain nuclear weapons.

In that year, the government had seven reactors humming to make plutonium; it built submarine reactors, refined large quantities of plutonium and uranium and manufactured new weapons. Almost once a week, it set off a bomb underground in Nevada.

Today, it does none of those things, but simply maintains the existing 4,804 weapons at \$1.3 billion more than in 1967. And the costs would be even higher if items such as submarine reactors, included in the 1967 budget, were added.

Don Cook, chief of the nation's nuclear weapons program for the Energy Department, argued that the size of the stockpile doesn't matter, because the facilities still have to have capability and special machines to repair even small numbers of weapons.

"You would think the saving grace would be having smaller numbers of weapons, so somehow it must be cheaper, but it doesn't work that way," Cook said.

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Critics sharply dispute that assertion, saying the department's capacity is beyond its needs, its vast complex is a political pork barrel, and its operations are hindered by mismanagement.

Profits paid to the contractors that run the system have tripled since 2006 to \$312 million, The Times found.

The eight major nuclear weapon labs and production sites are run by a network of joint ventures and private companies, including the University of California, Bechtel Corp., Northrop Grumman Corp., Honeywell International Inc. and Lockheed Martin Corp.

The increases came after a series of embarrassing security lapses at Los Alamos National Laboratory while it was managed by the University of California. The lapses led to a movement to pay more and demand far stricter security.

Cook said the agency knew it would have to pay more to attract top-tier defense contractors. "Part of the deal was profit," he said.

As a result, profits paid to the new consortium hired to run the Los Alamos lab jumped tenfold to \$59 million in 2013. At Lawrence Livermore National Laboratory, which is now run by the University of California and San Francisco-based Bechtel, among others, profits grew from \$4 million to \$41 million.

Costs for security at the labs since 2003 have doubled to \$665 million annually in the last decade, a response to Sept. 11. The department also spends more than \$100 million a year on cyber security.

Another major cost is maintaining parts for the nation's nuclear arsenal. Of 70,000 nuclear weapons that the U.S. built, only about 4,800 remain in service. But the government must still maintain a costly inventory of old parts.

Those parts, as well as some retired parts that are too sensitive or toxic for disposal, all have to be guarded in high-security warehouses, said Philip Coyle, former deputy director of the Lawrence Livermore National Laboratory and more recently scientific advisor to the Obama administration.

At a Texas warehouse, congressional investigators this year found a stash of 3 million parts, about half of them common screws, nuts and bolts that did not appear to need any special security measures.

In 2010, the Energy Department opened a \$549-million warehouse at Y-12 for thousands of parts. Among the parts are pieces of a megaton-sized weapon that is stored in case Earth has to be defended from an inbound asteroid, according to a report by the Government Accountability Office.

The \$355-billion modernization plan being championed by the Obama administration would upgrade weapon production facilities, refurbish warheads and build new submarines, bombers and ground-based missiles.

The Air Force wants \$91 billion to design and build 80 to 100 bombers to replace B-52 and B-2 bombers. The Navy plans to replace its fleet of 14 missile submarines with 12 new boats, along with new missiles, costing about \$60 billion. The Air Force would get new land-based missiles and a command-control system for the underground silos at a yet unspecified cost.

"If modernization isn't done properly, the perception of U.S. strength is at risk — and by extension our national security is at risk," said Norton A. Schwartz, a retired four-star general who served as Air Force chief of staff.

So far, Congress has set aside only a small fraction of that money. The Energy Department has made several attempts to replace outdated facilities, but the efforts have collapsed.

This year, the department shelved plans for a new plant in South Carolina that would have converted surplus plutonium to commercial reactor fuel. Nearly \$4 billion was spent before the project was deemed too expensive.

The department also halted a new plutonium manufacturing plant in New Mexico when the cost shot up sixfold to \$5.8 billion.

At the Y-12 National Security Complex, officials put on hold plans to replace the main production facility, a uranium foundry known as Building 9212 that was built during World War II. The Defense Nuclear Facilities Safety Board, a

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federal oversight panel, has warned that an earthquake could cause the building to collapse, trigger a fire and release uranium into the environment.

The project to replace it was stopped after costs rose from \$600 million to between \$12 billion and \$19 billion, after \$500 million was spent.

Vartebedian reported from Oak Ridge, Hennigan from Barksdale Air Force Base.

<http://www.latimes.com/nation/la-na-nukes-cost-20141109-story.html#page=2>

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The Japan Times – Tokyo, Japan

Foundation of U.S. Nuclear Weapons System Showing Cracks

By Robert Burns, Associated Press (AP)

November 9, 2014

WASHINGTON – The foundation of America’s nuclear arsenal is fractured, and the government has no clear plan to repair it.

The cracks appear not just in the military forces equipped with nuclear weapons but also in the civilian bureaucracy that controls them, justifies their cost, plans their future and is responsible for explaining a defense policy that says nuclear weapons are at once essential and excessive.

It’s not clear that the government recognizes the full scope of the problem, which has wormed its way to the core of the nuclear weapons business without disturbing bureaucracies fixated on defending their own turf. Nor has it aroused the public, which may think nuclear weapons are relics of the past, if it thinks about them at all.

This is not mainly about the safety of today’s weapons, although the air force’s nuclear missile corps has suffered failures in discipline, training, morale and leadership over the past two years. Just last week the air force fired nuclear commanders at two of its three missile bases for misconduct and disciplined a third commander.

Rather, this is about a broader problem: The erosion of the government’s ability to manage and sustain its nuclear “enterprise,” the intricate network of machines, brains and organizations that enables America to call itself a nuclear superpower.

What have been slipping are certain key building blocks — technical expertise, modern facilities and executive oversight on the civilian side, and discipline, morale and accountability on the military side.

The shortfalls are compounded by tight budgets and what experts call a decline in political support for the nuclear system. In the absence of a headline-grabbing nuclear accident in recent decades and receding fears of nuclear war, these problems generally are paid little heed.

The scientific and military capability is arguably the best in the world, but its underpinnings have weakened gradually.

The White House and Congress have paid little attention, allowing the responsible government agencies to “muddle through,” according to a congressional advisory panel. This is the case despite the fact that the U.S. still has thousands of nuclear weapons — more than it says it needs — and is approaching decision points on investing enormous sums to keep the arsenal viable for future generations.

“This lack of attention has resulted in public confusion, congressional distrust and a serious erosion of advocacy, expertise and proficiency in the sustainment” of the nation’s nuclear weapons capabilities, the panel on “Governance of the Nuclear Security Enterprise” said in a report in April that is expected to be updated soon.

The panel was led by retired Adm. Richard Mies, a former commander of U.S. Strategic Command, in charge of all U.S. nuclear forces, and Norman Augustine, a retired chairman of Lockheed Martin Corp.

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Nuclear weapons, the panel said, have been “orphaned” by Washington. Although today’s weapons are technologically sound, “there is no affordable, executable (government) vision, plan or program for the future of nuclear weapons capabilities.”

The atrophy gets little public notice because it’s largely hidden.

Some aspects of the problem will emerge with the expected release this month of an in-depth study of “gaps or deficiencies” in the nuclear force that Defense Secretary Chuck Hagel ordered in February. He also asked for immediate and long-term solutions after declaring in January that “something is wrong” in the nuclear force.

Hagel acted in response to a series of stories detailing failed nuclear security inspections, leadership lapses, training gaps and morale problems in the nuclear air force. The navy has since disclosed that a cheating ring operated undetected for at least seven years at a nuclear power training site and that at least 34 sailors were being kicked out for their roles in the long-hidden misconduct.

But the problem goes beyond the military and Hagel’s responsibility for nuclear weapons. It extends to the National Nuclear Security Administration (NNSA). This office within the Energy Department is in charge of ensuring that nuclear warheads attached to navy and air force missiles and bombs — as well as those in storage — are safe and work properly.

It also administers a network of nuclear weapons plants and nuclear laboratories.

The government splits nuclear management responsibilities between agencies. The Energy Department, through the NNSA, develops, produces and maintains nuclear weapons as well as dismantles and disposes of those that are retired. The Defense Department sets weapons requirements and operates them in the field.

Augustine told Congress last April that the NNSA “is on a trajectory toward crisis,” having “lost credibility and the trust of the national leadership (and the Pentagon) that it deliver needed weapons and nuclear facilities on schedule and on budget.”

Frank Klotz, the head of the NNSA and a former commander of the nuclear air force, says his agency is taking steps to fix its shortcomings. He believes its management of the nuclear weapons stockpile is a “phenomenal achievement,” considering it has not conducted an underground nuclear test for more than 20 years.

In an interview with reporters Oct. 29, Klotz did not dispute that the government has allowed cracks to form in the civilian and military underpinnings of its nuclear weapons complex.

“My generation came of age in the Cold War, when nuclear deterrence and the nuclear deterrent force were center stage,” he said. “At the end of the Cold War it was almost as if we had all heaved a sigh of collective relief and said, ‘Thank goodness we don’t have to worry about that anymore.’ . . . Quite frankly, we lost focus.”

The nuclear weapons laboratories say they have been losing ground and fear for the future.

Charles F. McMillan, director of the Los Alamos National Laboratory, told a Senate panel in April that the country is spending too little on the science, technology and engineering base that supports the nuclear program.

Congress is supposed to oversee both the military and civilian sides of the nuclear enterprise, but it has shown limited interest in addressing the problems. The most vocal lawmakers on nuclear weapons issues are usually those seeking to protect home-state interests — nuclear missile bases, nuclear weapons labs and the like.

Those who see nuclear weapons as a necessary deterrent to attack from other nuclear-armed countries worry about the looming obsolescence of the current Cold War-era arsenal and about the jaw-dropping cost — of up to \$1 trillion — of replacing it with a new generation of weapons and their support systems.

“Unaffordable,” is the blunt conclusion by a panel of defense experts who reviewed the Pentagon latest defense plan.

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John Hamre, president of the Center for Strategic and International Studies and a former deputy defense secretary, says post-Cold War decisions that downgraded nuclear weapons as a national priority may come back to haunt the U.S., in light of efforts by several countries to expand or begin building nuclear arsenals.

"It was always the backdrop of the competition with the Soviet Union that undergirded the nuclear enterprise. Now the Russians are coming back, the Chinese are expanding their inventory, and we are on the rim of a potential cascade of nuclear weapon states," Hamre said. "But the American establishment is in serious decline."

http://www.japantimes.co.jp/news/2014/11/09/world/foundation-of-u-s-nuclear-weapons-system-showing-cracks/#.VGO9_yxARDx

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Los Angeles Times – Los Angeles, CA

As U.S. Nuclear Arsenal Ages, other Nations Have Modernized

By W. J. Hennigan and Ralph Vartabedian

November 10, 2014

WASHINGTON -- As Russian forces were drawing back from a swift and violent incursion into Ukraine this fall, Moscow was delivering another powerful military statement many miles to the north.

A new 40-foot Bulava intercontinental ballistic missile, capable of delivering an unparalleled 10 nuclear warheads, was launched by a Russian navy submarine on a test run over the icy White Sea. The weapon was a clear signal to the world that as Russia battles tightening economic sanctions intended to block Moscow's aggressive posturing on NATO's frontiers, President Vladimir Putin has another card to play.

"I want to remind you that Russia is one of the most powerful nuclear nations," Putin declared earlier this year at a state-sponsored youth camp. He reinforced the message last month, inviting the world to "remember what consequences discord between major nuclear powers could bring for strategic stability."

The debate over how to modernize America's aging nuclear forces has taken on increasing urgency with the emergence of a newly assertive Russia and a new generation of nuclear powers with increasing technological sophistication.

North Korea, Pakistan and India all are working quickly to improve their nuclear arsenals and delivery systems. By next year, China is expected to be capable of delivering a nuclear strike anywhere in the continental U.S. for the first time in its history — a threat that Russia has posed for decades.

While the nuclear confrontation between the United States and Russia cooled off after the 1991 fall of the Soviet Union, it has never ended. Indeed, the long-held hope for continual reductions in nuclear forces now seems unattainable, nuclear arms analysts say. For the first time in years, the U.S. and Russia each have increased the number of nuclear warheads deployed over the latest six-month monitoring period — the U.S. by 57 additional weapons and Russia by 131.

Russia is spending \$560 billion on military modernization over the next six years with 25% allocated to aging nuclear forces, part of a program to replace all of its Soviet Union-era launchers. U.S. officials say it will take at least \$355 billion over the coming decade to upgrade America's nuclear arsenal and keep up with the rearmament spree underway in the rest of the world.

"Our rival powers are investing billions of dollars to modernize and improve their nuclear systems," said Maj. Gen. Sandra Finan, Air Force Nuclear Weapons Center commander, warning that if the U.S. is "to remain credible," it must maintain nuclear preparedness as a priority.

But veterans of the Cold War also say tit-for-tat responses in nuclear confrontation carry grave risks, anchored to erroneous assumptions that a nuclear exchange would leave one side in better condition than the other.

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"God help us if we ever need them," said Philip Coyle, a former nuclear weapons scientist, director of nuclear testing, senior Pentagon official and national security advisor.

The U.S. and Russia both continue to field land-based missiles that could be launched in a few minutes, submarine-based missiles able to deliver a devastating counterpunch to any surprise attack, and bombers that could loiter in threatening holding patterns above the Arctic.

A new strategic arms reduction treaty signed in 2010 limits deployed strategic warheads to 1,550 on each side, with a cap of 700 missiles and bombers by 2018. And over the last two decades, nuclear capabilities have been far from the U.S. military's top priority. Most of the attention has gone to high-tech conventional weapons that evolved after the first Gulf War. Two decades have gone by without developing a nuclear strategic weapon.

All the while, U.S. nuclear-capable bombers, submarines, intercontinental ballistic missiles and their launch-control bunkers have been allowed to become virtual Cold War museums.

In rural Great Falls, Mont., a small ranch house stands on the prairie with a sign at the gated entrance that reads "Ace in the Hole." The house, tucked amid the rolling hills just off Highway 200, is a facade for what lies beneath it.

In a cramped capsule 70 feet below the house, Air Force Lt. Katie Grimley, 26, and Lt. Wesley Griffith, 28, command a fleet of 10 towering missiles capable of obliterating any spot on Earth in 30 minutes or less.

The underground capsule is one of many launch-control centers spread across 28,852 acres at Malmstrom Air Force Base. When it was first built, it was equipped with the latest gadgetry that 1962 had to offer.

Now, a 6-foot-high digital translator must be used to convert tones and whistles into signals a computer can read. The computers use 8-inch floppy disks that became obsolete even before the era of personal computers. Spare parts are so hard to find that on occasion they've had to be pulled from military museums.

