

## Hazardous Material Transportation Professionals Now Have Ready Access to the Information They Need

DEFENSE AMMUNITION CENTER, MCALESTER ARMY AMMUNITION PLANT (MAY 2009)

A common source of indispensable information is now available for hazardous material transportation professionals. The Defense Ammunition Center launched its HAZMAT Transportation Community of Practice, which can be accessed through both the Army Knowledge Online (AKO) and the Battle Command Knowledge System (BCKS) portals. The CoP connects the HAZMAT transportation community and provides a forum in which to share expert knowledge.

The DAC is the Department of Defense's focal point for ammunition knowledge and logistical support. It is responsible for training professionals in safety, logistics engineering, transportability, demilitarization, and disposal for explosives and other hazardous material. In 2005, DAC enhanced its mission by implementing knowledge management as its way of doing business. The goal was to provide a practical way to easily find critical, relevant knowledge and get it into the hands of the workers that need it most. The HAZMAT Transportation CoP brings DAC even closer to achieving its mission. The CoP is a complement to the Ammunition Reset Knowledge Asset (also available on AKO), which is a repository of lessons learned during recent U.S. Army retrograde operations.

The HAZMAT Transportation CoP is an interactive knowledge base in which transportation professionals can communicate and share their experience of distributing ammunition and hazardous material around the world. The CoP is an excellent resource for lessons learned, best practices, and links to HAZMAT regulations and policies as well as other relevant topics of interest. HAZMAT transportation community members can also ask the community at large HAZMAT-related questions and receive answers directly from experts in their field.

The transportation of hazardous material, especially ammunition and explosives, carries inherent risks and must be executed with the utmost attention and care. While the Department of Defense has an excellent record of safely distributing hazardous materials and ammunition, a common source for obtaining and sharing critical knowledge did not exist until now.

The CoP site has four major sections specific to the modes of transportation: commercial air, land, military air, and sea vessel. It also has a section for frequently asked questions and links to other relevant Web sites. Under each transporta-

tion mode, information is categorized by topic. For example, under commercial air, information is categorized into communication, segregation/compatibility, and United Nations standard marking. CoP members can initiate or participate in forum discussions within any topic or explore past discussions to find the information they need. A "popular tags" capability allows users to see the most often read discussions and searches.

According to Dr. Upton Shimp, the associate director of operations and the associate director of training at DAC, "the CoP is a one-stop shop for HAZMAT information. It is an incredible resource for workers at every level of expertise."

Glenda Cummings, a recent graduate of DAC's quality assurance specialist intern program, put it in a special light. "Numerous policy and regulatory documents must be followed when transporting hazardous material and ammunition. The CoP provides those of us just coming into the field with a central location for accessing those resources."

For a workforce as widespread as the HAZMAT community, the CoP improves transportation operations and enhances DAC's support for the 21st century warfighter.

Anyone with access to AKO can access the HAZMAT CoP. If you're interested in becoming a community member, register through AKO <[www.us.army.mil](http://www.us.army.mil)> or by navigating straight to BCKS professional forums <<https://forums.bcks.army.mil/>>.

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## One Step Closer to A Networked Experiment Across The Atlantic

U.S. ARMY COMBINED ARMS CENTER (MAY 2009)  
Christopher Kessel

Experimenters at the Combined Arms Center have just completed the last in a series of trials that set the stage for a distributed, multi-national experiment between the United States and the United Kingdom. The experiment, known as TALON-STRIKE, will be the first of its kind to be networked across the Atlantic.

This kind of complex experiment, however, doesn't go without extensive preparation. Army Col. Mark Forman, deputy director of the Battle Command Battle Lab at Fort Leavenworth, Kan., oversees the organization that will execute TALON-STRIKE in May 2010. "We have just completed the Omni Fusion 2009 experiment—the last of five Omni Fusions that lead up to TALON-STRIKE," Forman stated.

TALON-STRIKE is the end product of a series of U.K.-U.S. interoperability studies conducted by the U.S. Army TRADOC Analysis Center (TRAC) and the UK Defence Science and Technology Laboratories (Dstl). The first study, conducted in 2004, identified capability gaps in battle command that would prevent effective interoperability between U.S. and U.K. forces. With each successive experiment, solutions were recommended to fill those gaps so that, for TALON-STRIKE, experimenters expect to see full interoperability between the forces.

"TALON-STRIKE is very important both for the U.S. and U.K. armies" stated Brian Hodges, a senior operations research analyst with TRAC. Hodges is the U.S. study director for the Future Land Operations Interoperability Study-Command, Control, Communications, and Information, or FLOIS-C3I, the study on which TALON-STRIKE is based.

"This capstone event [TALON-STRIKE] has three main goals: to assess and confirm U.S. and U.K. battle command interoperability; to identify any residual interoperability gaps not resolved in preceding experiments; and lastly, to demonstrate the capability of conducting a bilateral distributed experiment" he stated. Hodges also noted that TALON-STRIKE is sponsored by the U.S. Army Deputy Chief of Staff (G-3/5/7) and endorsed by the U.S.-U.K. Army Staff Talks.

"Everyone involved in Omni Fusion and TALON-STRIKE, which is a large community, is eagerly awaiting the TALON-STRIKE kickoff," stated Forman. "It is the culmination of five years of planning, experimentation, and coordination between the U.S. and U.K.," he added.

The TALON-STRIKE experiment will be the first of its kind. Elements of the 12th U.K. Mechanised Brigade headquarters will be linked into the experiment via the Battle Lab Collaborative Simulation Environment, or BLCSE from the United Kingdom. This differs from previous experiments in that U.K. participants will actually be located in the United Kingdom and still be connected to the experiment.

