America’s Bloated and Unsecure Nuclear Weapons Complex

BY LYDIA DENNETT

There are government facilities all over the country that use or store nuclear material for everything from scientific research to nuclear weapons production. Each of these facilities should be protected by the best security systems available. Instead, the Energy Department has apparently been relying on mystique and reputation to provide security.1 And it’s not working. In 2012, for instance, three protestors made it past security at the Y-12 National Security Complex, also known as the “Fort Knox of Uranium.”2 The activists protested for several minutes in front of the building where 500 metric tons of highly enriched uranium (HEU) is stored before they were apprehended.3

No matter how likely or unlikely a terrorist attack on a nuclear lab may be, if such an attack were to occur it could be devastating. It is for this reason that nuclear material such as HEU must be so carefully protected. And the security contractors who protect the nuclear weapons labs are required to be prepared for any kind of incident—whether it be a nuclear protest or an attack by terrorists intent on stealing fissile material for a nuclear device. Security tests are regularly performed at the sites, including force-on-force tests, or simulated combat between the nuclear guard force and a commando-type mock adversary team. Yet the nuclear weapons complex has repeatedly failed to accomplish their seemingly basic protective mission, as illustrated by a series of accidents, failures, and embarrassments detailed in a 2001 Project On Government Oversight (POGO) report on the securi-

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ty problems of nuclear weapons labs scattered across the country.4

Take, for example, Technical Area 18 (TA-18) at Los Alamos National Laboratory. This facility was the home of tons of weapons-grade uranium and plutonium. In 1997, a special unit of the U.S. Army Special Forces conducted a force-on-force test at the facility and was easily able to “steal” enough nuclear material to produce a nuclear blast.

The Wall Street Journal noted, “The 1997 mock invasion succeeded despite months of guard training and dozens of computerized battle simulations showing that newly beefed-up defenders of the facility would win.”5

After this disastrous failure, operations at TA-18 continued with mitigating safety restrictions.6 But despite assurances from the security contractor and the Energy Department that the security holes were fixed, the building again failed a force-on-force test in 2000.7

In 2002, the National Nuclear Security Administration (NNSA) announced that the mission of TA-18 would be moved to a far more secure location—a partially underground building called the Device Assembly Facility located at the Nevada Test Site in the Nevada desert.8 But it wasn’t until 2005 that all of the weapons-grade material was moved out of TA-18, eight years after the first failed security test.

This would not be the last time that a nuclear lab would drag its feet when de-inventorying weapons-grade nuclear material. Lawrence Livermore National Laboratory, located in California, also has a history of security problems.9 For years, the lab was unable to meet security requirements, and in 2008 Livermore was given a waiver exempting it from meeting them.

This waiver flew in the face of the
experienced a number of preventable operational incidents.” WSI-SRS met the overall objectives of the contract with the Energy Department, but these operational incidents, along with less-than-expected performance during the force-on-force tests, were “leading indicators of a lack of focus and degradation of conduct of operations.”

WSI-SRS’s sister branch at the Y-12 facility, Wackenhut Services Inc.’s Oak Ridge unit (WSI-OR), also had difficulty with the security tests following the 2012 break-in at the facility. Just three months after the break-in, Energy Department Inspector General Gregory Friedman released a report confirming that several of the guards cheated on a written security test. He found that copies of the test questions and answers “had been distributed in advance of the test to ... the very people whose knowledge was to have been evaluated as part of this process.”

The Inspector General’s report called the failure to safeguard the test “inexplicable and inexcusable.” This was not the first time Y-12 guards cheated on security tests. In June 2003, a test using four different force-on-force scenarios was conducted at Y-12 to determine the effectiveness of the guard force. It turned out that the guard force performed too well on all four scenarios, and an Inspector General’s investigation found that the tests had been compromised when leaders of the guard force gained access to the attackers’ plans. This review also found that inappropriate actions had occurred going back to the mid-1980s in connection with performance tests at the Department’s Oak Ridge Complex. WSI-OR was fired following the 2012 incident.