"It's a little like going back in time," Griffith says.

It's not just the missile launch centers: Each of the U.S. nuclear delivery systems is approaching obsolescence. The Air Force's largest fleet of bombers dates back to the Kennedy administration. The Navy's armada of missile-carrying submarines is nearing the end of its designed life, and the warheads they carry are nearly three decades old, on average.

Though the launch silo is a relic of the Cold War, it is routinely maintained and updated, and still provides the U.S. with a more lethal nuclear strike capability than that of any other nation. The debate over spending billions for modernization hinges in large part on how essential these Cold War systems remain when the most common security threats are low-tech insurgencies and domestic terrorist strikes.

The argument for upgrading got a boost this year in Ukraine, when Russia annexed the Crimean peninsula and supported separatists fighting to wrest control of the nation's eastern provinces. In the midst of the crisis, Putin reminded the world that his nation remained "one of the leading nuclear powers" and that "it's best not to mess with us."

Russia's newest missile, the RSM-56 Bulava, is submarine-based with a range of about 5,000 miles. After a series of failed test launches, the missile successfully conducted its first operational test last month from the new class of submarine, the Boreis.

In 2010, Russia deployed the land-based RS-24 Yars intercontinental ballistic missile on mobile launchers and in silos. It is designed to outsmart the U.S. missile defense system, according to a recent report by the National Air and Space Intelligence Center. Russia retains 1,200 warheads on its fleet of ICBMs.

The country has also been projecting power beyond its borders. Two months ago, in an exhibition that resembled a Cold War-era nuclear attack exercise, two Russian fighter jets, two long-range bombers and two aerial refueling tankers flew in international airspace near the coast of Alaska. They were intercepted by U.S. fighter planes and escorted out of the area.

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NATO has conducted more than 100 intercepts of Russian aircraft this year, about three times more than in 2013.

China also is developing more potent missiles that will enable it to target any area of the U.S. for the first time.

Just last month, state-run media carried front-page stories on the launch of China's first nuclear-powered submarine. The new fleet of subs, known as the Jin-class, will carry a dozen nuclear-tipped missiles capable of hitting the continental U.S. from the mid-Pacific, according to the U.S. Office of Naval Intelligence.

Until now, China's missiles could reach only the West Coast. The CSS-10 Mod 2, a solid rocket that can be launched from a mobile platform, is now being deployed with a nearly 7,000-mile range. And it is developing a variant with an 8,700-mile range. The intelligence center estimates that China will have about 100 ICBMs that could threaten the U.S. within a decade.

New threats are also looming from North Korea. The commander of U.S. forces in South Korea said he believed Pyongyang now had the ability to produce a miniaturized nuclear warhead and mount it on a missile. North Korea has had a string of failures in developing an ICBM, but continues its development of a missile with enough range to hit the U.S. It has shown at least one road-mobile ICBM in a military parade, though it has never tested it.

Iran, meanwhile, has a family of launch vehicles and is believed to be working on a missile with intercontinental range that could be deployed within years.

The \$355-billion price tag for modernizing the aging U.S. "nuclear triad" of bombers, submarines and land-based missiles over the next decade may not even be realistic, according to Jeffrey Lewis, an analyst with the James Martin Center for Nonproliferation Studies in Monterey. He said the actual expense, taking into account the tremendous spike in costs for new submarines, bombers and ballistic missiles, is likely to approach \$1 trillion over the next 30 years.

The Air Force is able to maintain about 98% of its existing ICBMs on alert, despite their age, but even that comes at a high price. Upkeep expenses over the last three years have increased 36% to about \$1.3 billion when compared to the same time frame a decade ago.

But can the U.S. afford to back away? Failure to maintain at least parity for U.S. nuclear forces could open the door to a fundamental recalculation in the balance of global power, analysts say.

Lewis notes that arms control treaties have been based on U.S. strength, not weakness. He worries that a failure to project a powerful level of nuclear readiness will leave the country vulnerable as foreign threats intensify — and actually undermine efforts to work eventually toward worldwide disarmament.

"I am an arms control guy," he said, "who fears the budget problems are so deep that it will kill arms control."

<http://www.latimes.com/nation/la-na-nukes-silos-20141110-story.html#page=2>

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The Washington Examiner – Washington, D.C.

Report: Obama Urged to Get More Nukes, Stop Acting like War is 'Unthinkable'

By Paul Bedard

November 13, 2014

President Obama should give up the "fallacy" that world nuclear powers won't use their weapons and instead begin investing in new nukes to show countries like Russia, China and North Korea that the U.S. has the muscle to back up its threats, according to a new report.

Noting Russia's efforts to build a war doctrine employing nukes, the influential Center for Strategic & International Studies told Obama: "We need to get serious again about nuclear weapons."

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The plea was included in the annual CSIS world guide, “2015 Global Forecast: Crisis and Opportunity,” and was written with a sense of urgency that Obama move soon.

“Nuclear weapons still matter for the United States because they are the most credible way of deterring how other countries might employ their nuclear weapons against us,” wrote nuclear expert Clark A. Murdock. “We are in a second nuclear age and denial is no longer an option.”

He said that the U.S. has to match the efforts of Washington enemies.

“The fallacy of hoping that our competitors would give up their means for offsetting U.S. conventional power is laid bare by the actions of Russia, China and North Korea,” wrote Murdock in the report provided to Washington Secrets.

“As they plan for how to cope with a United States that increasingly acts as if nuclear war is unthinkable, they are thinking through how they might physically employ a nuclear weapon to demonstrate their willingness to escalate to the nuclear level,” wrote Murdock.

The solution: “Like our potential adversaries, we should develop and procure new nuclear weapons.”

<http://www.washingtonexaminer.com/report-obama-urged-to-get-more-nukes-stop-acting-like-war-is-unthinkable/article/2556158>

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U.S. Department of Defense – Washington, D.C.

News Release

Release No: NR-567-14

November 14, 2014

Secretary of Defense Hagel Announces Nuclear Force Reforms

Secretary of Defense Chuck Hagel announced today a comprehensive action plan to reform to the nuclear enterprise and called for additional critical investments in sustainment as well as measures to address longstanding cultural issues that have hurt the morale of the nuclear force.

In February of this year, following a series of events involving the nation’s nuclear forces and their leadership, Hagel directed both an internal and external review of the entire Defense Department nuclear enterprise.

The reviews concluded that while our nuclear forces are currently meeting the demands of the mission with dedication, significant changes are required to address systemic problems that could undermine the safety, security and effectiveness of the force in the future.

Together, the two reviews identified more than 100 recommendations to improve the nuclear deterrent forces. They focus on several key areas, including: oversight, investment and personnel and training and their recommendations range from acquisition investments to cultural challenges that will take time to see through.

These investments will cost several billion dollars over the five-year defense spending program in addition to ongoing modernization requirements identified in last year’s budget submission. The Department will prioritize funding on actions that improve the security and sustainment of the current force, ensures that modernization of the force remains on track, and that address shortfalls, which are undermining the morale of the force.

The external report, a summary of the internal report, a fact sheet on implementation and the secretary’s message to the force can be found at the following link: <http://www.defense.gov/pubs/>.

<http://www.defense.gov/Releases/Release.aspx?ReleaseID=17027>

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U.S. Department of Defense – Washington, D.C.

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Public Affairs Release

November 14, 2014

Summary of DoD Internal Nuclear Enterprise Review

Earlier this year, after a series of missteps involving the nation's nuclear deterrent forces and their senior leadership, Secretary Hagel directed both an internal Department of Defense (DoD) review and an external, independent review of the DoD nuclear enterprise. This includes Air Force Intercontinental Ballistic Missiles (ICBMs), nuclear-capable bombers and tactical fighters, Navy ballistic missile submarines, and the supporting infrastructure to build, maintain, and control these assets. The internal review was led by then-Assistant Secretary of Defense Madelyn Creedon, Rear Admiral Peter Fanta formerly from the Joint Staff, and Command Sergeant Major Patrick Alston from U.S. Strategic Command. The external review was led by former Air Force Chief of Staff and Commander of Strategic Air Command, General Larry Welch (retired), and former Commander of Fleet Forces Command, Admiral John Harvey (retired).

The review leaders and their staffs visited all of the operational U.S. nuclear bases and key supporting facilities. They interviewed more than a thousand officers, enlisted personnel, civilians, and contractors from across the armed services. Both review teams found participants that were open, candid, and eager to engage in dialogue regarding their ability to perform their mission.

The internal review was specifically asked by the Secretary of Defense to examine the nuclear mission regarding personnel, training, testing, command oversight, mission performance, and investment. This review also looked into mission readiness and other operational issues and therefore remains classified. The internal report is, however, consistent with the findings and conclusions of the external review.

The internal review disclosed systemic problems across the nuclear enterprise. In general, these problems can be divided into several categories: longstanding, known problems that remained unaddressed and so became, over time, under-reported; known problems that were addressed but the corrective actions made the problem worse (or created new problems); and problems that were common knowledge in the field but which were never communicated to leadership. Significantly, the review determined that many of these problems were inextricably interrelated, with one problem begetting another. While many issues will need additional investments, in many cases the necessary corrective actions are cultural and structural. These measures will take time to implement, and must also be sustained over the long-term.

The review provided a number of recommendations for both short and long-term action; some are service-specific, some are at the departmental level and others are relevant to the entire enterprise. The review team made clear that this essential mission requires refocused attention and resources at all levels of the Department. The review organized its inquiry, findings, and recommendations into four categories: personnel, inspections, investment, and organization.

The review of *personnel* issues identified issues with accountability, manning and skills mix, career development, morale and recognition, the personnel reliability program, and security forces. Within these areas, some issues manifested at the departmental level, in both services, or in a specific service. Key findings include:

- A blurring of the lines between accountability and perfection in the Air Force;
- Inadequate facilities and equipment, including IT systems, for the civilian workforce;
- A rapidly aging civilian workforce in Navy shipyards, with a significant mid-career gap;
- Lack of promotion opportunities generally in the nuclear career field and lack of a defined, sustainable career path for nuclear officers in Air Force, and career constraints resulting from nuclear specialization for both officers and enlisted personnel;
- Stress on submarine crews created by shipyard shortfalls in the Navy;

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- Unduly burdensome, overly technical, and excessively risk-averse implementation of the personnel reliability program.

The internal review's inquiry into *inspections* found that the nuclear enterprise is subject to a culture of excessive inspections. The problem is particularly acute in the Air Force, in part owing to the relative scope of inspections (a submarine inspection involves 180 sailors, a missile wing inspection involves ~4000 airmen) and in part owing to important cultural differences between the services; in particular, the demand for perfection and lack of a meaningful self-assessment program.

Regarding *investment*, the review surveyed an aging nuclear enterprise with a focus on sustainment, operations and maintenance (O&M) funding, and infrastructure issues. The review determined that as this infrastructure continues to age, sustainment will become increasingly more difficult, time-consuming and expensive. Findings included:

- The lack of "weapon system" approach to the ICBM force, leading to disparate and inefficient sustainment and investment decisions for different system components;
- Component issues resulting from an aging, unique, and (relative to other weapons programs) small-sized, programs and systems;
- Serious shortfalls in basic O&M requirements; and
- Shipyard inefficiency caused by use of obsolete and/or temporary facilities.

Finally, looking at the *organization* of the nuclear enterprise, the internal review echoed the finding of the external review regarding the absence, at the departmental level, of an integrated "nuclear enterprise." This absence led to reduced awareness of issues in the nuclear field, particularly those issues that cut across individual stovepipes.

Collectively, the internal and external reviews found a nuclear workforce that was dedicated, capable, and performing well in spite of challenges resulting from being understaffed, under-resourced, and reliant on an aging and fragile supporting infrastructure in an over-inspected and overly risk-averse environment. Both reports identified serious issues with potential real world consequences if not addressed -- some of which require long term and permanent cultural and structural changes.

As a result of these reports, the Department is undertaking a comprehensive effort to revitalize and integrate the nuclear enterprise. As long as the need for effective U.S. nuclear deterrence endures, the United States must operate its nuclear forces with world-class professionalism, ensure its plans and capabilities are tailored to emerging nuclear threats, and retain the human capital and infrastructure to adapt as the strategic landscape changes. The Department is using this opportunity to refocus attention and resources to continue to ensure the safety, security and effectiveness of our nuclear enterprise.

<http://www.defense.gov/pubs/Summary-Internal-NER.pdf>

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U.S. Department of Defense – Washington, D.C.

Public Affairs Release

November 14, 2014

Fact Sheet: Implementing Changes to the Nuclear Enterprise

In the wake of a series of events involving the nation's nuclear forces and their leadership, Secretary Hagel directed last February an internal and external review of the entire Defense Department nuclear enterprise.

The reviews concluded that while our nuclear forces are currently meeting the demands of the mission with dedication, significant changes are required to ensure the safety, security, and effectiveness of the force in the future.

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Together, the two reviews identified over 100 recommendations to improve the nuclear deterrent forces. This summer, Secretary Hagel directed Department leaders to take action on these findings. The recommendations range from acquisition investments (e.g. upgrading Air Force helicopter fleets) to leadership challenges that will take time to see through (e.g. improving the morale of the force). Generally, they focus around several key areas, including:

- **Oversight:** clarifying the nuclear deterrent enterprise leadership structure and reducing administrative burdens imposed on the forces.
- **Investment:** providing increased resources to the nuclear deterrent enterprise to improve and sustain current equipment.
- **Personnel and Training:** changing the “culture of micromanagement,” boosting morale, and improving the manner in which training and inspections are conducted.

These investments will cost billions of dollars over the five-year future year defense spending program in addition to the modernization requirements identified since last year’s budget submission. The Department will prioritize funding on actions that improves the security and sustainment of the current force, ensures modernization of the force remains on track, and addresses shortfalls, which are undermining the morale of the force

The Department of Defense is working with the military services, the Office of Management and Budget, and the National Security Council Staff to finalize recommendations for the President’s FY16 budget submission, which will provide more detailed analysis of the spending and time horizons for various programs.

What We Have Done Already

Oversight

NDERG: Secretary Hagel established the Nuclear Deterrent Enterprise Review Group (NDERG) to establish senior leader accountability and bring together all the elements of the nuclear force into a coherent enterprise. This group, which consists of the leaders responsible for training, funding, and implementing the nuclear mission, has already met twice. The NDERG will report to Secretary Hagel on at least a quarterly basis – and Deputy Secretary Work, who Secretary Hagel has asked to help lead this effort, will chair meetings in between – to review the actions we are taking and the progress we are making in improving the health of our nuclear 2 forces. Secretary Hagel has made clear he will hold senior leaders accountable for making real near-term improvements in force sustainment, and for prioritization of the resources required to modernize the force and its supporting infrastructure.