"For previous Omni Fusion experiments, we've only had participants in the U.S. linked in via the BLCSE," stated Army Maj. John Rainville, project lead for Omni Fusion 2009. "It will be interesting to see what challenges having participants linked into the experiment from across the Atlantic will bring" he said.

The TALON-STRIKE experiment will examine the interoperability between current and future U.S. and U.K. forces. It also hopes to establish a baseline of interoperability to be

used for testing and evaluating the battle command relationships of other coalition and multinational forces.

This most recent Omni Fusion experiment, which concluded in July, served as the last technical de-risking session for the U.K.'s participation in TALON-STRIKE. Experimenters are taking the lessons learned from this experiment and building them into TALON-STRIKE.

"Experimentation is a continuous process," said Forman. "Every experiment informs the next, and all aim to help our forces operate better in the future," he stated.

### **Air Force Officials Unveil Acquisition Improvement Plan**

*SECRETARY OF THE AIR FORCE PUBLIC AFFAIRS (MAY 11, 2009)  
Air Force Tech. Sgt. Amaani Lyle*

WASHINGTON—Air Force leaders have announced their plan for improving acquisition, which will have far-reaching impacts on the way the Service develops and buys defense capabilities for the nation.

The Air Force's acquisition improvement plan "will serve as our strategic framework for the critical work of modernizing and recapitalizing our air, space, and cyber systems," Secretary of the Air Force Michael Donley and Air Force Chief of Staff Gen. Norton Schwartz said May 8 in a joint memorandum introducing the plan.

The plan addresses shortcomings in the acquisition process that were identified during protests by contractors on major programs and by subsequent reviews of the Service's key acquisition processes.

The plan outlines five initiatives with 33 actions that are intended to "ensure rigor, reliability, and transparency across the Air Force acquisition enterprise," according to Donley and Schwartz. The five initiatives are designed to:

- Revitalize the Air Force acquisition workforce
- Improve the requirements generation process
- Instill budget and financial discipline
- Improve Air Force major source selections
- Establish clear lines of authority and accountability within acquisition organizations.

Perhaps the most significant action proposed is to increase in size, and improve the training and experience of the Air Force's professional acquisition corps, which has been cut by 41 percent over the past 20 years.

The plan calls for immediate action to increase the workforce by 258 military and 1,804 civilian personnel and an improve-

ment in the hiring, recruiting, retention, and training programs essential to maintaining a quality professional corps.

"Recapturing acquisition excellence requires an experienced, skilled, empowered, and accountable workforce and begins with proper requirements and adequate, stable funding," said Lt. Gen. Mark D. Shackelford, military deputy to the assistant secretary of the Air Force for acquisition. "We will continue to shape and size our workforce and ensure professional development for our personnel."

Acquisition officials said regardless of workforce and process improvements, financial discipline must remain a critical focus. In this regard, the plan calls for more realistic budgeting and tighter cost control at all acquisition phases, with the flexibility to adjust or cancel programs whose costs grow beyond acceptable levels.

"We are committed to being responsible stewards of the taxpayers' money and a provider of winning capabilities for our nation's warfighters," Shackelford said.

### **Army Seeks Inexpensive, Lightweight, Reliable Battery**

*SPECIAL TO AMERICAN FORCES PRESS SERVICE (MAY 13, 2009)*  
*Navy Lt. Jennifer Cragg*

WASHINGTON—The Army's Advanced Automotive Battery Initiative is searching for the "holy grail" of power technology: an inexpensive, lightweight, and reliable battery.

"Collaboration is very important, in my opinion," Sonja Gargies, energy storage team leader for the Army's Tank-Automotive Research, Development and Engineering Center, told listeners during an "Armed with Science: Research and Applications for the Modern Military" Webcast May 6 on Pentagon Web Radio. "I don't see how one agency alone can accomplish the goal of a more energy-efficient world."

Academia and industry, along with the Defense and Energy departments, need to work together to make the goal a reality, she said.

"The 'holy grail' of power is actually the path that leads to an inexpensive, lightweight, reliable, and long-lasting battery," Gargies said.

TARDEC and other collaborating agencies, such as the Energy Department and the Army Research Lab, are trying to find dual-use niche markets with industry and academia under this new initiative.

"The battery initiative's outcome is to establish a cost-competitive, flexible, domestic production base where we can have high-quality, advanced automotive battery materials, along with components that have dual-use applications for military ground vehicles, hopefully by 2015," Gargies said.

Toward that end, TARDEC chaired a battery planning summit meeting, where military and commercial vehicle users worked together to reach a consensus on the near-term equipment for launching and executing this initiative. The result was an Advanced Automotive Battery Initiative white paper.

"Basically, [we are] maximizing the commonality between the military and commercial market," Gargies said. "We're hoping to reduce the overall cost and increase the manufacturing flexibility to address the ... unique vehicle military requirements and weapon systems requirements."

The military is a large consumer of batteries, but that alone doesn't create a sufficient demand to justify the creation of facilities and cell manufacturing that are solely devoted to military applications, Gargies said.

"To reduce the cost for military and industrial applications, we need to grow the niche battery markets while taking advantage of something called 'dual-use' technologies that will help meet the needs of both commercial and military vehicle platforms and products," she explained.

Gargies added that battery research and development is an integral part of the national effort to develop environmentally friendly technology.

"In addition to the conventional applications, they can be used for electric vehicles—hybrid-electric vehicles and plug-in hybrids—to reduce the greenhouse emissions and the dependence on imported oil," Gargies said. "They can be used to store electricity that is generated by solar energy and wind energy."

