

Comptroller Explains DoD Budget Challenges

DEFENSE LOGISTICS AGENCY LAND & MARITIME PUBLIC AFFAIRS
(JUNE 29, 2011)

Tony D'Elia

COLUMBUS, Ohio—The sluggish growth of the economy will make it difficult to maintain current defense funding, the Defense Department's chief financial officer told attendees at the 2011 Defense Logistics Agency Industry Conference and Exhibition here yesterday.

Under Secretary of Defense (Comptroller) Robert F. Hale said to expect anemic growth in the defense budget in the near future.

"There's a rule of thumb that says you need a 2 to 3 percent growth [in the national economy] to maintain current forces," Hale said, warning that there may be no growth in the DoD budget because of the current economic climate.

"My guess is we'll end up with something like zero growth," he continued. "Even a constant budget will be a challenge to implement."

Hale said the same 2 to 3 percent growth is necessary if DoD wants to fund bigger and better weaponry.

"It's because we want to buy the very best weapons so that we're never in a fair fight," he said. "Those more sophisticated weapons tend to cost more than the ones they replaced, and they also tend to push up the costs of training and maintenance."

Health care and other costs add more pressure to the budget, Hale said.

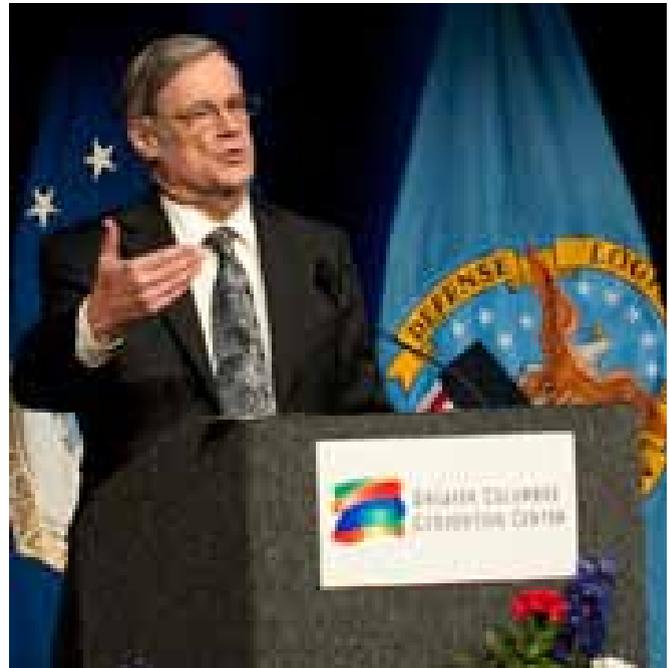
"Military health care has gone up 10 percent a year, and fuel costs haven't helped, either," he said.

Hale said he knows upcoming budgets will be leaner, and the challenge will be how department officials deal with it. "We'll have to take some risks and stretch our dollars," he said.

Some of the biggest challenges will be the freeze on civilian billets and contractor cuts, Hale said.

"We owe it to the public to streamline and hold down costs," he said.

Incoming Defense Secretary Leon E. Panetta is the right person for the job, Hale said. "He has a strong knowledge of the budget, and has some strong managerial skills," he said.



Under Secretary of Defense (Comptroller) Robert F. Hale speaks at the 2011 Defense Logistics Agency Industry Conference and Exhibition in Columbus, Ohio, June 28, 2011. The conference brings DLA employees together with industry representatives, stakeholders, and customers.

DoD photo by Chuck Morris

Hale also lauded the Defense Logistics Agency, its employees, and its industry partners.

"We depend on the private sector and the 26,000 in the Defense Logistics Agency who make it happen," he said. "We very much appreciate your support."

Carter: Warfighter Support Needs 'Fast Lane'

AMERICAN FORCES PRESS SERVICE (JULY 15, 2011)

Cheryl Pellerin

WASHINGTON—The Defense Department must institute a "fast lane" that is more agile than traditional requirements, acquisition, and budgeting, the under secretary of defense for acquisition, technology and logistics said here today.

Ashton B. Carter told an audience at the Brookings Institution that supporting the wars in Iraq and Afghanistan calls for a rapidly fielded new capability, agile logistics, and careful contingency contracting.

"Going forward, we need to institutionalize a fast lane in the department in some way," Carter said. "It's not only necessary for the wars we're in, it's really necessary for the tempo of technological change and the way the world changes."

Today, the Pentagon's ad hoc fast lane is formally called the Senior Integration Group, chaired by Carter and Robert Neller, director of operations for the Joint Staff, and created by former Defense Secretary Robert M. Gates.