When the three protestors appeared before a judge for sentencing on espionage charges a year and a half after they broke into Y-12, prosecutors were asked how the peaceful protesters had actually harmed U.S. national security. Assistant U.S. Attorney Jeff Theodore replied that they “had destroyed the ‘mystique’ of the ‘Fort Knox of uranium.’”

Unfortunately, even these less-than airtight facilities are not the constant homes of nuclear weapons and material. The Energy Department’s Office of Secure Transportation is responsible for keeping the nuclear components secure when they must be transported from site to site, often from one end of the country to the other. For instance, when a nuclear weapon is dismantled at the Pantex Plant in Amarillo, Texas, the uranium portion of the bomb is transported to Y-12 in Tennessee for further processing. That means these nuclear materials are transported over 1,000 miles on public highways. However, as POGO reported in 2013, these uranium parts can actually be processed at Pantex, which would significantly decrease the amount of material needed to be transported across the country.

Perhaps one of the most long overdue solutions to these security problems is to reassess and consolidate the sprawling U.S. nuclear weapons complex. These dangerous materials should be stored only at a few sites that can legitimately prove their ability to protect them. Consolidation will reduce the number of terrorist targets, reduce the costs of maintaining numerous facilities, and decrease security costs and vulnerabilities at several labs while still supporting a post-Cold War nuclear mission.

For many years, officials within both the Energy and the Defense

2 Y-12 National Security Complex Website, “Secure Storage.”
7 U.S. Nuclear Weapons Complex: Security At Risk
10 U.S. Nuclear Weapons Complex: Livermore Homes and Plutonium Make Bad Neighbors
14 Savannah River Site, “Award Fee Determination Scorecard,” 2013, p. 3.
15 “Award Fee Determination Scorecard”
20 “Nun gets nearly 3 years in prison for nuke protest”
Departments have suggested that it is long past time to re-evaluate the Energy Department managed labs, including the nuclear weapons labs. In 2011, a Defense Department memo that harshly criticized the Energy Department’s reluctance to downsize the nuclear labs was leaked to POGO. The memo advocates a BRAC-like review of the labs. BRAC stands for Defense Base Closure and Realignment Commission, an independent entity established to reassess the efficacy of military installations after the Cold War. Simply stated, a BRAC review is used to reorganize the Defense Department’s base structure to more efficiently and effectively support forces, increase readiness, implement changes in military operations, and save money by cutting redundancies.

The leaked memo highlighted the fact that the Energy Department is still operating with a supersized Cold War mentality when it comes to its facilities, compared to the Defense Department which has performed multiple BRAC rounds and closed 21 laboratories.

This is not a new problem; previous administrations have found the Energy Department’s lab complex far bigger than it needs to be. For instance, a 1995 report from a Secretary of Energy Advisory Board Task Force found that there was “excess capacity in areas associated with nuclear weapons design and development; and political considerations which have inhibited downsizing and laboratory restructuring.” A similar review in 2005, also done by an Energy Department advisory board, reached almost exactly the same conclusions and even recommended consolidating all nuclear material at a single site. This report highlights how consolidation would reduce operating and security costs and the risk to populations surrounding these facilities.

Inspector General Friedman has also recommended consolidating and streamlining the complex. In a November 2011 special report on management challenges at the Department, Friedman laid out the case for a base (or, in this case, lab) realignment commission, focusing on the billions of dollars spent on support costs at the labs. The IG concluded that “the proportion of scarce science resources diverted to administrative, overhead, and indirect costs for each laboratory may be unsustainable in the current budget environment.”

Just a year later, the Government Accountability Office echoed concerns over Energy Department spending on support costs, which then totaled some $5 billion dollars each year.

Inspector General Friedman proposed an Energy Department realignment commission yet again in March 2013 when he testified before the House Committee on Science, Space, and Technology’s Oversight Subcommittee: “We recommended that the Department, using a BRAC-style formulation, analyze, realign, and consolidate laboratory operations to reduce indirect costs and, as a result, provide greater funds for science and research.”