*Cragg serves in the Defense Media Activity's emerging media directorate.*

### **Budget, Acquisition Reforms Reflect "New Direction in Defense," Lynn Says**

*AMERICAN FORCES PRESS SERVICE (MAY 14, 2009)*  
*Gerry J. Gilmore*

VIRGINIA BEACH, Va.—The Defense Department's budget and acquisition reform efforts represent a dramatic and needed departure from the past, so that the U.S. military

can stay strong and be flexible in challenging times, Deputy Defense Secretary William J. Lynn III said here today.

"The United States of America has the best-trained, the best-equipped, the best-led military that the world has ever seen, and we intend to keep it that way," Lynn told attendees at the annual Joint Warfighting Conference.

Lynn served as the Defense Department's comptroller from 1997 until 2001. Four years prior to that, he was the director of Program Analysis and Evaluation in the Office of the Secretary of Defense.

President Barack Obama's proposed fiscal 2010 defense budget increases defense spending by 4 percent, Lynn said, for a total expenditure of \$534 billion.

"We need to uphold our solemn commitment to take care of our all-volunteer force, to ensure that they can prevail in the wars that they are in now," Lynn said. To this end, he said, Army and Marine Corps troop plus-ups have been achieved two years early, while previously planned cuts in Air Force and Navy personnel have been halted.

The more than \$13 billion increase in the 2010 defense budget's personnel account, Lynn said, will be used to fund military and civilian pay raises, to provide new troop barracks, family housing and child care centers, and to fully fund military health care, including programs for wounded warriors.

The Defense Department also is ending the practice of funding the wars in Iraq and Afghanistan through a budget supplemental process separate from the annual budget, Lynn said.

Lynn also said that the fiscal 2010 defense budget strengthens computer system security by providing funds to triple the number of defense cyber experts. And, President Obama's 60-day review of the nation's cyber policy has been completed, he said, noting the report likely will be released in the coming days.

Meanwhile, recent tough budget- and acquisition-related decisions that scaled back or jettisoned unnecessary or too-costly defense programs reflect the intent of the Obama administration and the Pentagon to embark on "a new direction in defense," Lynn said.

"President Obama has made it clear that it is time to break out of the conventional thinking that has failed to keep pace with unconventional threats," Lynn said.

Obama and Defense Secretary Robert M. Gates are consequently making hard decisions and bold changes as they propose far-reaching reforms during the first defense budget the president is presiding over, Lynn said.

"This budget is one of the most dramatic set of reforms I've seen," Lynn said, "from the forces and systems we field, to how we develop them."

For example, he said, U.S. and allies' concerns about missile defense needs are growing. Unfortunately, billions of dollars have been spent on missile defense programs facing major technological challenges or questionable operational roles, Lynn said.

As a result, Lynn said, the Pentagon has decided to restructure its missile defense program to focus on the theater missile threat from rogue states.

"We decided not to invest in the second airborne laser prototype aircraft, and we're terminating the multiple-kill vehicle program," Lynn said of those costly, high-tech programs. Instead, he said, the U.S. will focus investment on its capable Theater High Altitude Area Defense (THAAD) and sea-based SM-3 missile defense systems. Also, he added, the Pentagon proposes to convert six more Aegis-class ships to provide additional theater missile defense coverage.

"In fact, across a whole range of programs, we've made a decision to halt or delay production of systems that relied on promising, but unproven technology," Lynn said, "while continuing to produce, and if necessary, upgrade, systems that are best in class and we know will work."

That's why the new Presidential Helicopter Program was cancelled after its cost had doubled to more than \$13 billion, Lynn said. The \$19 billion Transformational Satellite Program also was axed due to its rising costs, he added.

"We'll instead buy two proven and more affordable satellites to fill the gap," Lynn said.

The 2010 fiscal defense budget, Lynn said, also funds military leaders' requirements to field joint forces that possess the right capabilities needed to confront both current and perceived future threats, Lynn said. Current threats, he noted, include today's terrorists and extremists who wage irregular warfare against U.S. forces in Iraq and Afghanistan.

Future potential threats, Lynn continued, include the possibility that a failed or weaker state could employ hybrid war—a mix of irregular and conventional forces—against U.S. forces,

or that there may one day be a peer-to-peer conflict, mostly waged with conventional forces.

Consequently, Lynn said, the decision was made to train, equip, and field joint, balanced, and flexible U.S. forces that can fight enemies practicing irregular, hybrid, or conventional war. The message, Lynn said, is that “from now on, irregular warfare is a regular part of America’s military planning.”

Senior Pentagon leaders are committed to the joint force concept, Lynn said, which involves not only “the way we fight, but in the way we buy” equipment. For example, he said, production of the Air Force-centric F-22 fighter jet was ended at 187 aircraft, while more Joint Strike Fighter aircraft will be purchased. It is imperative “to have an acquisition system that is as flexible and effective as the force it serves,” Lynn said. “A modern, effective acquisition system should deliver savings and speed—savings to the taxpayer and speed for the warfighters that provides them the tools and technologies they need within the time they need them.”

However, Lynn said, today’s defense acquisition system fails to meet those criteria. That’s why, he said, reform of the system is vital. Therefore, he said, the Defense Department is launching five acquisition reform initiatives:

- Dramatically increase the acquisition workforce by 20,000 total positions
- Bring more discipline to projects’ requirements development, to better balance performance needs with respect to cost and schedule limitations
- Improve cost estimating and reduce the risk of cost overruns by relying more heavily on independent, outside cost estimates
- Strengthen the project execution phase by making more use of fixed-price contract agreements, where appropriate, and by employing more steering boards to limit requirements “creep”
- Cancel poorly performing systems whenever they fail to meet desired requirements.