Track and Assess Program: Secretary Hagel directed OSD/CAPE to lead an effort to track and assess the implementation of the over 100 recommendations from the internal and external reviews. CAPE will also conduct analysis to determine if corrective actions are having the desired effect as well as continually assess the health of the nuclear deterrent enterprise.

STRATCOM Readiness Tracking: Admiral Cecil D. Haney, Commander U.S. Strategic Command is conducting quarterly nuclear force readiness reviews focused on critical resources required for the mission. He has refined readiness reporting to include infrastructure, sustainability, and nuclear command, control and communications. He will also convene leadership stakeholder meeting for each of the legs of the triad to address sustainment and modernization challenges. This approach broadens readiness tracking to take into account a more holistic view of the health of the force.

Accountable Service Leaders: The U.S. Navy has consolidated oversight of the nuclear mission under the Director of Strategic Systems Programs, and the U.S. Air Force has received authority from Secretary Hagel to elevate the rank of Global Strike Command to a 4-Star billet and HQ USAF Strategic Deterrence and Nuclear Integration (AF/A-10) to a 3-Star billet in order to ensure their rank is commensurate with the importance of the mission relative to the rest of their services.

Investments

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Air Force Improvement Program: U.S. Air Force Global Strike Command established a Force Improvement Program that reallocated \$161 million to ICBM force support in FY14, and has identified \$150 million in FY15 to address the most urgent shortfalls in equipment, facilities, and personnel. While much of this funding is going toward incentive pay and new billets, many upgrades came from a grass-roots program to recommend improvements to force leaders:

- FY14 –ICBM and Launch Control Center equipment, manpower, security forces equipment, ICBM maintenance (including maintenance training), and nuclear material convoy command and control.
- FY15 – Upgrades to four-wheel drive vehicles, security force personnel duty gear, additional ICBM trainers, and communications modernization. The first ever deep clean of launch control centers.

Additional FYDP Planning: Over the summer, the Department conducted a Nuclear Enterprise Review (NER) Strategic Portfolio Review to inform the FY16 budget, and we are taking its conclusions into account in allocating resources to the nuclear mission. The Services have integrated resources needed to implement NER recommendations in their FY14 and FY15 budgets where possible, and in their FY16 Program Objective Memoranda (POMs). A Program Review Issue Team comprehensively assessed unfunded requirements across the nuclear enterprise and presented them to the Deputy Secretary for consideration in PB16. 3

Personnel and Training

Reduce Administrative Distractions: The Navy has launched a “Reduce Administrative Distractions” (RAD) program to get direct input from sailors on how the fleet can streamline or eliminate administrative processes, instructions and training, and propose solutions to fix these issues.

Force Management: Secretary Hagel has provided Navy relief from its civilian hiring caps for its Naval Shipyards and the Navy has begun additional hiring actions at shipyards, matching workforce capability with workload. The Air Force has exempted 4,000 nuclear force Airmen from manpower reductions, and is reshaping nuclear force training, evaluations, and force management. The Air Force will add nearly 1,100 (military and civilian) billets to the forces assigned to its Global Strike Command to address manpower shortfalls.

Incentive Pay and Leadership Improvements: The Air Force has implemented incentive pay for ICBM field operations and enlisted nuclear force specialties. Funding is authorized starting 1 October 2014 and personnel will receive back pay once Congress approves the FY15 budget. The Air Force has also established an ICBM-duty Reserve Officer Training Corps scholarship program for ten officers in 2014 growing to 20 in 2015 and beyond. In November, the Secretary of the Air Forces presented the first ever Nuclear Deterrence Operations Service Medal to airmen from across the force.

Updated Training Standards: The Air Force revised proficiency test scoring policies for missileers to pass/fail at a high standard eliminating the expectation that crew members score 100 percent on every test to advance in their career.

What We Have Decided and are Working to Implement

Oversight

Updating the Personal Reliability Program: Secretary Hagel has directed an update to the Personnel Reliability Program (PRP) regulations to remove administrative burden on the service members that fall under this program. Under new guidelines, inspectors will be prevented from questioning judgments made by medical professionals. The rules will also provide some common sense adjustments governing who must be in the PRP program and ensure reliability without imposing bureaucratic red tape that harms the mission. There are approximately 17,000 personnel on the PRP across DoD including 12,000 in the Air Force.

Investments

U.S. Navy: The Navy will implement additional infrastructure recapitalization at public shipyards and Strategic Weapons Facilities. The Navy will hire approximately 2,450 civilian shipyard and refit facility workers and

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approximately 100 personnel (mix of civilian and military) for the Strategic Weapons Facility and TRIDENT Training Facility to improve sustainment and training of the ballistic missile submarine force. Naval Reactors will also replace two training platforms that have reached the end of their useful lives, refuel a third training platform, and incorporate additional simulation technology to augment training capacity.

U.S. Air Force: The Air Force will replace its ICBM security force helicopter fleet of UH-1s and improve its associated infrastructure. The Air Force will fund nearly 1,100 (military and civilian) billets to fill gaps in operations, maintenance, security and other critical mission areas. Personnel will begin filling these billets as the Air Force Personnel Center can place them. The Air Force is also planning Military Construction to improve the Weapon Storage Facilities (WSF) at four sites beginning with FE Warren Air Force Base over the coming years.

Personnel and Training

Improving Inspections Regime: Joint Staff is improving the inspection process and eliminating redundancies that tax the force without a benefit to operations. These improvements will reduce the administrative burden imposed on the forces and are part of the Department's effort to change the "culture of micromanagement." Additionally, inspection teams will have increased flexibility in overall inspection ratings, the Joint Staff will provide standardized training for inspectors across the nuclear enterprise, and inspectors will focus on process and procedures used to certify service members on the Personnel Reliability Program as opposed to conducting repetitive medical reviews.

ICBM Operations: The U.S. Air Force is making changes to the organization of the ICBM operations group, crew training, and scheduling to emphasize hands-on training and the empowerment of crew commanders to be responsible for the proficiency of their crew. This will establish a training environment that embraces learning from mistakes as an opportunity for personal development. Crews will also have a second simulator session to hone the ICBM crew proficiency.

Improving Career Management: The Air Force has developed a Nuclear Enterprise (NE) Human Capital Strategy (HCS) that is revamped periodically. This NE HCS was originally developed between 2010-2012 and rewritten in 2014 with a vision to integrate Air Force human capital processes that deliberately develop and manage sustainable pipelines of talent with the goal of delivering the right person with the right skills at the right place and time.

<http://www.defense.gov/pubs/NER-Fact-Sheet.pdf>

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The New York Times – New York, NY

Russia to Curtail Nuclear Security Efforts with U.S., Officials Say

By MICHAEL R. GORDON

November 13, 2014

WASHINGTON — Russia has informed the United States that it is planning to reduce its participation next year in a joint effort to secure nuclear materials on Russian territory, a move that could seriously undermine more than two decades of cooperation aimed at ensuring that nuclear bomb components do not fall into the hands of terrorists or a rogue state.

Sergey V. Kirienko, the head of Russia's state nuclear company, has told senior Obama administration officials that no new projects in Russia are "envisioned" in 2015, according to American officials.

The officials still hope to persuade the Russians to continue work next year on some current projects, though Russian officials have yet to agree.

The reduced cooperation is a byproduct of the general downturn in relations between Russia and the United States, which has been compounded by President Vladimir V. Putin's decision to intervene militarily in Ukraine. But it also stems from longstanding concerns among Kremlin hard-liners about a program that brings American nuclear

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experts to Russia's nuclear sites and that, they fear, may create the impression that Russia is in need of outside help.

Russia also announced last week that it was planning to boycott an international security summit meeting that is to be hosted by President Obama in 2016.

But the message delivered by Mr. Kirienko represents the first time that the rising tensions between the Kremlin and the Obama administration have threatened to disrupt some of the practical efforts that the two sides initiated at the end of the Cold War to help Russia safeguard its nuclear materials.

"There is a real danger that 20 years of U.S.-Russian cooperation to secure nuclear material will simply stop at the end of this year, and some of the gains we have made could slip away," said Matthew Bunn, a Harvard professor who, during the administration of Bill Clinton, supervised a classified government study on protecting nuclear materials in Russia.

A senior Obama administration official said the United States still planned to work with the Russians on nuclear security efforts in third countries and hoped to persuade the Russian government to continue cooperation in Russia.

"We would hope that the door can be left open to any and all forms of cooperation in this important area," said the administration official, who spoke on the condition of anonymity to discuss diplomatic exchanges. "If a reasonable project comes up that is on Russian territory, we would hope they would consider it."

The joint American and Russian efforts began in 1991 as fears grew that the collapse of the Soviet Union would make its nuclear weapons vulnerable. The Nunn-Lugar Act, named for its two sponsors, Senators Sam Nunn of Georgia and Richard G. Lugar of Indiana, provided \$400 million to help the Soviet Union and its "successor entities" destroy and protect nuclear and chemical arms.

As the program has evolved, the United States has spent billions of dollars to finance security upgrades and improve procedures to keep track of nuclear materials, efforts that are intended to guard against the risk that highly enriched uranium or plutonium might be stolen and sold to terrorist groups or rogue states.

"Nuclear security in Russia has improved dramatically since the years immediately following the collapse of the Soviet Union," the Belfer Center at Harvard concluded in a March report. "Unfortunately, sophisticated conspiracies to steal valuable items continue to plague Russia."

Hundreds of buildings in Russia, for example, still contain nuclear material that could be used in weapons. One American and Russian effort has sought to consolidate the material at fewer buildings, while improving the security of transporting nuclear material.

The United States and Russia have also been working to convert Russian research reactors to use low-enriched uranium instead of highly enriched uranium, which is suitable for bomb purposes.

The Energy Department has also helped Russia's customs service install radiation detection equipment at border crossings, which is intended to guard against the smuggling of nuclear material. Continued training and maintenance and improved management of that equipment are still important, American officials say.

Last year, the United States and Russia began narrowing the scope of their efforts. Under a new protocol, Russia's Ministry of Defense stopped participating in projects, which meant an end to American help in destroying Russia's strategic weapons or securing its warheads. But the Energy Department has continued to work with Rosatom, the state-owned nuclear company, and other Russian organizations to improve the security of Russian facilities and materials.

As tensions have grown, however, the prospects for future cooperation have come under a cloud. In September, Rose Gottemoeller, the State Department's senior arms control official, led an American delegation to Moscow that sought unsuccessfully to resolve an American allegation that Russia had violated a 1987 Soviet-American treaty banning intermediate-range missiles based on land.

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During this visit, Ms. Gottemoeller also met with Mr. Kirienko, the Rosatom chief, and stressed the importance of continued cooperation on nuclear security, despite the tensions in American-Russian relations.

Typically, the Energy Department signs contracts with Russian laboratories or other institutions on projects to provide security upgrades or training. And Ms. Gottemoeller noted that the Obama administration was concerned about the prospects for joint security efforts if new projects were not agreed on before the current contracts expired at the end of this year, according to accounts by American officials.

Mr. Kirienko said that the Russian government did not “envision” that new contracts would be concluded for 2015, though he expressed a willingness to work on nuclear security issues in other countries.

Mr. Kirienko conveyed a similar message that new contracts were not envisioned “under current circumstances” in a meeting with Energy Secretary Ernest J. Moniz that was held later in Vienna, officials said.

An Energy Department official, who asked not to be named because he was discussing diplomatic issues, said that the two sides still agreed that cooperation on nuclear security should continue in some form. Nuclear experts from the two sides plan to meet in Moscow in December, and American officials plan to use that session to discuss whether work on some continuing projects can proceed.

The administration also plans to encourage efforts to work jointly on nuclear security in countries like Belarus, Kazakhstan, Poland and Uzbekistan by repatriating to Russia highly enriched uranium that Moscow originally supplied to these nations for nuclear research purposes. More than 400 kilograms, or about 880 pounds, of highly enriched uranium is stored at research facilities in these countries, enough for 16 nuclear weapons, administration officials say.

There is no indication, however, that the administration plans to reverse its earlier decision to suspend an American-Russian scientific cooperation agreement, which could have included projects on nuclear energy and planetary defense against asteroids, because of Russia’s annexation of Crimea in March.

Still, some American experts say that a new approach is needed, one that treats Russia more as an equal. By proposing the joint research and development of ways to secure and account for nuclear material or the joint training of teams that test security at nuclear sites, the United States could address some of Russia’s complaints and increase the chances that some projects might be sustained, said Dr. Bunn, the Harvard professor.

“I think the United States needs to be actively proposing more fully equal approaches to put Russia in a position of a co-leader on nuclear security, not a state that needs help,” he said.

http://www.nytimes.com/2014/11/14/world/europe/russia-to-curtail-nuclear-security-efforts-with-us-officials-say.html?_r=0

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Sputnik News (RIA Novosti’s new International brand).com – Russian Information Agency

Russia Open to Nuclear Disarmament Talks if Its Interests Considered

According to the Russian Ambassador to US, Russia is ready for a new round of negotiations on nuclear disarmament with US, but providing that Moscow’s strategic interests are considered.

8 November 2014

BOSTON, November 8 (RIA Novosti) — Moscow is open to a new round of nuclear disarmament talks with Washington, but only if Russia’s strategic interests are considered, Russian Ambassador to the United States Sergei Kislyak said Saturday.

"We want negotiations to happen, that's what [Russian President] Vladimir Putin said the other day... The problem is that we are only interested in talks that would genuinely take Russia's defense interests into account, which means they should include not just nuclear arms, but also a complex of new armaments that are entering service with the US Armed Forces and that infringe Russian strategic defense interests," Kislyak said.

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Speaking at a conference of the US-based Russian-American Scientists Association (RASA) in Boston, Massachusetts, the Russian diplomat said the case in point was US non-nuclear high-precision weapons. He said the offensive potential of these weapons was on par with nuclear warheads.

At the same time, Sergei Kislyak admitted that Russia and the United States still cooperate in the sphere of nuclear non-proliferation, "and it is fruitful because it serves the interests of both the US and our country," he pointed out.

<http://www.sputniknews.com/military/20141108/1014526476.html>

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TASS Russian News Agency – Moscow, Russia

Russia Developing Next-Generation Strategic Bomber

The next-generation bomber is developed by the Tupolev design bureau and state tests are planned for 2021
November 11, 2014

ZHUHAI (China), November 11. /TASS/. Russia is developing a prospective aviation complex for long-range aviation (PAK DA) - the country's next-generation strategic bomber that is to make the first flight in 2019, President of the United Aircraft Corporation (UAC) Mikhail Pogosyan said at the Airshow China 2014 International Aviation & Aerospace Exhibition on Tuesday.

