



# THE DEFENSE MONITOR

PROJECT ON GOVERNMENT OVERSIGHT

# Purge the Generals

## What it will take to fix the Army

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BY DANIEL L. DAVIS

**T**he U.S. Army's generals, as a group, have lost the ability to effectively function at the high level required of those upon whom we place the responsibility for safeguarding our nation. Over the past 20 years, our senior leaders have amassed a record of failure in major organizational, acquisition and strategic efforts. These failures have been accompanied by the hallmarks of an organization unable and unwilling to fix itself: aggressive resistance to the reporting of problems, suppression of failed test results, public declarations of success where none was justified, and the absence of accountability.

Today, and consistent with these patterns, senior Army leaders are poised to reorganize the service into

one that is smaller and less capable than the one that existed at the end of the Iraq War in 2011, and just as the threat environment is becoming more unpredictable and potential adversaries more capable.

Events have granted us a short window of time in which we might address the problem. America is drawing down after two intense wars, while the potential threats of the future are not quite upon us. Seven decades ago, Army Chief of Staff Gen. George Marshall surveyed an officer corps similarly ill-suited for the tasks to come. He forced into retirement scores of generals, clearing the way for the ones who would help win World War II.

Today's times, like Marshall's, call for a reformation of the general officer corps.

### A Bad Track Record

Gallup polls show that American's trust the military more, by a wide margin, than any other institution in the United States. Many people—from private citizens to members of Congress—view the military's senior leaders as something close to infallible.

But a clear-eyed look at their actual track record shows a crying need for change. Over the past two decades, Army generals have consistently insisted that various acquisition, organizational and even combat efforts were on course despite substantial and frequent expert testimony to the contrary. They rejected alternative courses of action that independent analysis suggested might have produced superior results, and reaped failure after expensive failure.

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A short and by no means exhaustive list of such failures might include the RAH-66 Comanche armed reconnaissance helicopter (launched in 1991, canceled after \$6.9 billion), the XM2001 Crusader mobile cannon (launched in 1995, canceled after \$7 billion), and the Future Combat Systems (launched in 2003, canceled after \$20 billion). FCS in particular was notable for senior Army leaders' efforts to ignore or suppress the results of simulations, tests and analyses that highlighted problems and ultimately predicted failure.

Today, we have the Ground Combat Vehicle program, which was launched amid the wreckage of FCS and has, despite official proclamations of confidence, already seen two delays that have pushed production out to 2020 or so. There is also the Joint Tactical Radio System, launched in 1997 as the heart of the effort to bring a robust network to the battlefield. In March, the Government Accountability Office reported that the 16-year-old program had yet to demonstrate in a realistic environment that the Rifleman variant could use one of its three critical technologies or that the Manpack variant could use any of its four critical technologies.

The Army has done little better in efforts to modernize the decades-old divisional structure. In the late 1990s, senior leaders launched the Advanced Warfighter Experiment, a set of war games ostensibly meant to guide the reorganization of combat formations for new challenges. In fact, these senior leaders had already chosen their path: reduce formations' striking power, then try to compensate with better communications. Even though AWE's simulations, command post exercises and field exercises exposed serious weaknesses in the concept, the Army dis-

patched a pair of three-star generals to tell the Senate Armed Services Committee about "compelling experimental success." And when the Army proceeded to impose the principles of the AWE on its divisions, combat power suffered just as the experiment had predicted. As demonstrated in both Iraq and Afghanistan, additional soldiers assigned to various headquarters did not negate the need for front-line troopers to engage the enemy.

In 2004, Army generals reorganized the new "modular" brigade combat team by stripping away one of its three maneuver battalions. Defying internal Army analysis that predicted a less-capable force, the leadership attempted to offset the loss of infantrymen, tanks, Bradley Fighting Vehicles and artillery with larger headquarters elements, technology and more intelligence capability. After spending nearly nine years and reportedly \$75 billion on the reorganization, Army leaders are now trying to reverse course by returning the third battalion to the BCT.

This sad pattern extends into combat operations, as well. Since 2004, senior American military leaders have consistently made claims of combat success in Afghanistan. In the face of substantial evidence to the contrary, they repeatedly argued that the Taliban were being defeated and the Afghan National Security Forces were steadily improving. After I chronicled these claims in a February 2012 essay in *AFJ*, Lt. Gen. Curtis Scaparrotti told reporters at a Pentagon news conference that he had read the article but remained confident in DoD's assessment that the war was on the right track. The general, who was then the commander of NATO's Joint Command in Afghanistan and who now directs the Joint Staff, said the Taliban had been "unsuccessful

at even reaching the level" of past violence and would fail again in the coming year.