"That is the mechanism Secretary Gates set up to overcome his frustration with the department's general inability to be agile and quick, which is true," Carter said.

"The system we have is designed to be deliberate and not to be quick," he added. "That's a problem all by itself, even in our normal programs, [and] it's completely unacceptable when you're in the middle of a war."

Carter, who just returned from Afghanistan, said the focus of activity there now "is to ensure that the force in Afghanistan, which President [Barack] Obama has directed be reduced in size, nevertheless continues to grow in capability."

That objective can be achieved in several ways, Carter said.

One is to continue to provide more of what Carter calls enablers—intelligence, surveillance, and reconnaissance, or ISR, technology and the capability to detect roadside bombs.

"The second way we can increase capability is by using fewer deployed soldiers, sailors, airmen, and Marines to accomplish tasks that don't require uniforms or physical presence in Afghanistan," he said. A long-standing example, Carter told the group, is the way the United States flies remotely controlled unmanned Predator and Reaper aerial vehicles from Creech Air Force Base in Nevada.

Making the Afghan security forces more capable in the years ahead is another way to reduce the number of U.S. forces while maintaining capability in Afghanistan, he said.

Describing actions being pursued in the area of rapid and responsive acquisition and fielding, Carter said a second surge of equipment to Afghanistan that Gates began in January is now delivering.

"You can see that everywhere in the country," he said.

The number of aerostats—moored balloons enabled with sensors for persistent ISR—is doubling, for example, he said. These, he explained, are especially critical for use over outlying facilities and roadways.

Unattended ground sensors are becoming useful in Afghanistan now that more areas are being cleared and held, Carter said, and the all-terrain, mine-resistant, ambush-protected

armored fighting vehicles in Afghanistan are getting underbody improvement kits that increase their resistance to bombs.

Clearing and holding areas in solidifying security in Afghanistan also increases the number of dismounted operations, he added, "and they require somewhat different kinds of equipment and tactics than the mounted operations that were the focus initially."

Troops are learning and adjusting to a changing enemy and from their own experience, he said, and training still is critical.

"I'll be going out to training ranges in the next couple of months to make sure that troops rotating into Afghanistan have seen and had the experience of training on the equipment before they fall in on it in country," Carter said.

In the area of logistics, "the miracle of 2010" continues in Afghanistan, thanks to the efforts of "Log Nation"—the totality of military commands, defense contractors, DoD civilians, and commercial contractors who support DoD logistics.

"It's amazing what Log Nation is capable of doing and does every day there," he said.

The miracle, Carter said, refers to getting tens of thousands of troops and their equipment into "a land-locked country with very parsimonious internal lines of communication" for the Afghanistan surge.

In the area of contracting, he said, "we do a lot of contingency contracting," or direct contracting support to tactical and operational forces, to ensure warfighters have what they need.

"[We're] always trying there to balance effectiveness and efficiency and make sure we have enough contracting officers [and] contracting officer representatives," he added. "We still have work to do, but we are making progress not using cash payments and otherwise trying to minimize opportunities for fraud, corruption, or just a bad deal as we do our contingency contracting."

Meanwhile, back at home, Carter said, there are wars of a different kind—budget wars.

Gates and his successor, Defense Secretary Leon E. Panetta have made it clear that the Defense Department is entering a new era in defense spending that is going to require changing the way it does business, Carter said. Obama and Congress

have also made it clear, he added, that the defense budget, which is about 20 percent of the total federal budget, must be part of the reduction in spending over the next 12 years.

"As we have assessed how to accomplish [this] task, first Secretary Gates and now Secretary Panetta have undertaken a comprehensive review of the impact of budget reductions on force structure and capability, and ultimately on missions and America's role in the world," Carter said.

Comprehensive, he added, means that everything must be on the table.

The comprehensive review is under way and making progress, he said, but it already has revealed that:

- The new era will require a different mind set for government and industry managers and their congressional overseers;
- It's important to proceed not by subtraction alone, but by a vision of the military needed in the future; and
- However large the budget is, every dollar must count.

"The president, the secretary, and the taxpayers are going to expect us to make every dollar we do get count," Carter said. "In short, they want better value for the defense dollar," he added. "It's what the country should expect, no matter what size the budget is."

Army Develops New Ways to Test, Identify Biological Agents

EDGEWOOD CHEMICAL BIOLOGICAL CENTER (JULY 19, 2011)

ABERDEEN PROVING GROUND, Md.—The Army is advancing science in new ways. Scientists at the U.S. Army Edgewood Chemical Biological Center developed a groundbreaking method for identification of biological agents.

"Remember today, July 14, 2011. You are experiencing the beginning of a revolution," said David Chiang, chief executive officer of Sage-N Research, Inc.