The strategic bomber's state tests are planned for 2021, he said.

The next-generation bomber is developed by the Tupolev design bureau. The PAK DA delivery to the troops is expected to begin in 2023.

The Radio-Electronic Technology Concern (KRET) is already developing avionics for the future bomber, and the Tactical Missiles Corporation is developing weapons for it. In addition, the first stand tests of the engine prototype for the PAK DA bomber were held in Samara last week.

<http://en.itar-tass.com/russia/759174>

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Air Force Times – Washington, D.C.

Global Strike Outlines Latest Improvements for Missileers, Security Forces

Air Force Global Strike Command's program to improve the morale of its airmen has netted 350 recommendations and budgeted millions of dollars in improvements to missile wings.

By Brian Everstine, Staff writer

November 11, 2014

Air Force Global Strike Command's program to improve the morale of its airmen has netted 350 recommendations and budgeted millions of dollars in improvements to missile wings.

The force improvement program began earlier this year with Air Force and Defense Department officials seeking recommendations from Global Strike Command airmen at all levels following multiple high-level incidents of cheating and commander firings.

The command outlined the most recent changes in a news story posted this week. The changes come from the outreach to airmen and were suggested during the improvement program. The changes include:

- \$10.1 million to purchase new optics and \$330,000 for collapsible rifle stocks and shorter barrels for security forces airmen, who asked for upgrades to their weapons.

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- \$1 million to improve the training course at Camp Guernsey, Wyoming. Airmen asked for improved training, which now includes more "trigger time" and a convoy course focused on training to protect missiles in transit.
- \$300,000 in funding for new tools and equipment for maintainers.
- An unspecified amount for six new personnel authorizations per ICBM wing to stand up launch control center survivable systems team sections.

"The nuclear mission is the most important mission in the Air Force," Air Force Secretary Deborah Lee James said in the release. "Were we backing that up with appropriate resources for people in maintenance with spare parts and modernization and all of the rest of it? Were we talking the walk or walking the talk? It struck me maybe we weren't doing a good enough job there, so I thought to myself 'we need some additional investments in people, facilities, maintenance, spare parts and so forth.' "

More than \$200 million in funding has been budgeted for the force improvement program in fiscal 2014 and 2015, with a total of \$350 million in additional funding planned in the next five years.

The new changes come on the heels of other new programs for airmen in missile fields. For example, security forces airmen are being outfitted with MultiCam uniforms and new up-armored vehicles. The command has created multiple new cross-service exchange programs and formed new Reserve Officer Training Corps scholarships for prospective missileers. Last week, James presented the first round of Nuclear Deterrence Operations Service Medals to 25 airmen at the Global Strike Challenge at Barksdale Air Force Base, Louisiana.

<http://www.airforcetimes.com/story/military/pentagon/2014/11/11/nuclear-changes-global-strike/18859293/>

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Asahi Shimbun – Osaka, Japan

Japan Plans to Load Sensor on Satellite to better Detect N. Korean Missiles

November 13, 2014

By HISATOSHI KABATA, Staff Writer

The Defense Ministry is developing an infrared ray sensor for early warning satellites to help Japan detect ballistic missile launches on its own.

The sensor is expected to be loaded onto the "advanced optical satellite" of the Japan Aerospace Exploration Agency (JAXA) scheduled for launch in fiscal 2019. The satellite will be used as part of measures to prepare for disasters.

The ministry will conduct a demonstration test on the accuracy of the sensor in detecting from space an object on Earth that emits heat. Infrared ray sensors can detect high-temperature objects at all times of the day and are considered indispensable for early warning satellites.

The development plan was revealed in a technology symposium in Tokyo by senior officials of the ministry's Technical Research and Development Institute (TRDI).

"With the sensor, we will be able to decrease instances of wrong detections of missile launches," said Yoshio Oguchi, director of the TRDI's Advanced Defense Technology Center. "We want to establish a more accurate detection technology."

Japan, which does not have its own early warning satellite, currently depends on information from the United States for North Korea ballistic missile launches.

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The planned sensor will be able to simultaneously detect infrared rays with two different wavelengths, making it possible to distinguish between the heat of missiles and the heat from mountain fires or volcanic eruptions, officials said.

The Defense Ministry and JAXA have jointly conducted research on infrared ray sensors since April 2013, following legal revisions in 2012 that allowed JAXA to use outer space for security purposes.

http://ajw.asahi.com/article/behind_news/politics/AJ201411130034

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Yonhap News Agency – Seoul, South Korea

N. Korea Slams U.S. for Overstating Pyongyang's Missile Capacity

November 14, 2014

SEOUL, Nov. 14 (Yonhap) -- North Korea lambasted the United States on Friday for trying to exaggerate Pyongyang's missile capacity, a tactic which the North said is aimed at stepping up the U.S. military presence on the Korean Peninsula.

The criticism from Pyongyang came after a U.S.-based media website, the Washington Free Beacon, reported in August that North Korea was developing a submarine capable of launching ballistic missiles.

The U.S. news triggered similar media reports on the new submarine development by the North in the U.S. and South Korea.

Calling such reports "a sneaky plot" by the U.S. government, the North's official Korean Central News Agency (KCNA) said in a commentary, monitored in Seoul, that the U.S. media campaign aims to exaggerate North Korean threats in order to boost its military presence on the peninsula.

"This is a sneaky plot in which the U.S. is trying to legalize the delay in the (planned) return of its wartime operational control of the South Korean (military) on the pretext of threats from ours as well as to build up the THAAD system (on the peninsula)," the KCNA report said, referring to the U.S. moves to deploy the Terminal High Altitude Area Defense (THAAD) missile-defense system.

"The South Korean and Western media are exaggerating with a keen interest that the North is developing underwater missile technology and planning to build and deploy a missile-equipped submarine in a near future," it noted.

It will be a big mistake for the U.S. to drum up pressure on the North by spreading media reports on our submarine-launched missiles, the North said, also warning that "it will lead to powerful counteraction from us."

The North Korean report also came one day after South Korean Defense Minister Han Min-koo warned of North Korea's growing military capacity.

Asked to confirm the North's suspected development of a missile-loaded submarine, Han said in a parliamentary meeting that he cannot officially verify it but South Korea is keeping close tabs on the issue.

<http://english.yonhapnews.co.kr/search1/2603000000.html?cid=AEN20141114005000315>

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Pravda.Ru – Moscow, Russia

Russia Prepares Nuclear Surprise for NATO

Pravda.Ru

12 November 2014

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On September 1, 2014 the US State Department published a report, in which it was stated that for first time since the collapse of the USSR, Russia reached parity with the US in the field of strategic nuclear weapons. Thus, Washington admitted that Moscow regained the status that the Soviet Union had obtained by mid-70's of the XX century and then lost.

According to the report from the State Department, Russia has 528 carriers of strategic nuclear weapons that carry 1,643 warheads. The United States has 794 vehicles and 1,652 nuclear warheads.

It just so happens that today, Russia's strategic nuclear forces (SNF) are even more advanced in comparison with those of the US, as they ensure parity on warheads with a significantly smaller number of carriers of strategic nuclear weapons. This gap between Russia and the United States may only grow in the future, given the fact that Russian defense officials promised to rearm Russia's SNF with new generation missiles.

The progress was made possible thanks to the treaty on the limitation of nuclear weapons, also known as START-3. The treaty was signed by Dmitry Medvedev and Barack Obama on 8 April 2010 in Prague (came into force on 5 February 2011). In accordance with the document, nuclear warheads of the parties are to be reduced to 1,550 by 2021. The number of carriers (intercontinental ballistic missiles, submarine-launched ballistic missiles and heavy bombers) is supposed to be cut to 700 units.

It was the first strategic agreement, after the treacherous policy of democrats, in which Russia managed to win significant advantages. In the treaty, the Americans, for the first time in history, undertook to reduce their strategic nuclear potential, while Russia won an opportunity to increase it. Furthermore, the new treaty removed important limitations that existed in the previous START 1 and START 2 treaties. It goes about the size of areas for the deployment of mobile ICBMs, the number of multi charge ICBMs, and the possibility to build railway-based ICBMs. Russia did not make any concessions.

Having written off Moscow as a serious geopolitical rival, flying on the wings of inaccessible military and technological superiority, Washington drove itself into a trap, from which it does not see a way out even in a medium-term perspective.

Recently, a lot has been said about so-called "sixth-generation wars" and high-precision long-range weapons that should ensure victory over enemy without coming into direct contact with its armed forces. This concept is highly questionable (The US failed to achieve victory in such a way both in Iraq and Afghanistan). Yet, this is the point, where Russia enters the parity line as well. The proof is long-range cruise missiles of a new generation that will soon be deployed on submarines of the Black Sea Fleet and missile ships of the Caspian Flotilla.

In today's Russia, many find this hard to believe. This is a common belief for many of those, who still enthusiastically remain in captivity of the myths about the absolute "weakness" of Russia and the absolute "superiority" of the West. The myth was made up in the 90's under the influence of Boris Yeltsin and his betrayal of Russian national interests. One has to admit that during that time, the myth was real, if one may say so.

Times have changed. One can easily understand the new state of affairs.

For example, let's consider the potential of conventional weapons of Russia and the West in the European Theater of Operations (ETO). In this area, it is generally believed that NATO is a lot stronger than Russia. Yet, a first encounter with reality smashes this misbelief into pieces.

As is known, the main striking force, the core of combat power of the ground forces are tanks. By the time of the collapse of the Soviet Union, the Russian Armed Forces had about 20,000 tanks in the ETO.

The Americans, in turn, deployed 6,000 heavy Abrams tanks on the territory of the allied group. Despite this, the combined potential of NATO forces in Europe was still significantly inferior to the Soviet potential. To compensate this imbalance, NATO strategists were forced to resort to tactical nuclear weapons (TNW).

In the first half of the 1950s, NATO conducted a research about what kind of forces the bloc should have to show reliable resistance to large-scale ground offensive of superior forces of the Soviet Union and Warsaw Pact countries. The calculations showed then that one required at least 96 full-fledged divisions for the purpose. Yet,

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the cost of armament for one of such divisions exceeded \$1 billion. Plus, one required two or three more billion to maintain such a large group of troops and build appropriate infrastructure. This burden was clearly beyond the power of the economy of the West.

The solution was found in a move to deploy a group of US tactical nuclear weapons on the continent, and that was done soon. By early 1970s, the US arsenal of tactical nuclear weapons counted about 7,000 units of ammunition. The highest achievement in the area was the creation of weapons of selective action - neutron warheads (for guns of 203-mm and 155-mm caliber, and for Lance missiles) with a capacity from 1 to 10 kilotons. The warheads were seen as the key in combating land forces personnel, particularly Soviet tank crews.

Given the nuclear factor, to reflect "Soviet aggression," NATO required to deploy only 30, rather than 96 divisions, and so they were deployed.

How do things work in this area now? In early 2013, the Americans withdrew the last group of heavy Abrams tanks from Europe. In NATO countries, over the last 20 years, one new tank would replace 10-15 old, yet still capable, tanks. At the same time, Russia was not decommissioning its tanks.

As a result, today Russia is the absolute leader in this regard. In mid-2014, the balance of the Defense Ministry had as many as 18,177 tanks (T-90 - 400 pcs., T-72B - 7,144 pcs., T-80 - 4,744 pcs, T-64 - 4,000 pcs, T-62 - 689 pcs, and T-55 - 1200 pcs.).

Of course, only a few thousand tanks are deployed in permanent readiness units, and most of them remain at storage bases. Yet, NATO has the same picture. Therefore, the decisive superiority of Russian tanks has not gone anywhere since the times of the USSR.

Here is another surprise. As for tactical nuclear weapons, the superiority of modern-day Russia over NATO is even stronger.

The Americans are well aware of this. They were convinced before that Russia would never rise again. Now it's too late.

To date, NATO countries have only 260 tactical nuclear weapons in the ETO. The United States has 200 bombs with a total capacity of 18 megatons. They are located on six air bases in Germany, Italy, Belgium, the Netherlands and Turkey. France has 60 more atomic bombs. That is pretty much it. Russia, according to conservative estimates, has 5,000 pieces of different classes of TNW - from Iskander warheads to torpedo, aerial and artillery warheads! The US has 300 tactical B-61 bombs on its own territory, but this does not change the situation against the backdrop of such imbalance. The US is unable to improve it either, as it has destroyed the "Cold War legacy" - tactical nuclear missiles, land-based missiles and nuclear warheads of sea-based Tomahawk cruise missiles.

To be continued.

http://english.pravda.ru/russia/politics/12-11-2014/129015-russia_nato_nuclear_surprise-0/

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The Atlanta Journal-Constitution – Atlanta, GA

Russian Bomber Patrols to Reach Gulf of Mexico

Wednesday, November 12, 2014

By VLADIMIR ISACHENKOV - The Associated Press

MOSCOW — In a show of military muscle amid tensions with the West, Russia will send long-range strategic bombers on regular patrol missions across the globe, from the Arctic Ocean to the Gulf of Mexico, a top official said Wednesday.

The announcement by Russian Defense Minister Sergei Shoigu came as NATO's chief accused Russia of sending fresh troops and tanks into eastern Ukraine.

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"Over the last few days, we have seen multiple reports of large convoys moving into Eastern Ukraine," said NATO Secretary-General Jens Stoltenberg. "We assess that this significant military buildup includes Russian artillery, tanks, air defense systems and troops. His statement called the situation a "severe threat to the cease-fire."

Moscow denied the allegation as unfounded, but Shoigu also said the dispute with the West over Ukraine would require Russia to beef up its forces in the Crimea, the Black Sea Peninsula that Russia annexed in March.

Shoigu said Russian long-range bombers will conduct flights along Russian borders and over the Arctic Ocean. He said, "In the current situation we have to maintain military presence in the western Atlantic and eastern Pacific, as well as the Caribbean and the Gulf of Mexico."

Shoigu would not say how frequent the patrol missions would be or offer any other specifics, but he noted that the increasing pace and duration of flights would require stronger maintenance efforts and that relevant directives have been issued to industries.

He said the Russian air force's long-range planes also will conduct "reconnaissance missions to monitor foreign powers' military activities and maritime communications."

A senior U.S. military official said Russia has not previously flown actual bomber patrols over the Gulf of Mexico, including during the Cold War.