Unfortunately, Scaparrotti's confidence turns out to have been misplaced. In April, the independent Afghanistan NGO Safety Office released its report for the first quarter of 2013. Flouting the general's expectations, the report states that "the opening dynamics of 2013 all indicate the likelihood of a return to 2011 levels of violence [the all-time high]. Though grim, this assessment only represents a further escalation in the perpetual stalemate that has come to characterize the conflict."

When *The New York Times* tried to compare the ANSO report to official U.S. accounts, it discovered that the American military, "which last year publicized data on enemy attacks with meticulous bar graphs, now has nothing to say. 'We're just not giving out statistics anymore,' said a spokesman, Col. Thomas W. Collins."

After each of these failures, one might expect the Army and program leaders to have suffered censure. Instead, the opposite seems generally to have been the case. The leaders of failed programs and other efforts received prestigious medals, promotion to higher ranks, and plum follow-on jobs; others retired and went to work for defense contractors, often with companies that had profited from the failed acquisition effort.

## Going Wrong Again

With such a record, it should come as little surprise that our senior uniformed leaders appear to be going wrong again. They are poised to create a smaller, less capable combat force just as the future operating environment grows more dangerous and our potential future adversaries grow more modern and proficient.

Before a nation's defense establish-

ment can craft an effective strategy, it must conduct a comprehensive analysis of the operating environment the future force may operate in. It must be able to reasonably assess the quality and nature of a given area's economic, ecological, agricultural and demographic foundation, and make educated guesses as to where those categories will trend in the coming years. Such an analysis must also take into consideration the military forces operating in that same area: What are their capabilities, what doctrine governs their fighting forces, how are they modernizing, and how might they match up against friendly formations if conflict were to break out?

It has become typical to dismiss the possibility of state-on-state war, but the likelihood is high enough to warrant military planning for it. In December, the Office of the Director of National Intelligence published "Global Trends 2030: Alternative Worlds," an effort to "stimulate strategic thinking by identifying critical trends and potential discontinuities." Among its main points was that "demand for food, water, and energy will grow by approximately 35, 40, and 50 percent respectively owing to an increase in the global population and consumption patterns of an expanding middle class."

The report predicted: "Many countries probably won't have the wherewithal to avoid food and water shortages without massive help from outside." But an even greater factor is affordable crude oil, key to every aspect of economic development. Evidence suggests global production may not meet that need. Nor can the United States realistically look to near-term energy independence, despite recent media reports citing numerous oil advocacy groups who say it may arrive as soon as 2020. In reality, many factors make this

unlikely, including global production fundamentals and limits to domestic tight oil production.

If current trends hold—global exports continue to shrink, China and India continue to increase their demand—and U.S. production of tight oil and gas do not perform as hoped, competition for food, water and energy will eventually depress economies across the globe. The danger of social unrest will rise apace. Moreover, the DNI report says, it is unclear whether the world's financial system is resilient enough to withstand a "global breakdown" in the face of "stalled economies or financial crises." All in all, there is a significant possibility of the kind of pressures on national governments that have in the past led to state-on-state war.

I do not advocate armed conflict with the People's Republic of China, nor do I hold that such conflict is inevitable. To the contrary, I strongly suggest that we engage Beijing in the diplomatic and economic spheres to foster mutual understanding and the common good of our nations and those of other countries in the Asia-Pacific region. Any sort of war would be destructive for all involved. Based

***The failures of our leaders over the past 20 years have been accompanied by the hallmarks of an organization unable and unwilling to fix itself: aggressive resistance to the reporting of problems, suppression of failed test results, public declarations of success where none was justified, and the absence of accountability.***

on China's recent declarations of their military intentions, however, it is wholly appropriate to ensure that our country is prepared for reasonable contingencies.

In April, the Chinese government laid out the focus of its military reformation in a white paper titled "The

Diversified Employment of China's Armed Forces." "The Asia-Pacific region has become an increasingly significant stage for world economic development and strategic interaction between major powers," the document said. "The U.S. is adjusting its Asia-Pacific security strategy, and the regional landscape is undergoing profound changes."

To meet these changes, the paper says, the People's Liberation Army "is engaged in the building of new types of combat forces. It optimizes the size and structure of the various services and arms, reforms the organization of the troops so as to make operational forces lean, joint, multi-functional and efficient. The PLA works to improve the training mechanism for military personnel of a new type ... and strengthens the development of new- and high-technology weaponry and equipment to build a modern military force structure with Chinese characteristics."

Over the past decade, the Chinese leadership has taken concrete steps toward these aspirations. In *Chinese Lessons from Other Peoples' Wars* (Strategic Studies Institute, 2011), Martin Andrew explained that the PLA

no longer relies on large-scale artillery fires and masses of infantrymen. Since 2000, he notes, the Chinese have been "in the midst of a transformation from essentially an infantry-based force into one designed around combined arms mechanized operations. A decade into the new century,

the PLA is redesigning its forces into battle groups, using modular force structures and logistics to support operations in high-altitude and complex terrains, conduct out of area operations, and develop the core for its vision of a hardened and network-centric army.”