Chiang forecasts a bright future for the Agents of Biological Origins Identification, or ABOID, system that researchers developed at Edgewood Chemical Biological Center, or ECBC.

Sage-N Research, Inc., a computational pyrometrics company, entered into an exclusive license agreement with ECBC May 27, 2011, with the agreement signed July 14, 2011.

This license allows the integration of ECBC's ABOID system into Sage-N Research's existing SORCERER proteomics

platform, enabling rapid and cost-effective detection and identification of microorganisms.

Researchers designed the ABOID system to test and identify biological agents in circumstances where commanders are unfamiliar with the possible threats that await their soldiers.

Ali Pervez, vice president of marketing at Sage-N Research, Inc., noted the technology will ultimately have the ability to save thousands of lives by allowing for faster response and corrective measures to be taken against emerging and unknown biological threats.

Currently, the system has a database of 4,500 unique genomes of bacteria, viruses, and fungi.

"This cutting-edge technology enables identification of microorganisms down to strain level in minutes, rather than hours," said Charles Wick, former ECBC Senior Scientist who led the ABOID team. "This proves very successful for infectious disease identification and a range of other potential applications in military, medical, pharmaceutical, food, and public safety areas."

ECBC, a sub-organization of the U.S. Army Research, Development and Engineering Command, is the Army's principal research and development center for chemical and biological defense technology, engineering, and services.

ECBC has achieved major technological advances for national defense, civilian needs, and industrial competitiveness, with a long and distinguished history for providing the armed forces with quality systems and outstanding customer service.

Defense Department Seeks Energy Revolution

AMERICAN FORCES PRESS SERVICE (JULY 19, 2011)

Karen Parrish

WASHINGTON—Advances in energy technology that increase warfighter capability not only help the Defense Department protect the nation, but also accomplish two other important objectives, Deputy Defense Secretary William J. Lynn III said here today.

"They boost the competitiveness of American industry, and they raise our nation's overall energy efficiency," Lynn said during a keynote speech at the Army and Air Force Energy Forum.

New developments in energy historically have bolstered the nation's military edge, Lynn said. The shift from wind to coal in the 19th century revolutionized naval power, and nuclear

energy in the 20th century transformed submarines and aircraft carriers, he noted.

"Our mastery of energy technology both enabled our nation to emerge as a great power, and gave us a strategic edge in the Cold War," he said.

Staying at the cutting edge of energy technology remains critical to the country's military supremacy, Lynn said, even as the nature of war itself is changing.

The recent wars have been long and far from home, and the nature of the fight leaves the U.S. "logistical tail" vulnerable to attacks, he said.

"A majority of the convoys into Afghanistan now are used for fuel," he said. "We haul these supplies on roads laced with [explosives] and prone to ambush. More than 3,000 troops and contractors have been killed or wounded protecting these convoys."

New energy technology may reduce that risk to forces, and can make drawn-out deployments less costly, he said.

"Our current energy technology is not now optimized for the battlefield of today, and certainly not tomorrow," Lynn said. "We need to make investments to change that."

For the past decade, DoD has met new security challenges with more spending, Lynn said.

"Going forward, we will not have that luxury," he noted. "We are going to have to make hard choices about how to reallocate the resources we already have."

The Defense Department accounts for 80 percent of the federal government's energy use and about one percent of the nation's, Lynn said. Three-quarters of DoD-consumed energy directly supports operations, and the cost is rising, he said.

"Last year, we spent \$15 billion on energy," he said. "We are spending 225 percent more on gasoline than we did a decade ago."

DoD's energy strategy addresses both increasing energy costs and the need for better energy efficiency, he said.

"The strategy is premised on the notion that a new generation of military technologies that use and store energy more efficiently will only emerge if we change how we do business, especially in acquisition," he said.

The future force will be more capable, but also will consume more energy, Lynn said. The Defense Department now will include energy costs in its assessment of proposed new systems, he added.

"So in addition to traditional performance parameters such as speed, range, and payload, we'll now consider system energy performance parameters in the requirements and acquisition process," he said.

Lynn said analyzing energy costs during the "analysis of alternatives" phase of major defense acquisition programs not only will ensure warfighters get the speed, range, and power they require, but also help the department manage the life-cycle costs of its systems.

The energy analysis also will help DoD planners better understand the energy footprint of deployed forces and the human and financial costs of moving fuel into a theater of war, the deputy secretary said.

The Marine Corps pioneered that approach this year by including system energy performance parameters in developing a new surveillance system, he said, and the Army and the Air Force have a number of fuel-saving systems in development, including turbines and a more efficient ground vehicle.