Long-range bombers have been in the area before, but only to participate in various visits to the region when the aircraft stopped over night at locations in South or Central America. During the Cold War, other types of Russian aircraft flew patrols there, including surveillance flights and anti-submarine aircraft.

The official, who spoke on condition of anonymity because he wasn't authorized to discuss the flights publicly, also said that the pace of Russian flights around North America, including the Arctic, have largely remained steady, with about five incidents per year.

Col. Steve Warren, a Pentagon spokesman, declined to call this a Russian provocation. He said the Russians have a right, like any other nation, to operate in international airspace and in international waters. The important thing, Warren said, is for such exercises to be carried out safely and in accordance with international standards.

Russian nuclear-capable strategic bombers were making regular patrols across the Atlantic and the Pacific Oceans during Cold War times, reaching areas from which nuclear-tipped cruise missiles could be launched at the United States. But that stopped in the post-Soviet economic meltdown.

The bomber patrol flights have resumed under President Vladimir Putin's tenure, and they have become even more frequent in recent weeks, with NATO reporting a spike in Russian military flights over the Black, Baltic and North seas as well as the Atlantic Ocean.

Earlier this year, Shoigu said that Russia plans to expand its worldwide military presence by seeking permission for navy ships to use ports in Latin America, Asia and elsewhere for replenishing supplies and doing maintenance. He said the military was conducting talks with Algeria, Cyprus, Nicaragua, Venezuela, Cuba, Seychelles, Vietnam and Singapore.

Shoigu said Russia also is talking to some of those countries about allowing long-range bombers to use their air bases for refueling.

Ian Kearns, director of the European Leadership Network, a London-based think tank, said the bomber patrols are part of Kremlin's efforts to make the Russian military "more visible and more assertive in its actions."

The new bomber flights "aren't necessarily prestaging a threat," Kearns said. "They are just part of a general ramping-up of activities."

But, he added, "The more instances you have of NATO and Russian forces coming close together, the more chance there is of having something bad happening, even if it's not intentional."

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On Monday, the European Leadership Network issued a report that found a sharp rise in Russian-NATO military encounters since the Kremlin's annexation of Crimea, including violations of national airspace, narrowly avoided midair collisions, close encounters at sea, harassment of reconnaissance planes, close overflights over warships, and Russian mock bombing raid missions.

Three of the nearly 40 incidents, the think tank said, carried a "high probability" of causing casualties or triggering a direct military confrontation: a narrowly avoided collision between a civilian airliner and a Russian surveillance plane, the abduction of an Estonian intelligence officer, and a large-scale Swedish hunt for a suspected Russian submarine that yielded no result.

In September, the report said, Russian strategic bombers in the Labrador Sea off Canada practiced cruise missile strikes on the U.S. Earlier this year, in May, the report said, Russian military aircraft approached within 50 miles (80 kilometers) of the California coast, the closest such Russian military flight reported since the end of the Cold War.

Russia-West ties have dipped to their lowest point since Cold War times over the Kremlin's annexation of Crimea and support for pro-Russia insurgents in Ukraine. The West and Ukraine have continuously accused Moscow of fueling the rebellion in eastern Ukraine with troops and weapons — claims Russia has rejected.

Fighting has continued in the east, despite a cease-fire agreement signed between Ukraine and the rebels signed in Minsk, Belarus, in September.

Stoltenberg, the NATO chief, urged Russia to "pull back its forces and equipment from Ukraine, and to fully respect the Minsk agreements."

U.S. Air Force Gen. Philip Breedlove, the Supreme Allied Commander in Europe, said Wednesday that in the last two days "we have seen columns of Russian equipment, primarily Russian tanks, Russian artillery, Russian air defense systems and Russian combat troops entering into Ukraine."

Breedlove, who spoke in Sofia, Bulgaria, wouldn't say how many new troops and weapons have moved into Ukraine or specify how the alliance obtained the information.

The Russian Defense Ministry quickly rejected Breedlove's statement as groundless.

Breedlove said the Russia-Ukraine border is "completely wide open," and "forces, money, support, supplies, weapons are flowing back and forth."

John-Thor Dahlburg in Brussels, Veselin Toshkov in Sofia, Bulgaria, and Lolita C. Baldor and Robert Burns in Washington contributed to this report.

<http://www.myaic.com/news/ap/international/russian-bomber-patrols-to-reach-gulf-of-mexico/nh5jh/>

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Sputnik News (RIA Novosti's new International brand).com – Russian Information Agency

Russia to Build First Hypersonic Missiles by 2020: Missiles Corporation

Boris Obnosov, general director of the Tactical Missile Systems Corporation, said that the first hypersonic missiles could appear before 2020.

13 November 2014

ZHUHAI, November 13 (Sputnik) — The first air-launched hypersonic missiles could be produced in Russia within the next six years, Boris Obnosov, general director of the Tactical Missile Systems Corporation, stated Thursday.

"In my estimation, the first hypersonic products should appear ... in this decade — before 2020. We have approached this. We are talking about speeds of up to six to eight Mach. Achieving higher speeds is a long term perspective," Obnosov told journalists at the Airshow China-2014 space exhibition.

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He noted that hypersonic missiles will be air-launched at first, using the carrier aircraft's initial velocity to reach the speeds necessary to run a ramjet engine.

The general director also suggested that manned hypersonic vehicles would appear no earlier than 2030. "I believe that manned flights at hypersonic speeds will be possible sometime between 2030 and 2040."

Russia's first PAK DA next-generation long-range bombers, expected enter service by 2023, will carry hypersonic missiles, Obnosov told Sputnik in 2013.

<http://sputniknews.com/military/20141113/1014696873.html>

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TASS Russian News Agency – Moscow, Russia

Sixteen Yars Missile Launchers to Be Placed into Service this Year

November 14, 2014

MOSCOW, November 14. /TASS/. The Russian strategic missile troops will place 16 Yars intercontinental ballistic missile launchers into service this year, the troops' commander Sergey Karakayev said on Friday.

The general said in October that the troops had received nine launchers, six ballistic missiles for mobile Yars systems and two for stationary systems in 2014 and expected to receive three launchers and eight missiles more until the end of the year.

Three regiments were planned to have Yars systems in service by the end of the year.

<http://en.itar-tass.com/russia/759675>

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The Economic Times – New Delhi, India

US Think-Tank Says Iran may have Violated Nuclear Deal with Powers

Reuters

November 8, 2014

VIENNA: A US think-tank says Iran may have violated last year's interim nuclear deal with world powers by stepping up efforts to develop a machine that could enrich uranium faster, but another expert group said it saw no breach.

Iran's development of advanced enrichment centrifuges is sensitive because, if successful, it could enable the country to produce potential nuclear bomb material at a rate several times that of the decades-old model now in use.

Western officials were not immediately available to comment on the allegation by the Washington-based Institute for Science and International Security (ISIS), which closely tracks Iran's nuclear programme. There was no immediate comment from Tehran.

ISIS, whose founder David Albright often briefs US lawmakers and others on nuclear proliferation issues, cited a finding in a new report by the International Atomic Energy Agency (IAEA) about Iran.

The confidential document, issued to IAEA member states on Friday, said Iran since the UN agency's previous report in September had "intermittently" been feeding natural uranium gas into a single so-called IR-5 centrifuge at a research facility.

The IR-5 is one of several new models that Iran has been seeking to develop to replace the erratic, 1970s vintage IR-1 centrifuge that it now uses to produce refined uranium.

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But unlike other advanced models under development -- IR-2m, IR-4 and IR-6 -- at a research site at its Natanz enrichment plant, Iran had until now not fed the IR-5 with uranium gas.

"Iran may have violated (the interim deal) by starting to feed (natural uranium gas) into one of its advanced centrifuges, namely the IR-5 centrifuge," ISIS said in an analysis of the IAEA report. "Under the interim deal, this centrifuge should not have been fed with (gas) as reported in this safeguards report."

But the Washington-based Arms Control Association said it did not believe it violated the deal. "The latest IAEA report says clearly that no enriched uranium is being withdrawn from the machine," the research and advocacy group said in an email.

Iran says it produces low-enriched uranium to make fuel for nuclear power plants. But if processed much further, refined uranium could be turned into the explosive core of a bomb, which the West fears may be the country's latent goal.

Tehran denies looking to build nuclear weapons.

Under last year's deal with the United States, Russia, China, France, Germany and Britain, Iran can continue its "current enrichment R&D (research and development) practices", language that implies it should not expand them. The text of the publicly released agreement did not elaborate on this point, potentially leaving it open for interpretation.

It was one of the thorniest issues to resolve in the negotiations on the temporary accord, which was designed to buy time for talks on a permanent settlement by a November 24 deadline. It is expected to be a key issue also in any long-term deal.

http://articles.economictimes.indiatimes.com/2014-11-08/news/55894227_1_uranium-gas-ir-2m-refined-uranium

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The Australian – Sydney, Australia

Iran Nuclear Threat Greater by Fivefold, Says Former Watchdog Chief

By Richard Kerbaj, London, *The Times*

November 09, 2014

IRAN could have five times more advanced centrifuges capable of producing weapons-grade uranium than it has previously admitted, according to the former deputy chief of the UN nuclear watchdog.

Olli Heinonen, who spent 27 years at the International Atomic Energy Agency, said Iran could have up to 5000 IR-2m centrifuges rather than the 1008 it has claimed. The IR-2m devices are up to five times more effective in enriching uranium than older IR-1 types.

Heinonen was speaking on the eve of nuclear negotiations between Iran's Islamic regime and the P5+1 countries, which are the US, Britain, Russia, China, France and Germany.

Mr Heinonen said Tehran "could have up to 4000 to 5000 centrifuges or raw materials for them" located outside two of its largest nuclear sites, Natanz and Fordow.

The estimate comes from intelligence sources and Mr Heinonen is concerned the negotiations will merely focus on what needs to be done about Iran's 18,000 or so IR-1 centrifuges and the 1008 IR-2m devices.

While the West fears Iran is intent on building a nuclear weapon, the regime has denied such aspirations, saying it is only interested in developing nuclear energy for peaceful purposes.

Uranium enriched to 90 per cent is required for a nuclear weapon and the negotiations taking place on November 24 will aim to seek an agreement from Iran to disconnect the majority of its centrifuges in return for a "suspension" of many of the sanctions that have crippled its oil revenues and hampered its banking with the West.

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Mr Heinonen said negotiators should broker an agreement with Iran to give the IAEA full access to its centrifuges and not only those located in Natanz and Fordow.

“They have manufactured 1000 IR-2m centrifuges that the IAEA is aware of and the negotiations with the US are going to focus only on the known 1000 IR-2m and 18,000 IR-1 and not the additional centrifuges,” said Mr Heinonen, a senior fellow at Harvard University’s Belfer Centre for Science and International Affairs.

“There are indications Iran has acquired carbon fibre, the key raw material for the advanced IR-2m centrifuges, to manufacture several thousand. The IAEA has seen 1000 of them in Natanz and the key question is: where are the rest?”

Mr Heinonen warned any agreement that does not compel Iran to open all its nuclear facilities to scrutiny would “make no sense”.

“It is important to have in this verification scheme an agreement that the IAEA can also verify all the centrifuges in Iran and not only those which are in Natanz or Fordow,” he said.

“And when I say all, I mean all the things that have been manufactured there — whether it’s in a warehouse, whether it’s in storage, whether it’s installed somewhere else.

“Iran needs to comply and provide the IAEA with the information and access so that the IAEA can do it ... if they don’t get this authority then I don’t think it will be a good agreement.”

Davis Lewin, head of policy and research at the Henry Jackson Society think tank, said a diplomatic resolution with Iran should not come at the cost of turning it into a nuclear state.

“Given the history of Iranian deception and the grave threat to international security that the Islamic regime in Tehran poses, it would be inconceivable to sign a deal with Iran that does not comprehensively cover all its potential routes to a bomb,” he said.

The Sunday Times

<http://www.theaustralian.com.au/news/world/iran-nuclear-threat-greater-by-fivefold-says-former-watchdog-chief/story-fnb64oi6-1227117333571>

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Al Arabiya – Dubai, U.A.E.

‘Little Progress’ Made in Iran Nuclear Talks

By Staff Writer, *Al Arabiya News*

Monday, 10 November 2014

A round of nuclear talks between Iran, the United States and European Union ended in the Omani capital Sanaa on Monday with “little progress,” a senior Iranian official reportedly said.

“After hours of talks we could make little progress,” the official told Reuters. “Still differences remain and still we have gaps over issues,” Reuters quoted the unnamed official as saying.

U.S. Secretary of State John Kerry and Iranian FM Mohammad Javad Zarif held “tough, direct and serious” talks, the State Department said.

State Department spokeswoman Jen Psaki said in Washington that the United States remains “very focused on making progress” and insisted “there is still time to do so.”

With two weeks until a deadline for an overall agreement, Zarif, Kerry and EU envoy Catherine Ashton met in Oman to tackle the decade-long dispute that has raised the risk of wider conflict in the Middle East.

The discussions aim to put verifiable limits on Iran's uranium enrichment work - and any other potential path to a nuclear weapon - in return for a gradual lifting of sanctions.

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U.S. President Barack Obama said in a CBS television interview there was still a big gap between Iran and Western powers and said a deal could be out of reach.

Economic sanctions led by the United States have pushed Iran to the table for a deal on its nuclear program, Obama said.

A final step would involve Iran providing “verifiable, lock-tight assurances that they can't develop a nuclear weapon”, he said. “There's still a big gap. We may not be able to get there.”

Western countries suspect Iran has secretly attempted to acquire the means to build nuclear weapons.

Iran says it wants peaceful nuclear energy only, but has refused to curb enrichment capacity and has been hit by damaging U.S., EU and U.N. Security Council sanctions.

An editorial on Iranian Supreme Leader Ayatollah Ali Khamenei's website on Sunday made an indirect reference to a letter to him from Obama and said the U.S. president had written three such missives - in 2009, 2012 and “about a month ago.”

“In fact, the U.S. has always reached out to Iran when faced with an impasse and Obama's latest letter is a direct link to foreign policy dead-ends, especially those involving Iran somehow.”

Obama declined comment on this during the CBS interview.

The toughest outstanding issues are the size of Iran's enrichment program, the length of any final accord and the pace at which sanctions would be phased out, diplomats say.

With Agencies

<http://english.alarabiya.net/en/News/middle-east/2014/11/10/U-S-faces-last-best-chance-on-Iran-nuke-deal.html>

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Press TV – Tehran, Iran

Iran, Russia Sign Deal to Build More Nuclear Power Plants

Tuesday, November 11, 2014

Iran and Russia have struck a deal to build eight more nuclear power plants in Iran.