Recent articles in Chinese professional journals confirm that the PLA conducts combined-arms joint field exercises that in some cases involve two mechanized divisions, air force and naval assets. These exercises combine computer simulation, field units equipped with laser gear (as the U.S. uses in its maneuver training centers) and live-fire ranges. Some of these exercises have taken place over hundreds of kilometers, akin to the Reforger exercises U.S. forces once conducted in Germany.

In short, during a decade in which the U.S. Army and Marine Corps have been focused almost exclusively on counterinsurgency and small-unit warfare, a new generation of Chinese military leaders has deepened its understanding and application of conventional warfare.

### **Cuts Planned, Not Changes**

Against this backdrop, let us now examine how the Army’s senior military leaders are posturing the force. The 2013 Army Strategic Planning Guidance says the force is “preparing to meet the demands of the rebalance to the Asia-Pacific region and the emphasis on building partner capacity and shaping the security environment as directed by the new Defense strategic guidance.” It says such preparation will take the form of reinvigorating “existing capabilities, develop new capabilities for the changing environment, and adapt processes to reflect the broader range of requirements.” Ultimately, it says, “[t]he breadth of missions the Army

must fulfill requires changing priorities in the way it organizes, mans, trains, equips and sustains to ensure that it is an agile, responsive, tailorable force capable of responding to any mission, anywhere, anytime.”

Unfortunately, the document’s amorphous language makes it difficult to ascertain how these concepts translate into actual plans and capabilities for the Army. There is little in the way of explaining what missions the Army will need to be prepared for beyond the bumper sticker of “across the range of military operations.”

***As demonstrated in both Iraq and Afghanistan, additional soldiers assigned to various headquarters did not negate the need for front-line troopers to engage the enemy.***

And regardless of the answers to those questions, Army Chief of Staff Gen. Ray Odierno warned he may be unable to accomplish even these uncertain objectives. In Feb. 12 testimony before the Senate Armed Services Committee, Odierno said: “If nothing is done to mitigate the effects of operations under a continuing resolution, shortfalls in our funding of overseas operations, and the enactment of sequestration ... the Army will be forced to make dramatic cuts to its personnel, its readiness, and its modernization programs, hence putting our national security at risk. ... If not addressed, the current fiscal uncertainty will significantly and rapidly degrade Army readiness for the next five to 10 years.” He followed that up April 23 by saying that if budget constraints were not eased, he would have to cut at least 100,000 troops more than currently projected.

Few expect fiscal conditions to change soon, and so it appears the chief is prepared to respond by pro-

ducing a smaller, less capable version of the Army that exists today.

What is needed now is real change, not mere cutting. In 1997, Douglas Macgregor, then an Army lieutenant colonel, published the first of two books on defense and Army reorganization. In his books, Macgregor (with whom I fought during Operation Desert Storm as part of the 2nd Armored Cavalry Regiment) proposed to reorganize the Army into truly plug-and-play deployable modules that would be synchronized with the plans and capabilities of the Air Force and Navy. A reorganization

along these lines could create a force that would add fighting strength, cost substantially less to operate, be more sustainable over the long term, and be more strategically and operationally responsive to the Joint Force.

The ideas are powerful enough to have moved a succession of senior Army leaders to pay them lip service—adopting “modular” and “adaptable” formations, for example. Yet the essential building blocks of the Army have remained unchanged: The force is still composed of combatant commands, followed by a corps-level three-star command, a two-star division command, continuing down to brigade and below. Even the weapons are the same: the M1 Abrams tank, Bradley Fighting Vehicle, 155mm self-propelled howitzer, Multiple Launch Rocket System, AH-64 Apache attack helicopters and iterations of command-and-control networks. In terms of tactical and operational effectiveness in combat operations, virtually nothing has changed.

## Recommendations

Given the increasing conventional capability of our potential adversaries, the rising possibility of a chaotic future operating environment, the growing likelihood of an extended period of constrained budgets, and the statements made by our senior leaders that our Army will become smaller and less capable in the coming years, a substantive change in the composition and culture of the senior leaders must be undertaken.

I am not alone in sensing a pattern of failure at the top. In May 2007, Army Lt. Col. Paul Yingling argued (“A Failure of Generalship,” *AFJ*) that our military failures in Vietnam and the first four years in Iraq were “not attributable to individual failures, but rather to a crisis in an entire institution: America’s general officer corps. ... If Congress does not act, [avoidable military defeat] awaits us.” Five years later, Tom Ricks expanded on the theme (“General Failure,” *The Atlantic*), writing, “Looking back on the troubled wars in Afghanistan and Iraq, many observers are content to lay blame on the Bush administration. But inept leadership by American generals was also responsible for the failure of those wars. A culture of mediocrity has taken hold within the Army’s leadership rank—if it is not uprooted, the country’s next war is unlikely to unfold any better than the last two.”