Ground forces today use radios twice as much and computer equipment three times as much as they did a decade ago, and therefore carry roughly 20 pounds of batteries for a three-day patrol in Afghanistan, Lynn said.

"We are finding that clean-energy technology is one way to lighten the load and give our troops more agility," he said. "In January, the Iron Rangers of the 16th Infantry Battalion deployed to Afghanistan with a suite of advanced power and energy capabilities, including better batteries, solar-powered rechargers, and propane fuel cells that can be refilled with fuel purchased locally."

Last week, he said, a one-megawatt microgrid project started up at Bagram Airfield in Afghanistan.

Chains of "fuel-hogging generators" at forward operating bases, or FOBs, are a major source of energy waste, he said.

"Rather than efficiently distributing right-sized generators across a FOB, everyone often brings their own, resulting in tremendous overcapacity and waste," he said. "The microgrid project at Bagram will replace 22 existing generators with just four energy-efficient ones, yielding a 30 percent savings in fuel."

Permanent military installations also offer opportunities for better energy management, Lynn said.

Those installations draw 99 percent of their power from commercial power grids, which are vulnerable to disruption, he said.

"This vulnerability highlights the importance of the fuel cell backup systems we are installing with DOE's help," he added.

The department spends \$4 billion a year buying energy for its facilities, Lynn noted.

"Our strategy must lower our energy bills while improving the energy security of our installations," he said.

DoD's workforce has already retrofitted fuel-efficient lighting, windows, and heating and cooling systems in many existing facilities, and is transforming rooftops, Lynn said.

"In Hawaii, the 6,000 units of privatized Army family housing featuring rooftop solar panels make it the largest such project in the world," he said, noting even greater opportunities to generate energy at a lower cost are on the horizon.

DoD installations are an ideal proving ground for next-generation energy technologies, Lynn said.

He added department experts estimate those technologies could save 50 percent of current energy costs in existing buildings, and 70 percent in new construction.

DoD has spurred developments over the decades in nuclear power, the Internet, microelectronics, and high-performance computing, he said.

"The department has a proven track record of leveraging our [research and development] funds and buying power to seed new industries," Lynn said.

Because DoD facilities draw power from commercial grids, the deputy secretary noted, innovations achieved in-house can directly transfer to the rest of the economy.

Systems now in testing range from the simple—such as lighting calibrated to augment available daylight and sense human presence to run on and off—to a more complex energy management test at Great Lakes Naval Station, Ill., which deploys distributed sensors to constantly optimize performance, Lynn said.

Energy industries' response to the DoD test bed program has been dramatic, Lynn said.

"Our latest solicitation generated 600 proposals for technology demonstration projects," he added.

While change is always difficult, Lynn said, DoD's commitment to efficient energy is firm.

"With energy supplies tightening and costs increasing, we have no choice but to make its efficient operational use a core part of fighting and winning the nation's wars," he said.

"This does not mean the energy revolution we are trying to foster will come easily, Lynn added, "but it does mean we have the winds of change at our back."

Parrish writes for American Forces Press Service.

DoD Space Program Broadens Industry, Foreign Partnerships

AMERICAN FORCES PRESS SERVICE (JULY 19, 2011)

Cheryl Pellerin

WASHINGTON—The Defense Department is expanding partnerships with spacefaring companies and nations to maintain the strategic advantage it gains in space, the deputy assistant secretary of defense for space policy said today.

Speaking with reporters from the Defense Writers Group here, Ambassador Gregory L. Schulte said NASA's final space shuttle flight this week represents "a time of transition" for the civil and military space programs.

"Space," Schulte said, "is increasingly congested, contested and competitive."

The Omaha, Neb.-based U.S. Strategic Command, whose mission now includes warning companies and countries when space debris threatens their satellites, is tracking more than 22,000 objects in space, he said.

A range of countries are developing counter-space capabilities, including satellite-damaging jammers and lasers, he added, and 11 countries now operate 22 launch sites.

"The United States is not the only player in space," Schulte said, "and space is certainly not our private domain."

Space is ubiquitous in the defense establishment and in the conduct of military operations, he added, "and we're acting to maintain our strategic advantage in space."

Space systems are critical to ground navigation, smart bomb precision, and to relay unmanned aerial vehicle feeds to troops, Schulte said. Space also is necessary for early warnings of missile launches and for keeping the president connected to U.S. nuclear forces, he said.

Space is a force multiplier, Schulte added. "Without space capabilities, we'd need a lot more bombs to put on a particular target and there would be a lot more casualties and collateral damage," he said. "Without space assets, we'd need a lot more troops on the ground doing counterinsurgency operations."

To maintain the advantage, Schulte said, "we just launched [the] second in a series of GPS satellites that's going to give us more jam resistance and better civil capacity."