It’s true, Lynn said, that numerous commissions and studies over the years have called for reform of the defense acquisition system without effect. However, Lynn said he is bullish that new efforts to reform the acquisition system will succeed, citing President Obama’s, Capitol Hill’s, and the Pentagon’s strong interest to do so.

“I’m optimistic that we will achieve real acquisition reform that will deliver real savings and increase speed of delivery to the warfighter,” Lynn said.



MC4 Product Manager Army Lt. Col. William E. Geesey unveils the program’s new strategic plan at the MC4 10-year anniversary stakeholders’ meeting in May.

Photo courtesy MC4 Product Management Office

### Army Program Celebrates 10 Years of Delivering Battlefield Medical Information to Warfighters

U.S. ARMY MEDICAL COMMUNICATIONS FOR COMBAT CASUALTY CARE (MC4) NEWS RELEASE (MAY 18, 2009)

FORT DETRICK, Md.—Ten years of integrating, fielding, and supporting the DoD’s first and most comprehensive battlefield medical recording system, Medical Communications for Combat Casualty Care (MC4), has enabled the capture of more than 10 million electronic patient encounters and 36,000 deployable medical professionals trained on medical information management systems on the front lines. This month, MC4’s product managers, past and present, met in an open meeting in Frederick, Md., to address lessons learned and to preview plans to advance battlefield medical recording using MC4.

At the event, MC4 Product Manager Army Lt. Col. William E. Geesey fielded questions from various DoD stakeholders and unveiled the program’s new strategic goals, which include:

- Sustain and enhance operational support
- Provide a “state of the practice” medical information system
- Expand and institutionalize use of the MC4 system.

“The move from paper to digital medical records, a transformation the new administration is striving for in the civilian healthcare industry, has been occurring on the battlefield for the past six years,” Geesey said. “To continue transform-

ing medical business practices in the war zone, we need to leverage Army partnerships and institutionalize MC4 use at home and abroad.”

Following the event, former Army Surgeon General and former Secretary of Veterans Affairs, retired Lt. Gen. James B. Peake, relayed to the MC4 workforce the important role they have in contributing to the quality of care provided to wounded warriors and the long-term issues with VA claims.

“The importance of getting the electronic health record started far forward as part of the continuous record cannot be overstated,” Peake said.

Chartered in May 1999, the MC4 program was established to meet presidential and congressional objectives set forth by Title 10 in 1997, which called for a medical tracking system for all deployed servicemembers. Originally deployed to Kuwait, Iraq, and Qatar in 2003, the once Army-only system, engineered for the tactical environment, has expanded its use to Air Force, Navy, and Army Special Operations Forces medical personnel in 14 countries. In January, deployable medical units began using the system in battalion aid stations in the United States, enhancing unit readiness for future deployments.

“The expanded use of MC4 in the U.S. creates a ‘train as you fight’ model that better prepares our medical units to use MC4 in the combat zone,” Geesey said. “Ingraining MC4 in Army training venues will ultimately improve system use, user proficiency, and data integrity—that equates to better decision making on the battlefield and better care for our warfighters.”

For more information on MC4, visit <[www.mc4.army.mil](http://www.mc4.army.mil)>.

### **Defense Official Outlines Hurdles in Defense Acquisition Reform**

AMERICAN FORCES PRESS SERVICE (MAY 22, 2009)

Jim Garamone

WASHINGTON—Reforming the Defense Department’s acquisition system is going to be a long and difficult process that will require cooperation across the department and with Congress.

One of the recommendations in Defense Secretary Robert M. Gates’ fiscal 2010 defense budget request is to reform the department’s procurement system.

People of all political stripes agree the acquisition system needs reform. Cost and timeliness are just two areas that often spiral out of control.

Understanding the bureaucracy and the laws surrounding the process are key to reform, a senior military official who has studied the issue said, speaking on background.

Many people come to government believing they are going to reform acquisition, the official said. “Acquisition is an incredibly regulated activity,” the official said. “If you gloss over that, you really don’t have a chance of succeeding.”

Laws and federal and defense acquisition regulations govern the process. The Office of Management and Budget has a way of looking at procurement. Then, the Congress has oversight of the process via appropriations and authorizations. Each perspective brings different needs and different checks and balances into play.

Anyone wishing to reform the process needs the knowledge of each stakeholder, the official said.

“Not having that insider understanding of the real bureaucracy that’s associated with it, you can get to the point where you think you have some influence over the process and it will only take you a few months to learn that you don’t,” the official explained.

While it’s a daunting task, it is not an impossible one, the official said. There are ways to make changes in the system.

There is room for different procurement, the official said.

The regulations don’t restrict the department from having different systems. The systems in the past were based on cost, and while cost needs to remain an element, it can’t be the main determinant, the official said. “We need to figure out how to re-categorize in ways that make sense.”

Part of the problem is the differing needs of war and peacetime. When the nation is not at war, the department becomes risk-averse and tries to be more businesslike, the official said. When the nation goes into a conflict and lives are on the line, the risk calculus in the bureaucracies often doesn’t change.

Gates has said on a regular basis that he has a department at war, but there are portions that have not made the transition. “That’s the disconnect,” the official said. But even in war, the official added, there should be priorities of acquisitions.

Urgency, the official said, obviously is a factor in determining the risk factor. There is a difference in a procurement where “somebody is going to die and an 80 percent [solution] might save them,” the official said.

In the successful procurements in the current wars, officials have built a process driven with urgency from the field. What's fundamentally different is that it's the customer—the combatant commands—saying what they need, and not the supplier.