The agreement was signed between Chief Executive Officer of Russia's Rosatom State Atomic Energy Corporation, Sergey Kirienko, and head of the Atomic Energy Organization of Iran, Ali Akbar Salehi, in Moscow on Tuesday.

According to the deal, up to four of the projected power plants are planned to be built at the site of Bushehr nuclear power plant in southern Iran.

The remaining four are expected to be constructed elsewhere in Iran, but the exact location has not been determined yet.

Moscow and Tehran have also expressed their intention to cooperate in the field of the nuclear fuel cycle and ecology, saying they will look into the possibility of producing components of nuclear fuel in Iran in the future.

“It is the turning point in the relations between our countries,” Salehi said, adding that now Russia and Iran “have become even closer to each other.”

Iran and Russia reached a preliminary agreement in Tehran in March to build at least two more nuclear power plants in the southern Iranian port city of Bushehr.

After signing a deal on the construction of nuclear plants in 1992, Tehran and Moscow reached an agreement in 1995 to complete Iran's Bushehr nuclear power plant, but the project was delayed several times due to a number of technical and financial problems.

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The 1,000-megawatt plant, which is operating under the full supervision of the International Atomic Energy Agency (IAEA), reached its maximum power generation capacity in August 2012.

In September 2013, Iran officially took over from Russia the first unit of its first 1,000-megawatt nuclear power plant for two years.

<http://www.presstv.com/detail/2014/11/11/385625/iran-russia-agree-on-new-nuclear-plants/>

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FARS News Agency – Tehran, Iran

Tuesday, November 11, 2014

Senior Iranian Negotiator: Attaining Final Deal by Nov. 24 Difficult

TEHRAN (FNA) - Reaching a final nuclear deal with the world powers by the November 24 deadline is difficult, senior Iranian negotiator and Deputy Foreign Minister Seyed Abbas Araqchi said on Monday.

"Since all issues are interwoven, this makes the job difficult and obtaining results by November 24 is really a tough job; our time is really limited, yet we are not disappointed," Araqchi told reporters in Masqat where representatives of Iran and the Group 5+1 (the US, Russia, China, Britain and France plus Germany) started another round of multilateral talks on Tuesday morning.

Araqchi, who was speaking after two days of talks among the top diplomats of Iran, the US and the EU, underlined that negotiations are intensely underway on the volume of Iran's nuclear reserves, installations, the heavy water reactor in Arak and the enrichment facilities in Fordo.

Iran and the six major world powers have already held 8 rounds of nuclear negotiations after inking an interim agreement in Geneva in 2013, and have less than three weeks time to strike a final deal before the November 24 deadline.

Tehran and the six powers have already held seven rounds of talks in Vienna, and one more round in New York and on the sidelines of the UN General Assembly. They started their 9th round of negotiations in Oman this morning.

Iranian Foreign Minister Mohammad Javad Zarif, his US counterpart John Kerry and EU foreign policy chief Catherine Ashton had earlier had two days of trilateral talks in Masqat on Sunday and Monday.

The Geneva agreement took effect on January 20 and expired six months later on July 20. In July, Tehran and the six countries agreed to extend negotiations until November 24 after they failed to reach an agreement on a number of key issues.

<http://english.farsnews.com/newstext.aspx?nn=13930820000422>

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Xinhua News – Beijing, China

Iran Not to Stop Gas Injection into Centrifuges: Spokeswoman

November 12, 2014

TEHRAN, Nov. 12 (Xinhua) -- Iran has not agreed to stop injecting gas into its centrifuges for testing purposes, Press TV reported on Wednesday, quoting Iranian Foreign Ministry Spokesperson Marzieh Afkham.

Iran began testing the IR-5 centrifuges before it reached an interim nuclear deal with the world powers in Geneva last November, Afkham said, adding that the tests continued after the agreement.

Tehran once again tested the IR-5 centrifuges in March in line with nuclear research agenda of the Atomic Energy Organization of Iran, Afkham said.



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"All reports by the International Atomic Energy Agency (IAEA) over the past seven months verified the Islamic Republic of Iran's commitment to the Geneva deal and no case has been reported about any violation of the agreement," she said.

Afkham's remarks came after a report by the Washington-based Institute for Science and International Security that Iran might have violated the interim deal by starting to inject natural uranium gas into its IR-5 centrifuges.

Such reports are media propaganda and Iran would test the centrifuges whenever it deems necessary, Afkham was quoted as saying.

The first nuclear agreement was reached in Geneva last November after intensive negotiations between Iran and the P5+1 group, the five permanent members of the UN Security Council plus Germany.

Under the deal, Iran was committed to halting enrichment above five percent and neutralizing its stockpile of near-20 percent uranium by means of dilution or converting. It also promised not to install more centrifuges, halt work at its plutonium reactor at Arak, and allow IAEA inspectors regular access to its enrichment facilities at Natanz and Fordow.

Iran has said that its research activities pertaining to peaceful nuclear program would never be halted.

http://news.xinhuanet.com/english/world/2014-11/12/c_133785133.htm

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Al-Akhbar.com – Beirut, Lebanon

IAEA Corrects Data on Iran's Uranium Stockpile as Deadline Looms in

Thursday, November 13, 2014

The UN atomic agency lowered its estimate of the size of Iran's uranium stockpile, diplomats said, as the deadline for Tehran and six world powers to settle a dispute over Iran's nuclear program looms closer.

The International Atomic Energy Agency (IAEA) now estimates that Iran's holding of low-enriched uranium gas is 8,290 kilograms, 100 kilograms less than it had said in a confidential report last week, diplomats said on Thursday.

There was no explanation for why the initial figure was wrong, or the significance of the discrepancy, and there was no immediate IAEA comment on the topic.

Iran's stock of uranium refined to a fissile concentration of up to 5 percent is a sensitive issue because, if processed much further, the material could provide the explosive core of a nuclear weapon.

In Friday's report on Iran's nuclear program, the IAEA said the stockpile had grown by 625 kilograms to nearly 8.4 tons since its previous report in early September.

But in a correction issued to IAEA member states this week both figures were reduced, to 525 kilograms and 8,290 kilograms respectively, according to the data seen by Reuters.

The IAEA also corrected another figure in its November 7 report, reducing the number of advanced IR-6 uranium enrichment centrifuges installed at its Natanz research and development site – in Iran's Isfahan province – to nine from 19.

The corrected estimates come ahead of a November 24 target date for Iran and the six states - the United States, France, Germany, Russia, Britain and China - to seal a long-term agreement that would dispel fears the standoff could plunge the Middle East into a new war.

'More time needed'

More time may be needed beyond a November 24 deadline to reach a deal between world powers and Iran in talks over Tehran's nuclear program, Interfax news agency quoted Russian Foreign Ministry spokesman Alexander Lukashevich as saying on Thursday.

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"It is not completely ruled out that more time could be needed to reach a mutually beneficial compromise," he was quoted as saying.

The P5+1 wants Iran to reduce the scope of its nuclear activities in exchange for an easing of punitive economic sanctions imposed since 2012 which have hobbled Iran's economy.

Iran says its nuclear program aims to produce atomic energy to reduce the country's reliance on fossil fuels, but the West and Israel say the fuel could be enriched to produce a bomb.

Israel has threatened to use military force against Iranian atomic sites if diplomacy fails to ensure Iran is deprived of the means of developing nuclear weapons. Tehran says Israel's presumed atomic arsenal is the main threat to peace.

Moreover, the Iranian delegation is under domestic pressure to deliver a quick and total lifting of US, UN and European sanctions under a deal. But US President Barack Obama said Sunday that sanctions would only be "slowly reduced."

The key sticking points are thought to be the number and type of uranium-enriching centrifuges Iran should be allowed to keep spinning, the process for relieving sanctions and the duration of the final deal.

Iran has said five years for the relief of sanctions, but world powers have suggested at least double that.

The interim deal implemented in January has already been extended once, when a July 20 deadline was missed.

Reuters, Al-Akhbar

<http://english.al-akhbar.com/content/iaea-corrects-data-irans-uranium-stockpile-deadline-looms>

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The Times of India – Mumbai, India

India Test-Fires Nuclear Capable Agni-II Missile

Indo-Asian News Service (IANS)

November 9, 2014

BHUBANESWAR: India, on Sunday, test-fired its nuclear-capable Agni-II strategic ballistic missile from a military base in Odisha, a defence official said.

The test was conducted from Wheeler's Island in Bhadrak district, around 200km from here. The test was undertaken by army personnel as part of routine user-trials, M.V.K.V. Prasad, director of the Integrated Test Range, told IANS. "The test was successful," he said.

The medium-range missile with a range of over 2,000 km has already been inducted into the army, and is part of the strategic forces arsenal for nuclear deterrence. The Agni-II is part of India's Integrated Guided Missile Development Programme.

The two-stage surface-to-surface missile, equipped with an advanced high-accuracy navigation system and guided by a novel state-of-the-art command and control system, is powered by a solid rocket propellant system.

The missile weighs 17 tonnes and its range can be increased to 3,000 km by reducing the payload. It can be fired from both rail and road mobile launchers. It takes only 15 minutes for the missile to be readied for firing.

<http://timesofindia.indiatimes.com/india/India-test-fires-nuclear-capable-Agni-II-missile/articleshow/45086002.cms>

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The Hindu – Chennai, India

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Pak Test-Fires Nuclear Capable Ballistic Missile

Press Trust of India (PTI)
November 13, 2014

Islamabad -- Pakistan on Thursday successfully test-fired a ballistic missile capable of carrying nuclear and conventional warheads to targets as far as 1,500 kilometres, bringing many Indian cities under its range.

The intermediate-range missile Shaheen—II, also called Hatf VI, was launched from an undisclosed location and its impact point was in the Arabian Sea, the military said.

The successful launch was the culminating point of the Field Training Exercise of Army Strategic Forces Command.

The purpose of the launch was to ensure operational readiness of a Strategic Missile Group besides re-validating different design and technical parameters of the weapon system, the military said in a statement.

Director of General Strategic Plans Division, Lieutenant General Zubair Mahmood Hayat and Commander Army Strategic Forces Command, Lieutenant General Obaid Ullah Khan witnessed the launch.

Gen. Hayat congratulated the scientists on the successful launch and said Pakistan is a peace-loving nation with no aggressive designs against any one.

He appreciated the operational preparedness and readiness of the Army Strategic Forces Command, which made the successful launch of Shaheen-II Weapon System possible.

President Mamnoon Hussain and Prime Minister Nawaz Sharif congratulated the scientists and engineers on their outstanding achievement.

<http://www.thehindu.com/news/international/south-asia/pak-testfires-nuclear-capable-ballistic-missile/article6594961.ece>

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Indian Express – New Delhi, India

Nuclear-Capable Prithvi-II Missile Successfully Test Fired

Press Trust of India (PTI)
November 14, 2014

India on Friday successfully test-fired its indigenously developed nuclear-capable Prithvi-II surface-to-surface missile, which has a strike range of 350 km, from a test range at Chandipur near here as part of a user trial by Army.

Defence sources said the state-of-the-art missile, which is capable of carrying 500 kg to 1000 kg of warheads, was test-fired from a mobile launcher in salvo mode from launch complex-3 of Integrated Test Range at about 10.40 hrs.

It is thrusted by liquid propulsion twin engines and uses advanced inertial guidance system with manoeuvring trajectory.

Describing the trial as “fully successful,” ITR Director M V K V Prasad told PTI that the test was conducted by Strategic Force Command.

The sophisticated missile was randomly chosen from the production stock and the entire launch activities were carried out by SFC and monitored by scientists of Defence Research and Development Organisation (DRDO) as part of training exercise, defence sources said.

“The missile trajectory was tracked by DRDO radars, electro-optical tracking systems and telemetry stations located along the coast of Odisha.



"The downrange teams onboard the ship deployed near the designated impact point in the Bay of Bengal monitored the terminal events and splashdown," the sources said.

Prithvi II, which was inducted into the SFC in 2003, is the first missile to be developed by DRDO under India's prestigious Integrated Guided Missile Development Program (IGMDP) and is now a proven technology.

Today's launch was part of a regular training exercise of SFC and was monitored by DRDO scientists, the sources said. Such training launches clearly indicate India's operational readiness to meet any eventuality and also establishes the reliability of this deterrent component of India's Strategic arsenal, the sources said.

The last user trials of Prithvi-II in 2014 were successfully carried out from the same base on January 7, 2014 and March 28, 2014, they added.

<http://indianexpress.com/article/india/india-others/nuclear-capable-prithvi-ii-missile-successfully-test-fired/>

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Gatestone Institute org. – New York, NY
OPINION/Commentary

Hiding Unilateral Disarmament Objectives

By Peter Huessy

November 11, 2014

What the Ploughshares Fund is actually doing with its proposed budget cuts, it appears, is trying to camouflage the objectives of permanently disarming America of key parts of its nuclear capability.

Describing the U.S. nuclear force structure as a "Cold War relic" says nothing about whether the force is still *needed*. Oddly, the nuclear cuts being proposed do not require any reciprocal Russian reductions.

Cutting \$20 billion a year from the current U.S. nuclear deterrent would require killing all modernization, plus all the work of extending the life of nuclear warheads. In 20 years, the U.S. would be left with no effective nuclear deterrent, while China, Russia and North Korea are modernizing their nuclear deterrents across the board.

"You have to invent a 'Dragon' to slay." — U.S. Rep. Norm Dicks, explaining how to kill defense programs.

In Washington, a delay often has the same impact as killing a program.

It has been 33 years since the U.S. last embarked on a nuclear modernization program.

Both the Secretary of the Navy and Secretary of Defense have called for a debate over what the future costs of the nuclear deterrent enterprise should be and what investment is needed to keep the peace and prevent nuclear war.

At issue is whether the United States can afford to spend 4% of its defense budget and 0.6% of all federal spending to modernize its nuclear deterrent over the next decade and beyond.

Two widely divergent views are emerging.

The first is that a plan is necessary to modernize the U.S. nuclear capability to keep it a robust and credible deterrent in the face of advances currently being made by China and Russia and North Korea in their nuclear programs

This view is shared by most of Congress and the administration. Congress declared -- and the administration concurred -- in 2010, in the Resolution of Ratification of the New START treaty with Russia, "that United States deterrence is assured by a robust triad of strategic delivery vehicles"[1] and as such was "committed to modernize... the triad [silo based missiles on land, submarines at sea and bombers in the air][2] ... for the long term." [3]



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In addition, this view is also associated with support for making more defense funds available to protect our security, including for our nuclear deterrent. That point was made in July 2014 by the National Defense Panel, and most recently by Congressman Randy Forbes (R-Va.) and Senator Mark Rubio (R-Fl.).