The Defense Department recently launched a new space-based infrared satellite, the first in geosynchronous orbit, that will offer much better tactical intelligence for missile launches, Schulte said.

DoD also is putting into orbit the first of four advanced extremely high frequency, or EHF, communications satellites, he said, and a new space-based surveillance satellite that will boost the ability to track objects in space.

"Our military space program is going to have to provide us that strategic advantage in a tight budget environment," he added, "and the [DoD National Security Space Strategy] shows a way to do that."

The strategy, issued by then-Defense Secretary Robert M. Gates in January and affirmed by Defense Secretary Leon E. Panetta, "seeks to address ... new challenges by promoting norms of responsible behavior in space and sharing data to help promote spaceflight safety," Schulte said.

The document also calls for partnerships with the commercial sector and with foreign partners to augment U.S. capabilities, he said, and to increase the resilience of U.S. satellite constellations against attack or disruption.

International partnerships that show the way to the future, the ambassador said, involve the advanced EHF satellite, in which three other countries participate, and a satellite called the Wideband Global SATCOM System, in which Australia participates.

Such collaboration, Schulte said, "shares the burden, gives us enhanced coverage, and helps provide some deterrence" to

those who might consider using counter-space technologies against space assets.

"Another illustration of the way forward," Schulte said, "is a program that our Defense Information Systems Agency, DISA, has proposed to Congress."

The program is called ASSIST, for Assured SATCOM Services in a Single Theater, which is the U.S. Central Command's area of operations.

"DISA is proposing to commercially procure satellite services to support the warfighter, rather than just leasing the services year to year," the ambassador said.

"In doing so," he added, "we can save significantly on annual leasing costs and we can also get access to satellites that have three times the capacity of the closest U.S. government-owned satellite."

The Defense Department also is beginning to work with commercial space companies to reduce the department's costs and to help energize the industrial base.

"We're going to see space increasingly commercialized," the ambassador said. "The cost of entry into space is going to go down, and that has all sorts of implications for the Department of Defense, along with opportunities."

Next month, for example, the Air Force will use the commercial space company Orbital to launch the CHIRP sensor—the Commercially Hosted Infrared Payload, Schulte said.

"This is a sensor the Air Force purchased and will be launched on a commercial communications satellite to demonstrate an advanced infrared imaging capability," he said, at considerable savings.

"CHIRP is costing us something like \$65 million and we get 80 percent of the requirements," Schulte said. "If we had launched it as a free-flying satellite, it would have cost more like \$500 million."

Commercial space is part of the future, he added, "and we want to be part of that future."

The Defense Department is working with NASA, the White House, and others to develop a new space transportation policy to update the 2004 presidential policy, he said.

"The new policy will reflect the end of the shuttle program, but also that there are potential new entrants into space

launch, and that our ranges are not only used for national security missions, but also increasingly for commercial missions," Schulte said.

SpaceX is another space transportation company that works routinely with the Air Force range at Patrick Air Force Base at Cape Canaveral, Fla., he added.

"Industry has read this strategy and has come to us with all sorts of ideas about innovative approaches to taking advantage of commercial capabilities and thinking differently about space," Schulte said. "And we welcome that."

Carter Updates Industrial Leaders on Better Buying Power

AMERICAN FORCES PRESS SERVICE (JULY 19, 2011)

Army Sgt. 1st Class Tyrone C. Marshall Jr.

WASHINGTON—The official who leads the Pentagon's plan to ensure better value to taxpayers and warfighters from the Defense Department's budget provided an update on progress to industrial leaders yesterday.

Ten months after introducing the 23-point "Better Buying Power" initiative, Ashton B. Carter, under secretary of defense for acquisition, technology and logistics, spoke to the National Defense Industrial Association about progress made toward maximizing every dollar spent.

The initiative is built on targeting affordability, rewarding productivity, promoting competition, improving tradecraft, and reducing bureaucracy to get the most out of each Defense Department budget dollar.

"For every 30 cents we spend to develop and acquire a defense system, we spend 70 cents to sustain them, resulting in a \$100 million annual maintenance budget," he said. "For every 45 cents we spend on goods, weapon systems, and things, we spend 55 cents on services, for a total of \$200 million."

The point, he added, is that Pentagon officials need to take a comprehensive look at spending, including things that can become options in meeting President Barack Obama's mandate to save money while keeping national security in mind.

"President Obama's planned defense budgets are robust," he said. "They're strong and will stay so. We are, after all, involved in two major ongoing conflicts [and] operations in Libya, and the world is still a dangerous place."

But Obama, Pentagon leadership, and Congress also have made it clear that the national security budget—which in-

cludes the defense budget and totals about 20 percent of the total federal budget—must be a part of the overall purchase equation over the next dozen years, Carter told the group.