The question today’s civilian leaders must ask themselves is this: Can America’s future interests best be served by those who have the track record, described above, of the past two decades, or by revitalizing the senior leader ranks via reform?

It is never easy to change national institutions. Inertia and the powerful constituencies that benefit from the status quo can be counted on to resist change. Current conditions

offer a window in which change may be possible. First, the budget reductions mean that regardless of what anyone wants, change is coming. Second, the war in Iraq is over and our combat role in Afghanistan will be ending next year. Third, there is a new defense secretary who has at least declared a need for reform and, according to *Army Times*, there is soon to be a new Army secretary. Thus, in a time of inevitable change and manageable near-term combat risk, the civilian leader of DoD has the opportunity to bring in a new leadership team and make wide-ranging reforms.

The following changes should be considered:

**Replace a substantial chunk of today’s generals, starting with the three- and four-star ranks.** This is likely the most controversial step, yet also the most necessary. It is unlikely that today’s top leaders—who are products and benefactors of the existing system—have the appropriate motivation or buy-in for substantive change. New leadership is required. In particular, the Army needs a visionary leader at the top with the experience, moral standing and iron will to lead the charge against those who will resist and obstruct such reform.

**Fix the promotion system.** To change the performance of the general officer corps, there must be a reform in the way officers are selected for promotion. The chairman of the Joint Chiefs of Staff, Gen. Martin E. Dempsey, has recently indicated he might change the evaluation system of general officers, but his suggestions are too minor to deliver substantive change. The new “iron-willed” leader must develop the parameters and objectives of this reform, which should, at a minimum, be based on demon-

strated superior performance, holding leaders accountable for what they do or fail to do, and fostering a new culture that encourages prudent risk-taking and nonconformist thinking.

**Shrink the general officer corps.** In 1945, about 2,000 general and flag officers led a total of about 12 million citizens in uniform. Today, we have about 900 generals and admirals and 1.4 million troops, and the ratio of leader-to-led has accelerated upward in the two decades since the end of the Cold War. In an age of unprecedented communications technology and with the education and training opportunities for today’s soldiers, this is indefensible. Many general officer billets are redundant and should be eliminated; others can effectively be filled by colonels or even lieutenant colonels.

With appropriate reform and new leadership, there is every reason to expect that the Army will continue to secure America’s national security interests even in an era of constrained budgets and an increasingly chaotic operating environment. ■

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*Daniel L. Davis is a Lieutenant Colonel in the U.S. Army. He has more than 25 years in service, 19 of which were on active duty. He has served as an enlisted soldier, as an officer, and as a Reserve Component soldier. He has been stationed in Korea, Germany, Saudi Arabia, Kuwait, Iraq, and Afghanistan. Davis has been deployed to combat zones four times in his career: Operation Desert Storm in 1991, Iraq in 2009, and Afghanistan in 2005 and again in 2011. He was awarded the Bronze Star Medal for Valor at the Battle of 73 Easting in 1991, and a Bronze Star Medal in Afghanistan in 2011. He earned a Masters of International Relations from Troy University in 2006. Davis is presently assigned duty in the Washington, DC, area. The views expressed in this article are his own.*

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# Air Force Tries to Kill the A-10, Again

BY ROBERT CORAM

The Air Force is so blinded by the allure of the multi-mission F-35 that it cannot, or will not, understand the nature of close air support (CAS) on today's battlefield; how very close our young troops are to the enemy and the special equipment, controllers, and pilots it takes to perform CAS.

Until recently, without the knowledge of Congress, the Air Force was moving fast on a secret plan to help fund the F-35 by abolishing the A-10 fleet. Thanks to some closet patriots contacting the Hill, the cat is now out of the bag, but the damage has already been done.

A-10 training hours have been cut back and the last class of A-10 pilots is going through training. Three A-10 units have been deactivated or are in the process of being deactivated. Next year there will be no A-10 class at the Weapons School. Each step has increased the unit costs of the

remaining A-10s and soon the fleet will be too expensive to keep. By the time Congress is aware of the plot, there will be no A-10s.

The plan to get rid of the A-10 has been on the desk of General Mark A. Welsh III, Air Force Chief of Staff. His decision will be one of the most important of his career, because this is not about losing an aircraft; it is about losing the CAS mission. There is no other aircraft in the Air Force inventory that can do what the A-10 does. The stories from the battlefield are countless. One will suffice.