The definition of success is a 60 to 80 percent solution, the official said. "We'll establish what the key attributes are going to be for functionality so they have commonality," the official added. Then the program transitions to a Service.

But once a Service is carrying the ball, procurement specialists still will need to live with the basic configuration, the official said.

The process today, the official said, tends toward a greater role for the combatant commands.

"In peace, the pendulum swings toward Services," the official said. "In wartime, it swings to combatant commanders, because they see changes on the battlefield that become emergent needs."

The fight against roadside and car bombs tends to turn every 30 days. Changes must happen quickly to remain ahead of the enemy. "If you are dealing on a 30-day cycle, then a two-year budget to build and field can't work," the official noted.

Requirements, acquisition, and resources need to be tied together, the official said. "It is critical to have resourcing match acquisition and requirements," the official said.

Bringing the requirements, acquisition, and resourcing are possible if the principal officials who make those decisions are consistent across all three areas, the official said.

The official said he doesn't believe changes in the laws are necessary now. "We have to clearly and implicitly define the law that is impeding the process and then suggest changes to statute," the official said. "I've seen people go in and try to legislate changes. They have to think about Congress, the oversight, and unintended consequences."

Gates also wants to hire more government employees to manage procurements. He spoke of "contractors managing contractors" in some acquisition projects and the need for government oversight. Again, this goes back to the differences between war and peace, the official said.

In war, building a robust acquisition force makes sense. A lot of money is being spent on a lot of equipment, but when peace returns, there will be a large acquisition force with few

projects to manage. (The next Quadrennial Defense Review could review whether National Guard and Reserve personnel may be the answer to this, the official said.) The department has to be careful to not in-source just to get more government employees, the official said, and must understand what the "shock absorber" is once the conflict stops.

The acquisition workforce should include all components, the official said. Active duty acquisition experts would be fully usable across the full range of activities. Guard and Reserve personnel could be the shock absorber when the nation goes to war and acquisition professionals are needed quickly.

Government employees and, finally, contractors, could also be part of the mix. The government would use more contractors as temporary employees to bridge the time it takes to bring a Guard and Reserve person on active duty or to hire and train a government employee, the official said.

There is precedent for using the Guard and Reserve to fill out a specialty. The Reserve components have the vast majority of civil affairs specialists, for example. These personnel often bring the experiences of their civilian jobs with them, and there is no doubt that they could do the same in the acquisition field, the official said.

"We would have to set an expectation with the force on how they will be used," the official said. "This would allow them to set expectations of employers as well."

All this requires a change of culture—one of the hardest things for any organization to do, the official said. Joint acquisition is an increasing goal for the department.

"We must get away from the mindset of 'I must have my own,'" the official said. "There is a difference between a radio that goes into an airplane and a radio that goes into a truck. But there doesn't have to be a difference in the waveform."

A certain amount of duplication of capabilities is necessary, the official said. Car rental companies, for example, affiliate with a specific automobile company, but a certain number of cars will come from a different company to guard against a systemic problem with one company.

Frustration in the Defense Department stems from a culture that says each Service must have all its own capabilities and cannot depend on other Services to provide it, the official said.

### **Air Force Chief Predicts Fewer “Exquisite” Acquisition Programs**

AMERICAN FORCES PRESS SERVICE (MAY 22, 2009)

Gerry J. Gilmore

WASHINGTON—The Air Force is taking a more critical eye in weighing the technological capabilities of new systems against their corresponding cost, the Air Force’s top military officer said May 21.

“We have had a temptation to design and try to build the most exquisite systems, and we’ve proven we can do that,” Air Force Chief of Staff Gen. Norton A. Schwartz said during remarks at the Center for Strategic and International Studies here.

Ultra-capable, sophisticated—and correspondingly expensive—weapons and other military-related systems “may have a place in certain instances,” Schwartz said. But building “too much capability” onto some military platforms may be unnecessary and drives up procurement costs, he added.

“My observation is we went way over,” Schwartz said of some military procurement programs, “on trying to build too many things on the same ‘bus,’” or platform.

President Barack Obama and Defense Secretary Robert M. Gates are seeking to rein in rising defense procurement costs. Some proposed fixes include more supervision of the acquisition process, including better definitions of exactly what capabilities are needed, with an eye toward controlling cost-overruns when a project is predicated on new, but untested and expensive, emerging technologies.

For example, Schwartz said, the Air Force’s sophisticated, multibillion dollar Transformational Satellite Program, or TSAT, was cancelled because of its exorbitant cost. Instead, the Air Force decided to purchase two existing, proven, and less expensive satellite systems to do the job.

“But the truth is that TSAT was a \$20 billion program,” Schwartz said. The axed satellite system offered “an exquisite platform,” he said, but it was simply too expensive.

The less costly legacy satellites won’t be as technologically “nifty” as the TSAT, Schwartz acknowledged, but on the other hand, they’re “not bad” and will perform the mission.

And “there’s going to be a lot more of ‘not bad,’ than there is of ‘wow,’” Schwartz predicted, regarding the Air Force’s acquisition process.

### **Obama Signs Defense Acquisition Reform Bill**

AMERICAN FORCES PRESS SERVICE (MAY 22, 2009)

John J. Kruzel

WASHINGTON—President Barack Obama today signed legislation aimed at reforming the Defense Department’s buying process. The Weapons Systems Acquisition Reform Act, which garnered unanimous support yesterday in voting by the House of Representatives and Senate, will increase government oversight, save taxpayer dollars, and spend defense funding more efficiently, Obama said at the White House signing ceremony.