"President Obama specifically [wants] over \$400 million in reductions over the next 12 years," he said. "To assess how to accomplish the task the president has laid out, the department has undertaken a comprehensive review of the impact of such reductions, ... and that review is ongoing."

The way government and industrial leaders think must change, Carter said.

"This new era will require a different mindset for our government and industry managers—you and us—and their congressional overseers," Carter told the industry leaders.

"[We are] a generation who has grown accustomed over the post-9/11 decade to circumstances in which we could always reach for more money when we encountered managerial or technical problems or a difficult choice," he said. "Those days are gone."

And it's not simply a matter of cutting from our current plans and activities, he noted.

"Cutting capability and adjusting strategy might be necessary, but they are where we should go only after examining all the options," he said. "The president, secretary of defense, and the taxpayer are going to expect us to make every dollar we do get count. ... This is something the country should expect no matter what size the defense budget is."

The Better Buying Power initiative is a response to that challenge, Carter said.

"People ask me, 'Well, can you succeed at this?'" he said. "I think we can. ... We have a very clear roadmap [and] clear and reasonable objectives coming from taxpayers, warfighters and our leadership. We also have the staunch support of the president, secretary of defense, and Congress."

Carter's final message to the industrial leaders was that the Defense Department needs the capabilities they can provide, but also needs them to be affordable.

"Whatever you're doing for us, make it possible for us to continue to afford it," he said. "Together, let's bend so we don't need to break our programs and activities, ... and this way, I'm sure we can succeed."

Future Force: Army Research Lab Equips Warfighters

U.S. ARMY RESEARCH, DEVELOPMENT AND ENGINEERING
COMMAND (JULY 22, 2011)

Sarah Maxwell

ABERDEEN PROVING GROUND, Md.—The U.S. Army is a well-trained, well-equipped fighting force. And behind every weapon, piece of armor, and training that prepares and protects soldiers in battle are teams of scientists and engineers who are solving complex problems and driving future capabilities.

As part of the U.S. Army Research, Development and Engineering Command, the Army Research Laboratory is a key component of the Army science, technology, and engineering enterprise that supports soldiers, according to ARL Director John Miller.

“Our diverse assortment of unique facilities and dedicated workforce of government and private sector partners make up the largest source of state-of-the-art research and analysis in the Army,” said Miller.

Focusing on the future while supporting current warfighters, ARL’s scientists are a diverse group who hold the keys to technologies for soldiers five, 10, and even 20 years down the road.

Almost every non-medical scientific field is touched by ARL, from advanced sensors to neuroscience to flexible electronics to weapons technologies to complex analysis. Basically everything a soldier needs or may need in the future is investigated by ARL.

Although it has more than 2,000 employees, the majority of whom are highly educated and skilled leaders in their fields, the lab combines in-house technical expertise with the intellectual powerhouse of academic and industry partners.

The research discoveries ARL produces either within its laboratories or through its partners are used as the foundations for other Army research, development and engineering centers under RDECOM, Miller explained.

“We act as the corporate laboratory, providing the underpinning of science, technology, and analysis for the rest of the Army,” said Miller.

As basic and applied researchers working in lab environments, ARL scientists and engineers sometimes need an up-close understanding of soldiers’ requirements. About 36 active duty soldiers are assigned to ARL, and work with the

scientists as subject matter experts, helping guide technologies to better suit soldiers.

“They act as the interface between the field and the lab,” said recently retired combat engineer and former ARL sergeant major, Steve Hornbach, who now works as an operations specialist for the lab.

“They’re extremely important and are able to provide the scientists and engineers the critical information on what soldiers need,” he added.

Soldiers from outside units, most with recent combat experience, also visit the scientists in the lab as part of an RDECOM program to bring fresh perspectives and information in from the field.

The scientists’ work is mostly behind the scenes for soldiers, said 1st Sgt. Kevin Spooner of the 1st Squadron, 73rd Cavalry Regiment, 82nd Airborne Division, during his unit’s visit.

“Joe on the line doesn’t realize there’s a guy on a computer in an office trying to keep him alive and help kill the enemy,” he added.

The average soldier may also not know that ARL soldiers and scientists volunteer to deploy to military posts in the United States, Iraq, and Afghanistan as part of their research, and with RDECOM field assistance teams, or FAST, to track down any technology gaps and rapidly help fill them for warfighters.

ARL’s Dr. Pam Savage-Knepshield, a human factors/ergonomics research psychologist, spends much of her time in the field talking to soldiers and getting their feedback about new and old equipment. She recently returned from a six-month deployment as a FAST team member in Iraq, where the team was responsible for finding solutions to soldiers’ problems.