In Afghanistan a Special Forces team attacked the compound of a Taliban leader. The Taliban reacted with heavy fire and the Air Force combat controller with the team was severely wounded. A Predator was overhead but could not get a shot. Nor could an F-16 which ran low on gas and departed. When two A-10s arrived, the gravely wounded controller called for them to make their gun runs "danger close." The pilots

fired high explosive cannon shells that impacted a mere *65 feet* from the team. The A-10s broke up the attack and provided cover so the friendlies could leave the kill zone.

Every member survived. Every member returned to base. The combat controller, who had almost bled to death on the battlefield, survived and was awarded the Air Force Cross.

Few aircraft in history have so directly saved the lives of so many combat troops and civilians as has the A-10.

Pentagon insiders report that the Air Force fears the efficacy of the A-10 so much that today combat controllers are not allowed to call for the aircraft. Rather they are ordered to radio the results they desire and headquarters will dispatch the appropriate aircraft. Today when troops are in contact and the enemy is close, controllers call for an aircraft with two-hour loiter time and more than ten combat trigger pulls, attributes possessed only by the A-10.

The Air Force says the F-35 can perform CAS. That would mean using GPS coordinates and standing off at high altitude to fire missiles or drop bombs. No \$160-million F-35 is going to get down in the weeds where a single bullet can take it out. A host of small arms fire hitting an A-10 can be fixed with what amounts to duct tape. No F-35 can maneuver under an 800-foot ceiling with two-mile visibility as can an A-10. No F-35 has more than three combat trigger pulls before running out of ammo. The A-10 has twenty. No F-35 has the battlefield survivability of the A-10.

But the Air Force has staked 60 percent of its aircraft budget on the claimed multi-mission versatility of the F-35, and that is what General Welsh wants to protect.

By all accounts, General Welsh is a highly-respected leader and a fine man. But he has been on the job only a year and is facing so many issues, some strategic and immediate, that he has not had time to conduct due diligence regarding the A-10. If he allows the A-10 to wither away by the end of 2015, he will have broken faith with the young men and women on the ground in faraway places. He will have deceived Congress about the force structure of the Air Force. He will have violated his doctrinal obligation to protect America's ground troops.

He will probably get his F-35. But he will have paid for it with the blood of brave young warriors. ■

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*Robert Coram is the author of *Boyd: The Fighter Pilot Who Changed the Art of War* and *American Patriot: The Life and Wars of Colonel Bud Day*. He is working on a biography of Air Force Brigadier General Robert Lee Scott.*

## Black Jack Shanahan, VADM (USN Ret.)

Jack Shanahan died on 10 September 2013 at the age of 90 after a long and well-lived life. He and I became friends while I was working in the Pentagon in the 1990s. By then, he was long-retired from the Navy, and he was Director of the Center for Defense Information. His main concerns were wasteful spending by the Pentagon and the unwarranted diversion of taxpayer dollars from domestic needs, especially infrastructure and education. In short, we were fellow travelers, and soon we became soul mates as well. I have fond memories of our collaboration. We co-authored several articles in major newspapers, including *The Washington Post* and the *Los Angeles Times*, and I worked with him in the production of a few TV shows for CDI's *Defense Monitor* weekly TV program, which to this day remains one of the most informative and best produced series of TV shows explaining defense policies and boondoggles ever made.

To be sure, I admired Shanahan's character, but I thoroughly enjoyed his company as well. To me he was your typical self-made, high-spirited Irishman, always full of humor. He raged against corruption, but he (we) laughed happily when he hurled his verbal spears. And like all good Irishmen, he liked his tippie.

But a strong principled character lay behind the twinkling eyes. This became evident early on, in the way Shanahan became a Naval officer. He did it the hard way—i.e., the good way: over the bows; from being among the dirty unwashed to being a success as a gentleman. He enlisted as a seaman in November 1941, just before Pearl Harbor, and had worked his way into the officer corps by 1946, eventually reaching the exalted rank of Vice Admiral. The deck was loaded against him, because he served in a Navy that favored those who had been more carefully prepared at its finishing school, the U.S. Naval Academy. In his latter Navy years, well before I knew him, according to a Navy officer friend of mine who served under him when he was CO of the Second Fleet, the sailors' nickname for Admiral Shanahan was Black Jack, for his fiery dark temper. I asked Shanahan if he knew about his nickname, and his eyes twinkled. He knew. And without him saying so, I knew the black temper was an act—and, of course, so did his sailors—such theatrics are part of the charm of being in the military. In fact, my Navy friend also told me Black Jack's Irish temperament engendered loyalty among his sailors, even though being called to his office was often painful.

Of course, this was before my time. When I met him, Black Jack was hanging out with my friend Ben Cohen (Shanahan introduced us) and the actor Paul Newman, both certified lefties coming from very different cultural backgrounds, but also fellow travelers in the futile but happy quest to bring the Pentagon to its senses. But it must be remembered: Shanahan loved the Navy and the military in general, even though he thought, correctly in my opinion, that the Navy (and the other services, to be fair) had gone nuts by the 1990s.