Finally it seems that Congress is taking notice. The Consolidated Appropriations Act for Fiscal Year 2014 included a mandate for the Energy Secretary to nominate members for a commission that will review the country’s energy laboratories to make sure their missions are not redundant, that they align with departmental priorities, and that they are appropriately sized to accomplish those priorities. While not a formal BRAC, the commission is the first step toward much-needed consolidation.

Congress and the Energy Department are clearly ready and willing to pay exorbitant sums to security contractors in the name of protecting the American people from a breach at nuclear facilities—as they should be. But when three protesters are able to walk right into the “Fort Knox of uranium,” serious questions arise about how this material is stored, where it is stored, and who is protecting it. Next time, the interlopers might not be peace activists but terrorists, and the consequences of failure will not be merely a slightly smaller award fee for a security contractor.

A thorough and independent review of the nuclear labs, their missions, and their capabilities is long overdue. The 2014 commission on energy labs is a step in the right direction and demonstrates Congress’s growing reluctance to take the Energy Department’s assurances at face value. It’s time for real changes to be made, for real downsizing and consolidation to occur, and for the security of the nuclear weapons complex to come first.

22 Memorandum from Don J. DeYoung, Laboratory Joint Analysis Team, to Dr. John W. Fischer, Laboratory Joint Analysis Team Chair, regarding New Missions for the Nuclear Weapons Labs, November 16, 2011.
Dear Friends,

I am a supporter of the Center for Defense Information (CDI) and would like to share information I’ve just discovered: If you included CDI in your estate planning, as I did, your funds may not support CDI and its ongoing work unless you change your will.

I am writing to ask for your help in securing the future of CDI, an organization I, and I hope you, care deeply about. Together with you, I want to ensure funds are not redirected away from Project On Government Oversight’s (POGO) CDI Project.

Starting with my father, members of my family have been financial supporters of CDI for over forty years. We have supported CDI since the early 1970s, continued to do so after CDI merged with the World Security Institute (WSI), and most recently in 2012 when CDI became part of POGO. I am proud to continue the support started by my father because my family and I believe so strongly in the need for a fact-based voice that challenges Pentagon and defense contractor propaganda. As a CDI supporter, you may have similar reasons to believe in its work.

POGO’s stewardship is giving me great confidence in the future of CDI. I look forward to receiving The Defense Monitor newsletter each quarter, which POGO’s CDI puts together so brilliantly.

With the three eras of CDI—as a stand-alone institution, as a part of the WSI, and now as part of POGO—a will written before 2012 that says to give money to CDI no longer precisely directs the bequest.

We need to help CDI by taking the time to update our estate plans. I have learned that two simple amended sentences in my will can ensure that my funds go where I want them to go after I am no longer here. I understand it is cumbersome to amend a will or trust—I just had to do it myself. But I write to you to ask, as a fellow longtime supporter of CDI, if you will join me in doing so. The specific language that you can provide to your attorney to craft an amendment or codicil is:

“After taking care of all expenses, debts, and other specific provisions, I give, devise, and bequeath ___% of the rest and residue [or $__ if a specific amount] to Project On Government Oversight (POGO)’s Center for Defense Information (CDI) Project. POGO is a Washington, DC, charitable organization [Tax ID # 52-1739443] currently having offices at 1100 G Street NW Suite #500, Washington, DC 20005.”

The key is to designate POGO’s Center for Defense Information Project to ensure that your generous donation reaches your intended charity.

If you would like to support WSI’s successor project, Global Zero, please go to its website at www.globalzero.org.

CDI is the sole Washington, DC-based group dedicated to the analysis of wasteful military spending that does not receive funding from defense contractors. That independent analysis will be necessary long after I am gone; my intent is to see that important work continue and to support long-term campaigns to cut wasteful Pentagon spending. I don’t want bequests that I make to support these efforts go to other organizations, even if they have a similar mission.

Please consider visiting with your attorney to update your will or trust with language that clearly directs your financial support towards POGO’s CDI project.