She saw field-expedient measures military members were employing to address multiple equipment issues, from lighting to seatbelts. The FAST team then coordinated with state-side scientists and logistics support, and immediately took measures to remedy the situations.

“The soldiers were happy we were there and looking out for their mission needs and personal safety,” said Savage-Knepshield. “It felt really good to be able to get solutions to soldiers quickly and see them try them out while we were there.”



Army Research Lab Scientists at the Army Research Laboratory conduct research on a variety of fronts. Here, a mannequin is positioned in one of the lab's auditory research environments. ARL personnel conduct an array of auditory research, including the effects of various types of headgear on sound detection and the identification and localization of acoustic signatures.

Army Research Laboratory image

While some at ARL are helping with the fight now, many more are focused on the future. The high-risk, high-payoff world of basic and applied science is where ARL expects to make the most significant impact on the Army and the world in general, said Miller.

"ARL has [been] and will continue to be a major force in developing game-changing technologies that could revolutionize the way the Army fights," he said.

Maxwell is with U.S. Army Research, Development and Engineering Command.

Most Acquisition Reform Policies, Plans in Place, Official Says

AMERICAN FORCES PRESS SERVICE (JULY 27, 2011)

Cheryl Pellerin

WASHINGTON—The Defense Department's acquisition organization is 18 to 24 months away from completing the integration of practices that are changing the way the Pentagon buys goods and services, the director of defense pricing said today.

Shay D. Assad, who until June 11 was director of defense procurement and acquisition, spoke to reporters at a meeting of the Defense Writers Group here.

The practices—together called the Better Buying Power initiative—arose from the Defense Department efficiencies effort launched in May 2010 and from a memo in June of that year to acquisition professionals from Ashton B. Carter, under secretary of defense for acquisition, technology and logistics.

The memo described a mandate to deliver better value to taxpayers and warfighters by significantly improving the way the department does business.

Carter's reform plan targeted five areas. He wanted the acquisition enterprise to target affordability, incentivize productivity in industry, promote competition, improve trade-craft, and reduce bureaucracy.

"Most of the policy [and the execution plans] are already in place," Assad said, noting that even now progress is being made toward building an integrated enterprise.

"Because we're talking about some remarkable change," Assad added, it will take time to implement the plan among 26,000 contractors and 3 million contracting actions.

"I think it's going to take 18 to 24 months to put everything in place that we want to do, especially from a pricing point of view," he said.

Assad's new job also arose from the need to integrate Better Buying Power policies and practices into the existing enterprise. Assad's former deputy, Richard Ginman, became director of acquisition and contract policy as Assad became director of defense pricing.

The division of duties enables him to spend more time with the field in implementing the Better Buying Power initiatives, Assad said, participating in major programs and helping program executive officers "to get those programs on track in terms of what they do cost, what they should cost, and what we're paying."

Carter's five-part strategy targets affordability as the No. 1 priority, Assad said, noting that Carter and Frank Kendall—the principal deputy under secretary of defense for acquisition, technology and logistics—have talked about establishing cost almost as a key performance parameter.

Cost is as important as any other factor in the acquisition process, he added.

"We're getting on it early in the program," he said, "so we don't go down the path of spending a tremendous amount of money in engineering, manufacturing, and development only to find out that what we've designed and developed, we can't afford."

The Defense Department is trying to do more engineering up front, Assad added, "so we can be more specific in the development program."

"That's what we're trying to accomplish," he said, "and it's a very different approach."

One of Assad's current pricing projects is the Joint Strike Fighter Program. Price overruns have cost Lockheed Martin millions of dollars in bonuses and delayed the program for more than a year. Assad said he is assisting Navy Vice Adm. David J. Venlet, tapped last year to take over the fighter program, "in coming up with what it is we think [the program] should cost."

The Navy is responsible for negotiating the contract, Assad said, but he will be "assisting them quite a bit."

"We are in the process now of evaluating the Lockheed Martin proposal as well as all the subcontractor proposals," the director said. "We expect that sometime in the fall, we'll commence negotiations and, if it goes according to plan, we should have a deal signed by the end of the year."

Normally, Assad said, Lockheed Martin alone would evaluate the proposals of its subcontractors, but the world has changed in terms of the composition of the cost of products the Defense Department buys.

"Twenty-five years ago, it was not uncommon for a contractor to perform 60 or 70 percent of the work internally within his own organization," he explained. Today, Assad said, major prime contractors still build a portion of a plane, for example, but they also integrate or do the final assembly of the plane.