After I retired in 2003, my wife and I moved aboard a sailboat and visited him in Florida in 2005, on our way to cross the Atlantic (the happy old sailor thought I was nuts). Over the ensuing years, we went down different pathways and gradually lost contact. But like Ben and a shrinking number of retired veterans who had the pleasure of knowing and working with him, I will always remember Black Jack fondly—particularly his humanity and humor—and I will miss him. ■



Vice Adm. Jack Shanahan received POGO's Good Government, Military Leaders Award at POGO's 25th Anniversary celebration in 2006.

PAMRUTTER

# The Littoral Combat Ship

## Is the Pentagon Finally Changing Course?

BY ETHAN ROSENKRANZ, POGO NATIONAL SECURITY POLICY ANALYST

In 2001, the Navy sold Congress on the idea of a new type of small, cheap vessel that could patrol coastal waters and perform three different missions by “plugging-in” modular units—counter-mine, surface warfare, and anti-submarine—which could be switched out with relative ease. Unfortunately, neither Congress nor the American taxpayers have gotten what they bargained for.

Originally, the Navy planned on procuring 55 Littoral Combat Ships (LCS), a vessel similar to a modern corvette or light frigate. The Navy announced that two teams, one led by Lockheed Martin and another by General Dynamics, would develop different designs for the ship. Ultimately, the Navy intended to down-select to a single winning contractor, thus ensuring a practical level of competition between contractors.

How things can change in less than a decade. During that time period, the Navy decided to forgo the down-select strategy and instead allowed both contractors to build two variants of the LCS, the *Freedom*- and *Independence*-classes. (At the time, the Project on Government Oversight obtained documents that showed Navy officials were covering up problems with the Lockheed Martin variant in the lead-up to the decision.)

The Navy claimed that procuring both variants would cut costs by hundreds of millions of dollars. But that hasn't worked out. Originally estimated to cost \$220 million per sea-frame in constant 2005-dollars, procurement buys are now pegged at \$380 million per frame in constant 2005-dollars, or \$450 million in current dollars.

Another selling point of the new vessel was that it would be manned by 75 to 80 sailors—significantly fewer personnel than the Navy's

larger ships—thus saving on long-term operating costs. However, following a recent examination of the LCS's first deployment to Singapore, it now appears likely that the total crew size will grow to almost 100 sailors.<sup>1</sup> Increasing the crew size will increase long-term operating and support costs, which further calls into question the LCS's cost-effectiveness.

Besides the LCS's cost growth and increasing crew size, other problems identified by POGO in the past include a flawed design, failed equipment, and construction deficiencies. Specifically, POGO identified problems with corrosion, power and engine-related failures, and cracks in the hull. Fixing these problems has contributed to the cost growth.

POGO also highlighted the LCS's low survivability in combat situations. According to a 2011 Pentagon





report, the LCS is “not expected to be survivable in a hostile combat environment.”<sup>2</sup> The Navy designed the LCS to a slightly higher survivability standard than existing counter-mine warfare ships, which the LCS is intended to replace. These counter-mine vessels, like support and patrol ships, have the lowest survivability rating. However, one of the other vessels that the LCS will replace is the *Oliver Hazard Perry*-class frigate, which was designed to a more robust survivability standard than the LCS.<sup>3</sup> During the 1980s, two of these frigates were almost sunk by hostile action in the Persian Gulf.<sup>4</sup> It’s difficult to imagine today’s Navy sending a fleet of LCS to counter Iranian threats in the Persian Gulf without being assured of the ship’s survivability.

### Alternative Options

During previous eras, the Navy might have gotten away with developing and procuring two expensive versions of a new ship class. However, this is no longer the case. In 2011, Congress enacted the Budget Control Act, which spawned automatic spending reductions known as sequestration. Over a period of nine years, the Budget Control Act (including sequestration) requires the Pentagon to shed close to \$1 trillion from previously planned spending levels. As a result, military budget planners now have to grapple with tough decisions about future funding priorities.

While analysts at POGO and elsewhere have called on the Navy to truncate the LCS program as soon as possible, the service apparently has other ideas. Earlier this year, Vice Admiral Richard Hunt suggested that the Navy may purchase 110 or 165 LCS—doubling the amount of ships procured.

Meanwhile, in response to seques-

tration, the Pentagon has begun preparing two budget requests for the upcoming fiscal year—one that ignores the automatic cuts and another that yields to them. Under the first request, the Pentagon will likely continue to procure the LCS at previously planned levels. Under the second, austere budget request, dubbed the “ALT-POM,” the office of the Secretary of Defense is reportedly recommending limiting total LCS procurement to 24 vessels—effectively killing the program after current block-buy contracts are completed.<sup>5</sup>

According to media reports, an additional option under consideration is down-selecting to one variant after the 24th ship is purchased.<sup>6</sup> Down-selecting to one variant would cut back on long-term operating and support costs, another issue that has been dogging the LCS program.