“I’m proud to join Democratic and Republican members of Congress for the signing of a bill that will eliminate some of the waste and inefficiency in our defense projects—reforms that will better protect our nation, better protect our troops, and save taxpayers tens of billions of dollars,” he said.

Obama echoed Defense Secretary Robert M. Gates, saying that a dollar of wasted defense spending is a dollar not spent on supporting U.S. troops, preparing for future threats, or protecting the American people.

“Secretary Gates, working with our military leadership, has also proposed a courageous set of reforms in our defense budget that will target waste and strengthen our military for the future,” Obama said. “In taking on this enormously difficult task, he’s done a tremendous job.”

The Government Accountability Office last year examined 95 major defense programs and found cost overruns totaling \$295 billion.

“To put this in perspective, these cost overruns would have paid for our troops’ salaries and provided benefits for their families for more than a year,” Obama said. “At a time when we’re fighting two wars and facing a serious deficit, this is inexcusable and unconscionable.”

Pentagon spokesman Bryan Whitman today said the bill demonstrates the Defense Department’s commitment to acquisition reform.

“This new legislation will be a key component of that in building a more responsible, high-performance government, and right here in the Defense Department,” he said.

Whitman said the legislation will help to create improvements in the areas of systems engineering, development evaluation and pricing, and also will cut the number of no-bid contracts.

### Army, Marines Boast Two New Vehicle Programs

ARMY NEWS SERVICE (MAY 28, 2009)

Miranda Myrick

ANNISTON ARMY DEPOT, Ala.—During a joint roll-out ceremony May 14, Department of Defense program managers commemorated the production of two vehicles intended to help the U.S. military travel in battle at a faster, safer rate.

The Joint Assault Bridge and the Assault Breacher Vehicle are tracked vehicles, both manufactured at the depot by government civilians for use by the U.S. Army and the U.S. Marine Corps. These two programs are successful because of the partnering efforts of the depot, U.S. Army Program Executive Office, and Marine Corps Systems Command.

The depot serves as the prime systems integrator for both the ABV and JAB vehicles, introducing a manufacturing process unique for depot employees, as they are most often known for upgrading, overhauling, and repairing tracked combat vehicles and Strykers.

Prototypes for both vehicles were designed by the Marine Corps. The hulls for each system are from the chassis of refurbished M1 tanks. All other parts and components mated to the hull are new to the DoD inventory. In other words, turrets for the ABV and JAB are made from new materials and not from used tank parts.

“Anniston can do what industry can do and do it at a better price, saving the taxpayer a lot of money,” said Joseph Augustine with the Marine Corps.

Leaders here said the depot workforce is to be commended for its willingness to adapt to new production processes and for its intensity in knowledge and skill when it comes to vehicle manufacturing.

“We’re doing more here than just overhauling combat vehicles, small arms, and artillery,” said Depot Deputy Commander Jack Cline. “These vehicles are produced new right here in Anniston, Alabama. This new endeavor demonstrates our unique capabilities.”

Already, about 30 ABVs have been fielded to Marine units for training purposes. It’s designed to breach minefields and complex obstacles and provide a deliberate and in-stride

breaching capability for the Marine Air-Ground Task Force and the Army Heavy Brigade Combat Team.

Production of the JAB is still in the testing phase; only five have been completed for design evaluation.

The JAB has atop it a 60-foot bridge that can be launched when other tracked vehicles like the M1 main battle tank need to cross wet or dry terrain.

“Anniston can do what industry can do—and do it at a better price, saving the taxpayer a lot of money.”

—Joseph Augustine  
Marine Corps Civilian

“These vehicle capabilities help guarantee the lethality of the soldiers and Marines,” said Depot Commander Col. S. B. Keller.

*Myrick writes for Tank-Automotive and Armaments Command Life Cycle Management Command (TACOM LCMC).*

### Army “Deadly Serious” About Replacement Ground Vehicle

ARMY NEWS SERVICE (JULY 2, 2009)

C. Todd Lopez

WASHINGTON—After cancellation of its Future Combat Systems program, the Army continues to focus on modernization of the force and a replacement for the canceled Manned Ground Vehicle.

“We’ve got our very best people working on it,” said Lt. Gen. Stephen Speakes, deputy chief of staff, Army G-8. “We’re doing everything we can to reflect the lessons of combat—we’re deadly serious about getting this as right as we can.”

The result of a recent Acquisition Decision Memorandum spelled the end of the Army’s expensive modernization strategy, FCS. The ADM gutted the program of its eight centerpiece “manned ground vehicles.”

“There was a commitment to Army modernization; there was a specific objection to individual programs that were part of Army modernization, and so, for example, the MGV did not enjoy the support of the senior leadership in the DoD,” Speakes said. “We are getting a do-over.”

There's no disagreement, however, that the Army needs a new ground vehicle.

"The Army's got about 16,000 fighting vehicles—Bradleys, tanks, 113s, howitzers," said Lt. Gen. Ross Thompson, the military deputy for the Army Acquisition Executive. "At some point in time, the Army's got to modernize those 16,000 fighting vehicles for the future or we are going to put soldiers in harm's way if we don't do that."

The Army is working now to develop a new ground vehicle—the Ground Combat Vehicle—that is meant to fill the need for a more modern ground vehicle. Currently, operational requirements for such a vehicle are being developed by the Army's Training and Doctrine Command.

The Army is also focused on modernization through the "spinout" technology from the FCS program. Spinouts from FCS include such things as the non-line-of-sight launch system, the tactical unmanned ground sensors, the urban unattended ground sensors, the class-1 UAV, the small unmanned ground vehicle, and the network integration kit. Those technologies will be part of the set of spinouts to the first seven infantry brigade combat teams.