Thank you for taking the time to ensure that your support goes where you intend it to. And, if you haven’t included POGO’s CDI Project in your will, please consider doing so now.

With thanks and respect,

Philip A. Shamus, Jr.

P.S. If you have questions, please do contact Chris Pabon at POGO at cpabon@pogo.org or (202) 347-1122. Feel free to use my name when doing so.
Saving the Warthog to Save Troop Lives

BY ANDREW COCKBURN

Reminiscing about his service in the Korean War, a veteran once remarked to me with wonder how his Army boots were so inadequate in the freezing conditions of winter combat that he and his comrades would compete for the fur-lined boots of dead Chinese soldiers and even mount dangerous trench raids for that purpose. “How was it,” he said, “that I, as a soldier of the richest nation on Earth, was having to steal the boots of soldiers from one of the poorest countries on Earth?”

The answer was not that the U.S. military was too underfunded to buy proper boots for its men. After all, the military budget shot up to World War II levels once the war started. It was because senior commanders preferred to spend the money elsewhere, mostly on a variety of strategic nuclear bombers and other aircraft that never reached Korea.

U.S. military footwear has improved since those days, but the overall mind-set has not changed, as glaringly demonstrated by the Air Force’s current efforts to junk the A-10 Warthog, the only aircraft specifically designed to support ground troops in combat. The plane is devastatingly effective in this role, thanks to its ability to maneuver close to the ground in the face of hostile fire while accurately targeting enemy positions with its lethal 30-millimeter cannon. Scores of combat veterans ascribe their survival in firefights to intervention by one or more A-10s, accolades accorded no other combat plane.

This simple fact of life cuts no ice with Air Force planners, traditionally disdainful of the close support mission, as they pursue a furious campaign to discard the A-10. They justify their plan with excuses, including that the plane is “40 years old and designed to fight Soviet tanks” and therefore obsolete. But they studiously ignore its vital contributions in every war since 1991.

Lacking experience in, or at least uncaring of, current combat realities, commanders tout multi-role substitutes, such as the B-1 bomber, which depend on video screens and map coordinates to place their bombs. Reliance on such means has left a trail of collateral damage across recent war zones, not only dead civilians by the score, but also U.S. service personnel. In June, a B-1 killed five American soldiers because the crew did not know that the plane’s technology could not detect markers for “friendlies.”

The campaign against the A-10 has been ongoing for decades but has taken on new urgency as the Air Force defends its treasured F-35 Joint Strike Fighter program. This gold-plated clunker, years late and staggeringly over budget, is today’s equivalent of the Korean War-era nuclear bombers that ate up all the boot money. Although the program is years behind schedule because of its shortcomings, the Air Force
shamelessly claims that the principal obstacle to imminent deployment is a suddenly discovered shortage of mechanics that can be alleviated only by reassigning personnel from a junked A-10 program.

“Are we going to delay the Joint Strike Fighter?” Air Force Secretary Deborah Lee James said recently. “That would be awful. Are we going to underman the very aircraft that are most needed in this latest fight” against Islamic State?

The delay of which James complained in this fatuous statement (the F-35 will not even complete operational testing until 2019) has been brought about by Congress. Impelled by well-informed arguments from combat veterans and the clear political logic of sticking up for the grunts on the ground, the House Armed Services Committee, as well as the full House and relevant Senate defense committees, voted overwhelmingly at the end of last year to prevent the Air Force from retiring the plane.

That should have been the end of it, but the service chiefs refused to concede defeat. The Senate and House committee bills had expressed the same intent—to preserve the A-10 force in its entirety—but in different ways. The final 2015 defense authorization bill was therefore negotiated behind closed doors by the leadership of the authorization committees. It was here, secluded from public scrutiny, that the will of the wider Congress and the lives of soldiers could be ignored in favor of obliging the generals’ demands.