On the other side, the Ploughshares Fund, a group pushing for zero nuclear weapons globally, claims that planned nuclear spending will be much higher than the Defense Department (DOD) is admitting. Ploughshares claims that fully modernizing the U.S. nuclear deterrent would require between \$570-700 billion over the next ten years, more than triple the current DOD projections.

Ploughshares argues that the defense budget spending caps agreed to in 2011 for the subsequent ten years means that nuclear spending should be cut significantly over the next ten years because 1) we cannot afford the full modernization of our nuclear forces, and 2) nuclear weapons are, after all, increasingly obsolete and not needed.

What are the facts?

In four recent highly regarded assessments, below, of the U.S. nuclear deterrent budgets, the current year's expenditures are pegged at \$23 billion a year and project future average annual spending at upwards of \$27-\$35 billion. None comes anywhere close to the "fuzzy math" estimates of Ploughshares.

According to the office of the Secretary of Defense, current nuclear deterrent spending is \$23 billion a year. That was also the expert testimony to Congress in 2012 of former Under Secretary of Defense for Policy James N. Miller.

According to the Congressional Budget Office (CBO),[4] the U.S. Department of Defense is projected to spend on average \$35 billion a year for the next decade as nuclear modernization goes into effect, compared to the \$23 billion the CBO agrees we are spending today.

Similar spending estimates were calculated in both a 2009 study by the Mitchell Institute of the Air Force Association[5] and a 2012 Stimson Center study, entitled, "Costing Nuclear Weapons."

The Mitchell study detailed the costs of a hypothetical future modernization program, but one that turned out to be very close to the U.S.'s actual currently-planned force of submarines, bombers and land based missiles. The study determined that the annual investment costs would average \$6.25 billion for replacing or modernizing 450 new ICBMs, 14 submarines (two more than currently planned), and sustaining the bomber force, which includes a new bomber air-launched cruise missile.[6]

The study added into the mix annual operations and maintenance costs of \$5.4 billion for the platforms of submarines[7], bombers and land-based missiles, for a total nuclear force modernization cost of \$12 billion a year.

To get the full costs of the U.S. nuclear deterrent enterprise, one also has to add to the Mitchell numbers the associated nuclear warhead work at the National Nuclear Security Administration (\$7.4 billion) and the command-and-control nuclear related costs, (\$4.2 billion).[8] Those additions would bring the total nuclear deterrent enterprise costs to roughly \$23 billion a year right in line with other mainstream estimates.

Total costs for a decade, therefore, — using the Mitchell and Stimson Center studies[9] — would be \$228-\$280 billion -- not \$570+ billion that Ploughshares estimates. While they are not insignificantly less than the CBO numbers of \$350 billion, they are a huge 50-70% less than the Ploughshares spending estimates of \$570-\$700 billion over a decade.

Nevertheless, it is the grossly exaggerated Ploughshares estimates that are being used by those opposed to the U.S. plan to modernize its nuclear capability.

Based on the large Ploughshares numbers for nuclear expenditures, Senator Ed Markey (D-Mass) in the Senate and Congressman Earl Blumenauer (D-Oregon) in the House introduced in Congress what they call the SANE Act, the Smarter Approach to Nuclear Expenditures. Senator Markey's plan would cut \$100 billion from planned nuclear deterrent budgets over the next decade.

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The SANE act would cut the new nuclear-armed sea-based fleet from a planned 12 submarines to 8,[10] and stop development of both a new replacement for the intercontinental ballistic missile (ICBM) and a new strategic bomber.

Unfortunately, that round of cuts may be only the first being sought by the Senator. Previously, Senator Markey had relied on even bigger estimates for future nuclear deterrent spending from the Ploughshares Fund to support nuclear cuts of \$200 billion -- not \$100 billion -- over the next decade.[11]

In 2011, for instance, Ploughshares estimated that the **annual** cost of US nuclear deterrence was not \$57 billion (their earlier estimates) but \$70 billion.[12]

Markey had then proposed that nuclear deterrent spending be cut not by \$100 billion, but by \$200 billion over the next ten years.

That is a cut in the range of 35-70% from future strategic nuclear deterrent funding and upwards of 90% of current spending. Either cut would totally devastate the U.S. nuclear deterrent capability.[13]

What is going on here?

Years ago, Congressman Norm Dicks, a leading defense expert and member of the defense subcommittee of the House appropriations committee, explained how to kill defense programs you do not like. He said, "You have to invent a 'Dragon' to slay."

So Ploughshares made two dragons to slay. It first designated "nuclear weapons" their "Dragon to Slay." Then it claimed that this "Dragon" would become a "Trillion" dollar one.

So how did \$23 billion a year in nuclear spending all of a sudden get to \$57-70 billion a year and then \$1 trillion over the next few decades?

First, Ploughshares adopted enough assumptions -- however wrong-headed -- that eventually got them to the "right" dragon-number.[14]

They adopted, for example, the idea of adding missile defense spending to the category of "nuclear weapons" when in the defense budget it is solely under Defense Wide, Army and Navy **conventional** forces accounts but not nuclear.

This insertion alone adds upwards of \$10 billion year to their "nuclear" number,[15] even though 90% of American missile-defense funding goes to build missile-defenses such as Iron Dome or Patriot, which are designed to protect people against *non*-nuclear conventional missile strikes. These are not nuclear systems by any stretch of the imagination.

Next, Ploughshares ignored that nuclear bomber costs are relatively small, (the nuclear component of a new dual-capable bomber is only 3% of the total bomber cost).

The U.S. needs a new conventional bomber irrespective of whether it is going to have a nuclear capability or not.

But if you take the entire cost of the new conventional bomber modernization program, as well as the costs of existing bombers -- both nuclear and conventional capable -- and simply count everything as if it is a nuclear program, that will add tens of billions of dollars to annual "nuclear spending" by a simple rhetorical sleight of hand.[16]

The cook-the-book experts at Ploughshares, however, were not done. Instead of estimating nuclear budget costs for one year, as every administration does when it submits its annual budget to Congress, they adopted various spending estimates for up to three decades.[17]

Redefined "nuclear budget" estimates suddenly grew very rapidly. They in fact reached the "magic" attention-getting "trillion" dollar mark.

Thus, the "Dragon" was born.

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Ploughshares then had to invent a way to trash the value of nuclear deterrence, as an argument to "slay" the dreaded "Dragon" it had invented.

Ploughshares argued that since nuclear weapons did not deter the attacks of 9-11, they are obviously no longer useful.[18] But no American military or law enforcement capability of any kind -- not just nuclear weapons -- stopped the attacks of 9-11.

Then they added to that argument what missile defense expert Uzi Rubin describes as a "fortune cookie analysis".[19] They argued that as nuclear weapons are relics of the Cold War, "what good are they?"

It is true that many of the weapons systems in our conventional arsenal today were deployed or under development during the Cold War.

But as USAF Lt Gen James Kowalski, the Vice Commander of the U.S. Strategic Command, explained about nuclear weapons: "I don't think we're any more a Cold War force than an aircraft carrier, or Special Ops, or the UH-1 helicopter." [20]

After the end of the Cold War, as USAF General Garrett Harencak argued, the U.S. went on an extended "procurement holiday." In short, the U.S. did not modernize its forces, nuclear or conventional, for nearly two decades. The U.S. also delayed modernization, a lapse that has led to the current problem of having to modernize most elements of America's nuclear deterrent simultaneously, as well as key parts of its conventional forces.

One example can illustrate how serious this failure is. U.S. Air Force planes now average 26 years of age. When President Ronald Reagan was elected in 1980, the "hollow" military that so worried the country had an Air Force whose planes at that time averaged 12 years of age.[21]

As a result, much of the technology and equipment now used in the U.S. armed forces, including nuclear forces, is in fact the same as at the end of the Cold War.

Should these conventional weapons be dramatically cut as well?

In fact, describing the U.S. nuclear force structure as a "Cold War relic"[22] says nothing about whether the force is still *needed*.

So, having claimed that much of nuclear arsenal is not needed because it is, after all, so much "Cold War" stuff, Ploughshares can now use its fuzzy cost-estimates to advantage.

As Senator Markey has argued, for example, if the U.S. is now spending upwards of \$70 billion a year on nuclear weapons,[23] (which if true would be a level higher in current-year dollars than what the U.S. was spending during the height of the Cold War), doesn't it make sense, when faced with serious budget deficits, to cut, say, \$20 billion a year from the nuclear enterprise?

But cutting \$20 billion a year from the current nuclear deterrent of the U.S. would require killing all modernization of the U.S. triad of nuclear forces, plus all the work extending the life of nuclear warheads.

And that is what the Ploughshares Fund has variously proposed: pushing to delay the strategic nuclear bomber and eliminate the Minuteman land-based missiles. In a recent essay, Ploughshares additionally claimed that the current nuclear submarine force replacement program might not be needed either. Writes Ploughshares, "We have not yet determined whether we will need... any... of the bombs they [submarines] will carry." [24]

In short, Ploughshares has proposed to either eliminate or delay the modernization of every leg of the nuclear triad even if, as a result, each element risks becoming obsolete in the near term.

This means that in about 20 years, the U.S. would be left with no effective or credible nuclear deterrent, just as China and Russia are modernizing their nuclear deterrents across the board.[25]

If adopted together, all these Ploughshare recommendations would leave America with an aging, obsolete nuclear deterrent, one totally inadequate to meet current or future threats as it "rusts to obsolescence." [26]

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While Senator Markey and his Congressional allies are calling for a "delay" in the bomber and ICBM modernization programs, in Washington a delay often has the same impact as killing a program. Just think of the Keystone pipeline. A decision to delay its approval in order to "review" the pipeline program was made more than 74 months, or six years, ago.

What the proposed Ploughshares budget cuts are actually doing, it appears, is trying to camouflage the objective of permanently disarming America of key parts of its nuclear capability.

Such disarmament would place in jeopardy not only America's own security but also that of the more than 31 nations that rely upon its nuclear umbrella for their security.

Why has the press not seen this disarmament strategy for what it is, and what is the alternative?

The best way forward is the nuclear deterrent roadmap adopted in December 2010 and, since then, supported largely by the administration and overwhelmingly by Congress -- so far. As funded in the past five defense bills, the roadmap begins prudently to modernize the triad of forces the U.S. now has, while simultaneously reducing the warheads in its arsenal that eventually it will keep.[27]

To be clear, the U.S. will **not** be **adding** thousands of new nuclear bombs to the nuclear force, as Ploughshares claims. Modernizing yes, but while reducing total deployed warheads.

One poll, sponsored by the Stimson Center, found that 67% of American respondents agreed that modernizing the U.S. nuclear deterrent -- replacing old systems while also pursuing strategic stability and arms control -- made sense as an overall military strategy.[28]

This modernization is a replacement program that will responsibly reduce America's nuclear force structure from 14 to 12 submarines, while keeping 400 operational ICBMs out of 450 silos and 60 strategic nuclear bombers.

Modernization will occur even as the U.S. reduces the number of nuclear warheads to 1550, as allowed by the 2002 Strategic Offensive Reductions Treaty (SORT) -- but down from 2200, the number allowed during the George W. Bush era.

This new, lower, warhead level, last attained during the Eisenhower administration, is significantly down from the more than 13,000 deployed warheads the U.S. maintained at the height of the Cold War.

Such a plan makes sense.

It is appropriate for America's political leaders to see to it that the U.S. is prepared to defend itself and its allies. They must be open with the American people and explain that spending 4-5% of the defense budget and six-tenths of 1% of the federal budget on deterring nuclear war is a prudent, affordable and urgently needed investment in the nation's defense.[29]

Given Russia's recent aggression in Ukraine, further bilateral nuclear reductions between the Russians and the United States are at best a remote possibility.

But as William Broad hinted in the *New York Times*, a significant reduction of nuclear weapons can always be done unilaterally by the United States, bypassing the need for any arms control deal with Russia.

Oddly, the nuclear cuts being proposed by Senator Markey do not require any reciprocal Russian reductions, such as one would get in a bilateral arms control agreement. The U.S. nuclear cuts would be, as Ploughshares also proposes, unilateral, despite the current massive nuclear build-up by Russia and China.

There thus is a choice before us.

Should the U.S. recklessly make nuclear cuts unilaterally, in search of a hoped-for world, free of nuclear weapons?

Or should the U.S. pause in making further reductions in nuclear weapons, and modernize its nuclear forces to the level of nuclear weapons allowed by the 2010 New START treaty between the U.S. and Russia? And should the U.S.

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just get on with the task, tough as it is, to keep the peace, maintain the deterrent, "and provide for the common defense"?

As former Congressman Norm Dicks said on July 12, 2012 about America's nuclear weapons: "They are a good deterrent and they have been an effective deterrent. Thank God for that."