Also part of Army modernization, Speakes said, is to better include the mine resistant ambush protected vehicle into the Army. That vehicle, he said, has proven combat-effective, and a better plan must be developed to fit it into BCTs.

"Our challenge is clear, which is to take a vehicle that's been proven in combat and now, over the course of the days and months ahead, develop a specific blueprint for how we're going to do that for the future," Speakes said.

### **Program Aims to Deliver Unprecedented Surveillance Capability**

*AMERICAN FORCES PRESS SERVICE (JULY 2, 2009)*

*Donna Miles*

WASHINGTON—A giant, unmanned airship capable of hovering at about 70,000 feet promises to give future warfighters an unprecedented eye on the battlefield.

The Defense Advanced Research Projects Agency's Integrated Sensor is Structure program, ISIS for short, will provide a detailed, real-time picture of all movement on or above the battlefield, explained program manager Timothy Clark.

As envisioned, the ISIS airship will be able to track troop movements—friendly as well as enemy—up to 180 miles away and track the most advanced cruise missiles from about 370 miles away.

It also will be able to watch ground targets through heavily forested areas, a capability not possible without the huge ultra-high-frequency antenna ISIS will provide.

Operating outside of controlled air space and out of the range of most surface-to-air missiles, Clark said, the system will bring a capability not possible with satellites: the ability to maintain watch over a huge, fixed position without blinking.

ISIS is expected to have a 10-year lifespan, although engineers estimate it could last even longer. When it's no longer needed in one location, it can be moved to watch another. "We should be able to get it to anywhere the Services would need it in about 10 days," Clark said.

Since the program's inception in 2004, its focus has been on developing technologies needed to create extremely large, super-sensitive, but also super-lightweight phased-array radar antennas. That's been accomplished, Clark said, with 6,000 square meters of X-band and UHF antenna condensed onto a 40- by 46-meter cylinder—about the size of a 15-story apartment building.

Meanwhile, the antenna's weight has been cut 90 percent, from 20 kilograms per meter to about 2.

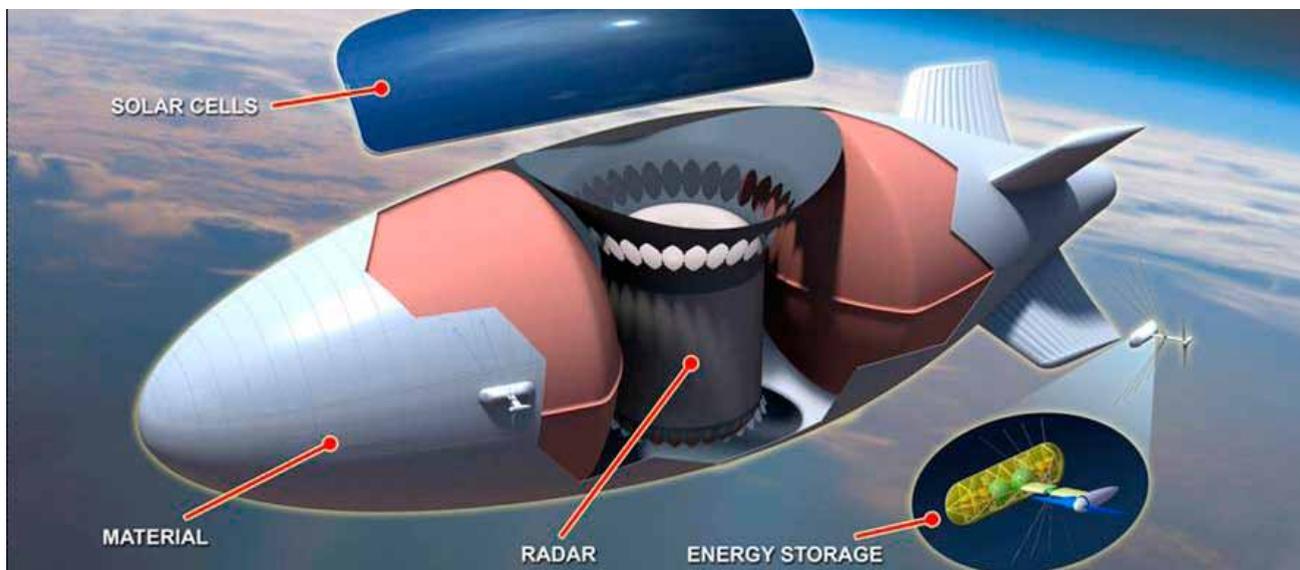
Powering the system so it can stay aloft was another challenge. Batteries were too heavy, so engineers tried something else. They opted to use solar rays during the daylight hours and to electrolyze water, storing the hydrogen and oxygen separately so they could be run through a hydrogen fuel cell at night.

"Then we collect the water and run it again," Clark said. "It's a fully regenerative system."

The next step is to incorporate these technologies into the hull of a non-rigid, pressurized airship. A demonstration program already is under way to see how this will work, Clark said.

Large pieces of the system are being put together at various locations around the country, and if all goes as planned, they'll be put together in a Lockheed-Martin hangar in Akron, Ohio.

Flight tests are expected to begin in late fall 2012, likely in the Florida Keys. Initially, DARPA will conduct 90 days of tests worldwide against air, ground, and surface targets at known positions and sizes to ensure the radar is operating properly.



The Defense Advanced Research Projects Agency's Integrated Sensor in Structure program, ISIS for short, will provide a detailed, real-time picture of all movement on or above the battlefield.

DoD graphic courtesy Defense Advanced Research Projects Agency

From there, the Air Force will take over the program, conducting its own additional testing before taking the ISIS operational.