The then-respective Armed Services Committee chairmen, Senator Carl Levin (D-MI) and Representative Howard “Buck” McKeon (R-CA), have shown little interest beyond the obligatory rhetoric in preserving the A-10. Rumors on Capitol Hill did not bode a good result. Such forebodings were somewhat justified, in that the final bill, negotiated in secret, accorded merit to the Air Force’s specious argument regarding the need to divert maintenance personnel to the F-35, and authorized the service to take 36 A-10s offline.

The battle will recommence with the new Congress. Hopefully we have moved on from the days of raiding enemy trenches for support that the high command refuses to supply.
It’s Time to Sink the Littoral Combat Ship

BY WILLIAM D. HARTUNG AND JACOB MARX

In an era of tight budgets, it is crucial that the Department of Defense spend taxpayer money wisely. That’s especially true for the U.S. Navy. It is clear that U.S. leaders envision diverse objectives requiring diverse maritime capabilities. It’s equally clear is that there is no need for the Littoral Combat Ship.

On paper, the Littoral Combat Ship, or LCS, is the high-tech, multipurpose answer to the Navy’s 21st Century needs. It is supposed to be fast, maneuverable, and able to operate in shallow water. And it is built to adapt to different tasks through a system of exchangeable weapons and equipment, known as “mission packages.” At a projected price tag of $450 million for one sea frame and three mission packages, it appears to offer three ships for the price of one.

Things that seem too good to be true usually are, and so it is with the LCS. Designing a weapons system for a dozen missions makes it good at none of them. Such inherently flawed requirements balloon costs, in this case to a staggering $780 million for one sea frame with two mission packages. This for a ship that is too big to be a corvette, too lightly armed or armored to be a destroyer, and too overweight to be upgraded through a full service life. And in one war game, the LCS’s mission packages took several weeks to exchange due to the time it took to get all of the appropriate equipment and personnel to the dock. The full extent of the problems with the LCS remains unknown. The Navy hasn’t even conducted formal testing for basic capabilities like the ability to operate in rough water or withstand an explosive shock.

How did this happen? There are three main reasons. First, DoD issued contracts with unworkable and often conflicting requirements. There is simply no need to have a ship the size of the LCS that can do 40 knots. Traveling at that speed takes too much fuel and creates weight and balance problems. And while commonality of parts could in theory make it easier to train crews and repair damage to LCS, the Navy undercut that rationale in 2007 when it decided to buy two different ships with different designs, yet both dubbed LCS.

The second reason the LCS shipbuilding program has gone so far off course is inadequate oversight. Congress should include a requirement that all major capabilities of a ship be adequately tested before it goes into full-scale production, and that contractors bear a larger burden of the financial risk if the systems don’t work.

Finally, the common defense industry practice of putting in unrealistically low bids as a way to win a major government contract must
end. If the Defense Department would more rigorously scrutinize those initial bids, it would be easier for Congress and the public to decide whether the weapon is worth the cost.

In February 2014, Defense Secretary Chuck Hagel cut the planned LCS purchase from 52 to 32 ships and authorized the Navy to identify more “capable and lethal small surface combatant” alternatives. The final report recommended the Navy purchase the final 20 LCSs with added armor and weapons at an additional cost of up to $60 million to $75 million per ship. But building a heavier, slightly better-armed LCS will not address the fundamental problems of sustainability and operational effectiveness cited above.

Tinkering at the margins of an ill-advised program is not a sufficient answer to the inherent flaws of the LCS. It’s time to acknowledge that those ships are a detriment to naval readiness and a bad deal for American taxpayers.

William D. Hartung is the director of the Arms and Security Project at the Center for International Policy.

Jacob Marx was a research associate at the Center for International Policy when this article was originally published, and is the author of an issue brief on the LCS.

FIND OUT MORE

A Closer Look at the ‘Modified LCS’
by Christopher P. Cavas

“Opinion: A Better LCS—Or An All-New Frigate?” by Bill Sweetman
Aviation Week & Space Technology, February 2, 2015. (Behind a paywall) http://aviation-week.com/defense/opinion-better-lcs-or-all-new-frigate

FY 2014 Annual Report
by the Director, Operational Test and Evaluation, Department of Defense
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