Notes

- [1] From paper prepared for Senator James M. Inhofe, Ranking member of the Senate Committee on Armed Services, November 2013.
- [2] Declaration 12, New START Resolution of Ratification, December 22, 2010.
- [3] Letter from President Obama to Senators Daniel Inouye,(D-HA) Thad Cochran,(R-MS); Diane Feinstein (D-CA) and Lamar Alexander (R-TN), December 20, 2011.
- [4] Report - "Projected Costs of U.S. Nuclear Forces, 2014 to 2023" by the Congressional Budget Office. December 2013. (pdf); "Budgets for Operating, Sustaining, and Modernizing the Strategic Nuclear Triad", "Cost of U.S. Nuclear Forces, by Department and Function".
- [5] "Triad, Dyad, Monad? Shaping the US Nuclear Force for the Future," Mitchell Institute for Airpower Studies, Mitchell Paper #5, December 2009.
- [6] "Triad, Dyad, Monad? Shaping the US Nuclear Force for the Future," Mitchell Institute for Airpower Studies, Mitchell Paper #5, December 2009, Table #3, p.27.
- [7] Data from remarks of General (ret.) Frank Klotz, Maj. Gen. Garrett Harencak, and Lt. Gen Steven Wilson, at the September 18, 2014 Symposium on the Future Roadmap of the Strategic Nuclear Enterprise, held at the Army Navy Club in Washington, D.C. and "Triad, Dyad, Monad? Shaping the US Nuclear Force for the Future", Mitchell Institute for Airpower Studies, Mitchell Paper #5, December 2009.
- [8] Based on Mitchell Study of December 2009 and Stimson Center study of June 2012, and author's own additional analysis.
- [9] The Mitchell Study assessed the ten-year costs at \$228 billion while the Stimson Center study (adjusted by the author by removing missile defense and other non-nuclear related costs) assessed the ten years costs at roughly \$280 billion.
- [10] "Legislation to Reduce Nuclear Weapons Spending Introduced", Mar 3, 2014 - SANE - "A high-profile U.S. Senate critic of nuclear-weapons spending on Friday introduced a bill that would cut \$100 billion over the next ... and national security," Senator Markey said in a press release on the SANE Act.
- [11] Senator Markey's proposed cut of \$200 was announced by the Friends Committee on National Legislation (FCNL) as well as the Council for a Livable World on September 29, 2011. They both praised then Representative Markey for sending a letter along with 64 House members entitled "Freeze the Nukes, Fund the Future" to the Congressional Super Committee calling for "a cut of \$20 billion a year or \$200 billion over the next ten years, from the US nuclear weapons budget."
- [12] "What Nuclear Weapons Cost Us;" Ploughshares Fund Working Paper, September 2012. (Annual estimates of nuclear spending in this paper are \$640 billion over a decade while other Ploughshares Fund estimates range from \$57 billion to \$70 billion annually).
- [13] Cutting \$20 billion a year from the current nuclear deterrent budget of \$23 billion would obviously gut the U.S. strategic nuclear deterrent capability. If that amount were cut from future annual estimated budgets of \$30-35 billion, it would still decimate America's deterrent capability.
- [14] "What Nuclear Weapons Cost Us;" Ploughshares Fund Working Paper, September 2012.
- [15] One of the original studies to include missile defense expenditures in what was termed nuclear deterrent spending was the 2006 "Spending on US Strategic Nuclear Forces: Plans & Options for the 21st Century" by Steven M. Kosiak of the Center for Strategic and Budgetary Assessments (CSBA). Other studies by the Congressional Budget Office, (CBO) in Dec. 2013 and Stimson Center in June 2012 followed suit.
- [16] Adding in a notional percent of the bomber costs (25%) to the nuclear accounts was adopted by the CBO in its 2012 study, while higher percentages of the strategic bomber costs were added to the nuclear accounts by both the CSBA and the Stimson studies referenced above and subsequently adopted by Ploughshares among other arms control groups.

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[17] One of the first times an anti-nuclear organization estimated the cost of nuclear weapons over multiple decades was the report entitled "The Trillion Dollar Nuclear Triad" by Jon B. Wolfsthal, Jeffrey Lewis and Marc Quint, of the James Martin Center for Nonproliferation Studies, Monterey, California, in January 2014. The "Trillion" dollar price tag was then subsequently adopted by the Ploughshares Fund, even as that organization was claiming annual nuclear related spending was variously \$57 to \$70 billion annually, which would imply a three-decade cost of \$1.5 to \$2.1 trillion.

One arms control analyst, Kingston Rief of Center for Arms Control and Non-Proliferation has concluded that a realistic cost-estimate of nuclear modernization over the next three decades could be as low as \$600 billion, a not insignificant \$400 billion less than the \$1 trillion estimated cost often used by opponents of modernization.

[18] See "America's Forgotten nuclear missile crews." See also "Bombs Away" by Bruce Blair, Brian Weeden, and Damon Bosetti, *International New York Times*; and from WarScapes by Russ Wellen, April 9, 2019, "The Real Reason Missile Launch Officers Cheat."

[19] The former head of the Israeli Missile Defense Agency, Uzi Rubin, once quipped that anyone can come up with a snappy "fortune cookie" analysis. "Relic" of the Cold War is one.

[20] Air Force Association, National Defense Industrial Association and Reserve Officers Association Capitol Hill Breakfast Forum, July 31, 2013, with Lt Gen General James Kowalski, Commander, United States Air Force Global Strike Command, on "Nuclear Deterrence, Prompt Strike, and Triad Perspectives."

[21] "The Nuclear Enterprise," Maj Gen Garrett Harencak, AFA - Air & Space Conference and Technology Exposition, 16 September 2014. The USAF data is from a personal communication with Gen (ret.) Michael J. Dunn, past President of the Air Force Association and National Defense University.

[22] "Is the Triad Cost Effective?"; and "The Unrealistic Budgets and Nasty Politics of Nuclear Weapons"

[23] *LA Times*, October 21, 2014 "How big a nuclear arsenal do we really need?" by Joe Cirincione. The \$70 billion a year figure was used by then Congressman Edward Markey, quoting remarks by Ploughshares President Joe Cirincione, in a letter the Congressman and 34 of his House colleagues wrote to the Congressional Super Committee, October 11, 2011.

[24] *LA Times*, October 21, 2014 "How big a nuclear arsenal do we really need?" by Joe Cirincione. Authors note: The need to replace the U.S. submarine fleet in a timely basis is not well understood. Each year after 2027, one U.S. submarine has to be retired: its hull cannot be certified to remain stable with greater service. Even today, the planned service life of the current submarine force is greater than the U.S. has ever previously relied on. In addition, R&D costs for the program remain fixed, whether four, eight or 12 submarines are built. Savings only occur when the program is terminated.

[25] An excellent summary of the strategic nuclear modernization effort of both China and Russia can be found on the Air Force Association website: Steve Blank (AFPC) and Mark Schneider (NIPP), May 23, 2014, "New Trends in Russian Nuclear Defense Strategy; and Russian Nuclear Modernization and Security Challenges;" and Gordon Chang, Rick Fischer, and Ed Timberlake, May 20, 2014, "China's Rise, US Deterrent Challenges: the Realities of the Second Nuclear Age."

[26] This term was first used by Clark Murdock, the director of the Program on Nuclear Initiatives (PONI) at the Center for Strategic and International Studies, in remarks to the AFA-NDIA, ROA Congressional Breakfast Seminar Series on Nuclear Deterrence and Arms Control in May 2013.

[27] "Modernizing US Nuclear Forces", from Senator James Inhofe, Senate Armed Services Committee, November 2013.

[28] Program for Public Consultation, Consulting the People on National Security Spending, May 12, 2012, provided by the Stimson Center.

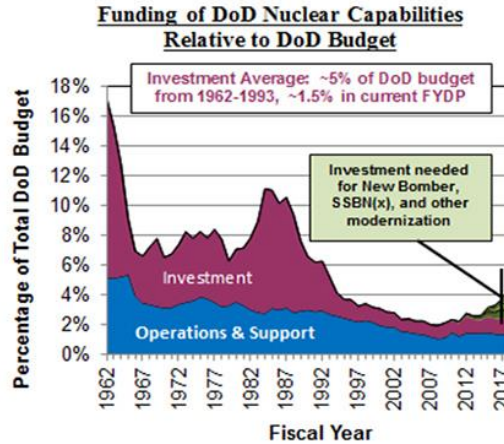
[29] Here is an excellent summary in chart form published in December 2013 by Senator Gary Inhofe, the ranking member of the Senate Armed Services Committee of the relative level of nuclear deterrent spending and investment from 1962 and projected to 2017, and expressed in terms of the percent of the DOD budget. Note that during the Cuban missile crisis, the U.S. was spending 17% of the DOD budget on nuclear weapons, and 11% during the Reagan modernization period. By comparison, projections (see table below) are that nuclear modernization costs might approach 4% of the defense budget.

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Another look at nuclear spending was an August 1996 *Atomic Audit: The Costs and Consequences of U.S. Nuclear Weapons Since 1940*. Edited by Stephen I. Schwartz, it concluded the U.S. government spent \$5.5 trillion in the 57 years from 1940-1966 on all nuclear and nuclear deterrent related programs, implying an average annual expenditure of \$100 billion (adjusted to today's dollars).

At the time of its publication, this author discussed the study with Schwartz, to determine what assumptions went into his conclusions. In particular, his view was that current nuclear expenditures at the time were roughly \$57 billion a year -- the number also used by the 2006 CSBA study referenced above.

Both estimates use the same, possibly faulty assumptions, to come up with the same numbers. As a historical review, this book has much information but its characterization of much spending as "nuclear related" is in this author's view, far too expansive.

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<http://www.gatestoneinstitute.org/4860/unilateral-disarmament>

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The Chosun Ilbo – Seoul, South Korea
 OPINION/Editorial

Are China, U.S. Losing Interest in N.Korean Nukes?

November 13, 2014

The North Korean nuclear standoff continues to slide down the priority lists of the international community. This was clearly evident during the APEC Summit in Beijing earlier this week.

President Park Geun-hye duly met with her Chinese counterpart Xi Jinping on Monday and with U.S. President Barack Obama on Tuesday, and Xi and Obama sat down together on Wednesday.

But the statements that came out of those meetings between the countries that hold the key to resolving the issue failed to transcend standard diplomatic rhetoric. Park and Xi vowed to "strengthen efforts" to prod the North to abandon its nuclear weapons, while Park and Obama pledged "mutual cooperation" to denuclearize North Korea. The statements might have been lifted out of any press release in the last decade.

It was no different after the China and U.S. summit. Xi and Obama "reconfirmed" their goal of achieving a Korean Peninsula free of nuclear weapons, and even that was only in reply to the question of a reporter.

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Of more pressing concern to Washington and Beijing are issues like measures to prevent a potential military clash between the two superpowers, the pro-democracy protests in Hong Kong and global warming.

Xi did call for the speedy resumption of the stalled six-party nuclear talks, but it sounded dutiful rather than urgent.

It has been six years since the last round of the six-way talks, the delay being mainly due to differences between the U.S. and China about the conditions that must be met to resume the dialogue. The U.S. says it can no longer trust North Korea, which has failed to live up to all previous pledges, and wants Pyongyang to take concrete steps to scrap its nuclear weapons first.

That is a perfectly sensible request since the U.S. has been providing North Korea with hundreds of thousands of tons of heavy fuel and food while the reclusive state has continued to develop nuclear weapons. But China has been insisting that the six-party talks should resume before any pledges are made.

The U.S. and China have wasted years this way, and all that time North Korea has been busy developing its nuclear weapons and missile technology. Considering the seriousness of that situation, the comments by the leaders of South Korea, China and the U.S. during the APEC Summit were simply disappointing.

Are they at all interested in solving this problem? South Korea has no choice now but to push the U.S. and China into moving more quickly. If they are stalling, then Seoul must take the lead and propose a way forward.

http://english.chosun.com/site/data/html_dir/2014/11/13/2014111302128.html

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Omaha World-Herald – Omaha, NE
OPINION/Editorial

World-Herald Editorial: Nuclear-Free Proves Difficult

Thursday, November 13, 2014

During six years in office, President Barack Obama has discovered the difficulties that confront a president when it comes to making national security decisions. The turmoil in the Middle East provides the latest sobering example.

The president has discovered, too, that it's not easy living up to ambitious pronouncements on the arms control front.

Working to stop the global spread of nuclear arms, securing nuclear materials, pursuing possibilities for practical arms control measures — all are sensible goals shared by many presidential administrations, regardless of party.

In 2013, however, President Obama, a Nobel Peace Prize winner, raised his rhetoric on the issue to rather steep heights. He used a speech at Berlin's Brandenburg Gate to talk about achieving a nuclear-free world as a long-term goal. It's an attractive goal in many respects but one that is difficult to square with the realities of the current world.

Still, the Obama administration rightly pledged, in exchange for Senate approval of the new START Treaty with Russia, to make investments to modernize our nuclear arsenal: upgrades or replacements of submarines, bombers, missiles and weapons technologies.

This autumn, arms control advocates are pushing for the abandonment or radical scaling down of the modernization plans. The price tag of the upgrades, totaling hundreds of billions of dollars, is much too steep, they argue.

The Federation of American Scientists notes that the Obama administration has reduced the nuclear arsenal considerably less (10 percent) than any U.S. president going back to Richard Nixon. A surprising fact the group points out: As president, George W. Bush carried out a 50 percent reduction in U.S. nuclear warheads and his father, 41 percent.

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The U.S. Strategic Command is our nation's leading entity for deployment and control of our nuclear weaponry, and Secretary of State Chuck Hagel, a former U.S. senator from Nebraska, this year has stressed the importance of nuclear modernization even as he juggles huge budget challenges.

The need for maintaining the reliability of our nuclear forces is a focus of U.S. Sen. Deb Fischer, a member of the Senate Armed Services Subcommittee on Strategic Forces. This fall she visited our country's nuclear weapons laboratories and later described the hard work being done to maintain our aging weapons systems.

Given the costs, the Pentagon will need to prioritize when it comes to nuclear modernization. Investment to ensure reliability is crucial, but given the competing demands for defense dollars, our military leaders will need to choose — to say “yes” to some modernization programs and “no” to others.

That's prudence and realism: Something every administration would do well to embrace, whether it's managing the budget or deciding national security questions.

http://www.omaha.com/opinion/world-herald-editorial-nuclear-free-proves-difficult/article_dfb19326-b7d2-57a4-bee5-d1d7c1f23783.html

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ABOUT THE USAF CUWS

The USAF Counterproliferation Center was established in 1998 at the direction of the Chief of Staff of the Air Force. Located at Maxwell AFB, this Center capitalizes on the resident expertise of Air University, while extending its reach far beyond - and influences a wide audience of leaders and policy makers. A memorandum of agreement between the Air Staff Director for Nuclear and Counterproliferation (then AF/XON), now AF/A5XP) and Air War College Commandant established the initial manpower and responsibilities of the Center. This included integrating counterproliferation awareness into the curriculum and ongoing research at the Air University; establishing an information repository to promote research on counterproliferation and nonproliferation issues; and directing research on the various topics associated with counterproliferation and nonproliferation .

The Secretary of Defense's Task Force on Nuclear Weapons Management released a report in 2008 that recommended "Air Force personnel connected to the nuclear mission be required to take a professional military education (PME) course on national, defense, and Air Force concepts for deterrence and defense." As a result, the Air Force Nuclear Weapons Center, in coordination with the AF/A10 and Air Force Global Strike Command, established a series of courses at Kirtland AFB to provide continuing education through the careers of those Air Force personnel working in or supporting the nuclear enterprise. This mission was transferred to the Counterproliferation Center in 2012, broadening its mandate to providing education and research to not just countering WMD but also nuclear deterrence.

In February 2014, the Center's name was changed to the Center for Unconventional Weapons Studies to reflect its broad coverage of unconventional weapons issues, both offensive and defensive, across the six joint operating concepts (deterrence operations, cooperative security, major combat operations, irregular warfare, stability operations, and homeland security). The term “unconventional weapons,” currently defined as nuclear, biological, and chemical weapons, also includes the improvised use of chemical, biological, and radiological hazards.

The CUWS's military insignia displays the symbols of nuclear, biological, and chemical hazards. The arrows above the hazards represent the four aspects of counterproliferation - counterforce, active defense, passive defense, and consequence management.

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