Other options the Navy should consider include forcing the LCS into a competitive “steam off” with foreign-developed frigates or corvettes; extending the service-lives of existing frigates; or using other available platforms to perform each of the LCS’s three core missions separately.

### The Littoral Combat Ship and the Navy’s Long-Term Shipbuilding Plans

This brings us to a larger point: the future of the Navy’s shipbuilding plans. Part of the reason the Navy has pushed for the LCS is that its various concepts were justified as a cheap option to fulfill the service’s goal of a 306-ship fleet (of which the LCS would comprise roughly 17 percent). But, why does the Navy need a (relatively) cheap option to fill out its fleet? Because, its long-term shipbuilding budget is unaffordable.

According to the Congressional Budget Office, the Navy underestimated the costs of its FY 2013 shipbuilding plan by close to \$100 billion

over thirty years.<sup>7</sup> And the Navy announced that it is facing a \$60 billion shortfall in its shipbuilding budget beginning in the 2020s.<sup>8</sup>

None of this takes into account the long-term effects of sequestration, which will wreak further havoc on the Navy’s thirty-year shipbuilding budget. Given these myriad fiscal challenges, it appears highly unlikely that the Navy can or should fund a broken ship like the LCS—let alone expand that fleet to 110 or 165 as Vice Admiral Hunt has suggested.

Whatever the future holds for the Littoral Combat Ship, it’s clear that the current course is unsustainable. Both LCS designs have turned out to be anything but cheap. And making the vessels already acquired perform well will add still further to that cost.

Whether the Navy likes it or not, fiscal pressures and a declining Pentagon budget will force it to rethink the LCS program. Ending procurement at the 24 ships already bought and getting on track for an alternative that is both cheaper and more effective offers a prudent course. ■

- 1 Olga Belogolova, “Navy Details Revised LCS Manning Plans To Be Incorporated In FY-15,” *Inside the Navy*, September 23, 2013.
- 2 Director, Operational Test and Evaluation, *FY 2011 Annual Report, Department of Defense*, p. 159.
- 3 U.S. Naval Institute, “Navy Responds to Pentagon LCS Survivability Claims,” *USNI News*, January 17, 2013.
- 4 Spencer C. Tucker, editor, *The encyclopedia of Middle East wars: the United States in the Persian Gulf, Afghanistan, and Iraq conflict*, United States of America: ABC-CLIO, 2010.
- 5 Christopher P. Cavas, “Sources: Pentagon Backs Cutting LCS to 24 Ships,” *Defense News*, September 2, 2013.
- 6 Christopher P. Cavas, “U.S. Navy Weighs Halving LCS Order,” *Defense News*, March 17, 2013.
- 7 Congressional Budget Office, *An Analysis of the Navy’s Fiscal Year 2013 Shipbuilding Plan*, July 25, 2012.
- 8 Frank Oliveri, “Is the Price Right for Navy’s Sub Replacement Program?” *Roll Call*, September 17, 2013.



## THE URANIUM PROCESSING FACILITY

# Just Stop Digging

BY LYDIA DENNETT, POGO RESEARCH ASSOCIATE

**The Department of Energy (DOE) and the National Nuclear Security Administration (NNSA) have a long history of mismanaging major nuclear construction projects, but the proposed Uranium Processing Facility (UPF) at Y-12 National Security Complex in Oak Ridge, Tennessee, just might be the worst.**

The UPF was first sold to Congress in 2005 as a replacement facility for several aging buildings at Y-12 that perform a variety of uranium operations. In 2005, the facility was expected to cost \$600 million and be operational by 2018. Today, the costs have skyrocketed to a shocking \$6.5 to \$11.6 billion with a fully operational date sometime in 2038.

In a recent investigation, the Project On Government Oversight found that despite these massive cost increases and schedule delays, alternative, cost-saving solutions have not been thoroughly explored. For instance, one of the primary missions of the UPF would be to assist with nuclear warhead Life Extension

A depiction of the proposed Uranium Processing Facility. (Image credit: U.S. Department of Energy)

Programs (LEPs). This process involves dismantling nuclear warheads, inspecting the parts, recertifying that the highly enriched uranium components still meet military requirements and remanufacturing any that don't. The dismantlement work begins at the Pantex Plant in Amarillo, Texas, the uranium parts (called secondaries) are then shipped cross country to Y-12 for recertification and remanufacturing, and are then sent back to Pantex to be reconstructed. However, the recertification work could be done at existing facilities at the Pantex Plant, significantly reducing the safety and security risks associated with shipping bomb-grade nuclear material back and forth across the country. Pantex is well equipped to take on this mission as the lab is already doing similar work with other warhead components, called plutonium pits.