Because DARPA is building a demonstration model, it will be prepared to hand the Air Force not just the technological capability, but also the manufacturing capability to move the program ahead, Clark said.

"To produce the demo, we're also producing a large amount of the components, including much of the antennae and transmit-receive modules, the hull material, significant portions of the power system," he said. "It's going to go through a lot of manufacturing development just to be able to produce the demo in an affordable manner."

Once operational, ISIS will bring not only new capabilities, but also new approaches to how the military conducts reconnaissance and surveillance, Clark said. "It's going to provide an affordable persistence," he said.

Clark recalled the post-Gulf War years, when U.S., British, and French military aircraft regularly patrolled two no-fly zones designated over Iraq to protect humanitarian operations in the north and Shiite Muslims in the south. ISIS could monitor the same areas without the wear and tear on flight crews and equipment, and at a fraction of the cost of manned patrols, he said.

"So you are talking about enormous change in how we do things," he said. "You are also talking about rethinking forward basing and crew rest. All those things change in how you execute what you do on the battlefield."

But the biggest gratification, Clark said, is knowing what ISIS will bring to warfighters.

"There's a lot of excitement about this program," he said. "That's because having that precise knowledge of what's out there is an extremely valuable piece of information."

### Defense Department Must End Business as Usual, Gates Says

AMERICAN FORCES PRESS SERVICE (JULY 16, 2009)

Samantha L. Quigley

CHICAGO—Defense spending and program priorities cannot be divorced from the very real threats of today and the growing ones of tomorrow, Secretary of Defense Robert M. Gates told hundreds of members of the Economics Club of Chicago on July 16.

"We stand at a crossroads," Gates said. "It is time to draw the line and take a stand against the business-as-usual approach to national defense ... We must all fulfill our obligation to the American people to ensure that the United States remains safe and strong," he said.

The proposed \$534 billion Fiscal Year 2010 defense budget is the first true 21st century defense budget and reflects the

fundamental shift in the nature of the conflicts the nation faces, Gates said. Other nations have learned from others' encounters with the United States that it is ill-advised to fight a conventional war head-to-head with the United States.

"Instead, they are developing asymmetric means that take advantage of new technologies—and our vulnerabilities—to disrupt our lines of communication and our freedom of movement, to deny us access, and to narrow our military options and strategic choices," Gate said. "In sum, the security challenges we now face, and will in the future, have changed, and our thinking must likewise change.

"The old paradigm of looking at potential conflict as either regular or irregular war, conventional or unconventional, high end or low end—is no longer relevant," he added.

As a result, Defense Department leaders need to think about and prepare for war in a profoundly different way than what has been typical throughout the better part of the last century, he said.

To this end, the president's budget request cut, curtailed, or ended a number of conventional modernization programs, including satellites, ground vehicles, helicopters, and fighters that were either performing poorly or in excess to real-world needs. Conversely, future-oriented programs where the United States was relatively underinvested were accelerated or received more funding.

For example, Gates described a little-noticed initiative in the budget that includes money to begin a new generation of ballistic missile submarines. It also allows for nearly \$700 million in additional funds to secure and assure America's nuclear deterrent.

"In truth, preparing for conflict in the 21st century means investing in truly new concepts and new technologies," Gate said. "It means taking into account all the assets and capabilities we can bring to the fight. It means measuring those capabilities against the real threats posed by real-world adversaries."

One of the programs the budget would cap is the F-22 fighter jet program. While "a niche silver-bullet solution for one or two potential scenarios," the fighter is expensive and has limited capabilities when compared to the F-35 Joint Strike Fighter.

The F-35 is 10 to 15 years newer, less than half the cost, carries a much larger suite of weapons, and is technologically superior in several areas. About 500 will be purchased over

the next five years, and more than 2,400 over the life of the program, Gates said. By contrast, he recommended to the president that the F-22s already allowed for were sufficient.

"The grim reality is that with regard to the budget, we have entered a zero-sum game," Gates said. "Every defense dollar diverted to fund excess or unneeded capacity ... is a dollar that will be unavailable to take care of our people, to win the wars we are in, to deter political adversaries, and to improve capabilities in areas where America is underinvested and potentially vulnerable.

"That is a risk that I cannot accept and one that I will not take," he said. "If the Department of Defense can't figure out a way to defend the United States on a budget of more than half a trillion dollars a year, then our problems are much bigger than anything that can be cured by a few more ships and planes."

When inflation and the fact that some war costs were moved from the supplemental appropriations to the main defense budget, the current proposed \$534 billion budget is a modest increase over the last proposed defense budget of \$524 billion, Gates said. By one estimate, the U.S. defense budget adds up to about what the entire rest of the world combined, friend or foe, spends on defense. "Only in the parallel universe that is Washington, D.C., would that be considered 'gutting' defense," Gates said.

Some in Congress have called for yet more analysis before making any of the decisions in this budget, he added. But when dealing with programs that were clearly out of control, performing poorly, and [in] excess to the military's real requirements, military leaders didn't need more study, more debate, or more delay, he said.

"What was needed were three things—common sense, political will, and tough decisions," Gates said.

Those three qualities would lead to decisions that provide the country with a portfolio of military capabilities with maximum versatility across the widest spectrum of conflict.

Exactly what's needed in today's high-stakes security world where the country is at war, and the security landscape is growing steadily more dangerous and unpredictable, he said.

"I am deeply concerned about the long-term challenges facing our defense establishment and just as concerned that the political state of play does not reflect the reality that major reforms are needed, or that tough choices are necessary," Gates concluded.