Modifying or upgrading facilities at Y-12 that aren't being used to their full capacity could be another cost-saving alternative to building the UPF. For instance, the Highly Enriched Uranium Materials Facility (HEUMF) is a new storage building for highly enriched uranium. The facility is only 57 percent full, and hundreds of the metric tons of uranium stored there have already been declared excess to U.S. needs. This highly enriched uranium could be downblended to create low enriched uranium, a process which dilutes the uranium making it unusable in a nuclear bomb. This low enriched uranium is used in commercial nuclear fuel reactors and, since it is no longer attractive to terrorists, is significantly less expensive to store, secure, and transport.

There are several other facilities at Y-12 that could be upgraded for a fraction of the cost of a new building. There is evidence to suggest that the buildings currently performing uranium operations at Y-12 are not as derelict as the NNSA would have Congress and the public believe. Although the facilities are clearly aging, millions have been poured into them over the years to keep them running, so the cost of modernizing them would likely be far less than the \$11 billion to construct a brand new facility. Indeed, in 2009 the NNSA estimated that it would take \$80-\$120 million to upgrade one of the most important facilities. Although this cost has undoubtedly risen in the past four years, it's an alternative worth exploring, especially if combined with conducting work at HEUMF and Pantex.

These LEPs are one of the primary justifications for UPF, which is why it is so troubling that the facility won't be fully operational until 2038. Yet, NNSA predicts that LEP work on most of the major warhead groups will be complete by 2038, calling into question the ability of UPF to contribute to this mission. Furthermore it is unclear how many uranium secondaries will need to be remanufactured rather than simply recertified. At the beginning of the project, the NNSA stated the UPF would require the capacity to remanufacture up to 200 secondaries per year. But there has been no independent scientific study on how long secondaries last before deteriorating. Such a study is essential, in light of what a similar study learned about plutonium pits: an independent group of scientists found that plutonium pits can last 150 years or more without needing remanufacturing. If the same is true of uranium secondaries, we have a long time to go before we need to

think about remanufacturing them.

The lifetimes of these components are important, as the NNSA learned during the construction process of the Chemistry and Metallurgy Research Replacement Nuclear Facility (CMRR-NF) at Los Alamos

***After \$500 million had been spent on plans for the building, it was discovered that the ceiling had been designed too low, so some of the uranium processing equipment would not be able to fit into the building. The re-design will cost an additional \$500 million.***

National Laboratory, a DOE construction project similar to the UPF. In the mid-2000s, the NNSA claimed that the CMRR-NF was needed to remanufacture 450 plutonium pits per year. But costs skyrocketed on the project and delays grew, and when it was found that the pits could last over 150 years, the NNSA revised its estimates. NNSA now claims that the capacity to remanufacture 80 pits per year is all that is required, and construction on the CMRR-NF has been deferred.

In addition to so many questions and unexplored options, the facility is also plagued by a troubling number of design flaws. Nuclear experts and the DOE Inspector General have agreed that the above-ground design for nuclear facilities, like that of the proposed UPF, take longer to build and are significantly more expensive and more difficult to secure than facilities built underground. This is particularly troubling since the Y-12 guard force has had some recent problems with security. Another design flaw was discovered in late 2012, after \$500 million had already been spent on plans for the building. The ceiling had been designed too low, so some of the uranium processing equipment would not be able to fit into the building. The result-

ing re-design work to raise the ceiling and thicken the walls and floor accordingly will add 13 months and another \$500 million to the project. A Defense Nuclear Facilities Safety Board inquiry found that the contractor managing the UPF project

had not adequately reviewed and incorporated design work done by four different subcontractors.

A report from an NNSA construction management contractor, called Parsons Infrastructure and Technology Group, Inc. (Parsons), was even more damning. The Parsons report found that the work environment at the UPF project was "chilled" and that workers were discouraged from sharing their concerns and opinions. Furthermore, the report confirmed that cost estimates were purposefully kept low in order to get approval and funding for the project, even after it became clear that the UPF would cost far more than \$600 million. It is therefore no surprise that Members of Congress and their staffs have stepped in to oversee the UPF project, meeting with NNSA leaders and UPF managers to ensure that no more costly mistakes will be made.

It's time for the NNSA to address the design, schedule, and cost problems that are facing the UPF at every turn and look into the logical alternatives to this multi-billion dollar boondoggle. ■

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For more information about the Uranium Processing Facility and POGO's findings, read POGO's report, *Uranium Processing Facility: When You're in a Hole, Just Stop Digging*.



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**PROJECT ON GOVERNMENT OVERSIGHT'S  
 Center for Defense Information**  
 1100 G Street, NW, Suite 500  
 Washington, DC 20005  
 Tel: 202.347.1122 / Fax: 202.347.1116



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