"What we've learned is that a lot of the money we're spending is at the subcontract level, so we're following the money," the director said. "We want to make sure we have a complete understanding of what we think a fair and reasonable subcontract price should be."

Carter and Kendall are in the lead for the sweeping changes occurring in the Pentagon's acquisition agency, Assad said, and his job is to help and advise them in getting the changes into play. In some cases, the change is being embraced and executed really smartly, he said. In others, he acknowledged, change is hard.

"My role is to work with program executive officers and heads of contracting activities, saying, 'What's the plan? Here's what we're trying to do. How are we going to execute it in your ... buying command?'"

A senior integration group regularly discusses the execution plans, Assad said. The question now, he added, is "how to take a couple of hundred thousand people and make this happen."

Obama Chooses Carter for 'Transparency' Board

AMERICAN FORCES PRESS SERVICE (JULY 29, 2011)

Lisa Daniel

WASHINGTON—A senior Defense Department official who has a lead role in Pentagon cost-saving and efficiency efforts has been named to a new White House board to cut waste in federal spending.

President Barack Obama yesterday appointed Ashton B. Carter, under secretary of defense for acquisition, technology and logistics, to the 11-member Government Accountability and Transparency Board, a body he created last month as part of the administration's "Campaign to Cut Waste."

Obama, in announcing the board's creation, said its mission will be to "hunt down and eliminate misspent tax dollars in every agency and department across the federal government."

In his June 13 executive order to create the board, Obama said it will build on two years of efforts by the Recovery, Accountability and Transparency Board to save taxpayer dollars by cutting wasteful spending and increasing efficiency in government operations. That has been done, he said, "by curbing uncontrolled growth in contract spending, terminating poorly performing information technology projects, ... and opening government up to the public to increase accountability and accelerate innovation."

Carter, since taking the under secretary position in April 2009, has championed efforts to find cost efficiencies in the Pentagon budget, particularly in acquisition, and to redirect savings to support warfighters and speed up the fielding of equipment and other needs to deployed troops.

Carter was named to the board, which held its first meeting yesterday, along with 10 other senior federal officials.

"With our nation's top watchdogs at the helm, we will deliver the kind of transparency and accountability for federal spending that the public deserves and expects," Vice President Joe Biden, who will preside over the board, said in a statement released today.

The board is to issue a report by the end of this year recommending a broad range of strategies to make government spending more transparent, to improve the use of technology to prevent fraud, and "offer a comprehensive vision for the management of federal spending that will fundamentally change how government works," according to a White House news release.

Army Preparing to Produce JLTVs

ARMY NEWS SERVICE (AUG. 8, 2011)

Kris Osborn

ARLINGTON, Va.—After refining requirements during a two-year technology development phase for the Joint Light Tactical Vehicle, Army developers are poised to conduct a full and open competition geared toward formal production, Service officials said.

The Joint Light Tactical Vehicle, or JLTV, will be a next-generation light vehicle designed to bring soldiers an unprecedented blend of protection, payload, and performance, said Tim Goddette, director of Sustainment Systems.

The technology development, or TD, phase for JLTV development, completed this past May, successfully demonstrated the vehicle's ability to meet a wide range of requirements, including fortified improvised explosive device, or IED, protections designed to withstand blast attacks; off-road mobility; variable ride height suspension; exportable power; and essential command, control, communications, computers, intelligence, surveillance, and reconnaissance, or C4ISR capabilities, Goddette said.

The 27-month phase included prototype vehicles from three teams of vendors: BAE-Navistar, Lockheed-BAE, and General Tactical Vehicles (General Dynamics and AM General).

"The purpose of the TD phase was geared toward refining the requirements in order to demonstrate the JLTV's ability to meet the designated capability gaps," Goddette said. "The program has succeeded in identifying and proving out those areas of needed development—and now the Army is analyzing what trade-offs might be required in order to best pursue an acquisition strategy that both lowers costs and delivers this needed capability to soldiers."

The competitive prototyping and extensive testing pursued during the TD phase was designed to match technological capability with the vehicle's requirements and lower risk for an anticipated production phase, Goddette said.

"We demonstrated that every one of the requirements was achievable," Goddette explained. "We've learned that some trade-offs are necessary to pursue an overall strategy that best synchronizes requirements, resources, mature technologies and a cost-reducing acquisition strategy."

"We demonstrated not only that the requirements were achievable, but we gained valuable insight into the cost of each capability and effect that one capability might have on another. We've learned that some trade-offs are necessary to pursue an overall strategy that best synchronizes requirements, resources, mature technologies, and a cost-reducing acquisition strategy," Goddette said.

Operating in today's more budget-constrained fiscal environment, Army developers are working on an approach to JLTV procurement that harnesses the best available technologies while minimizing costs and achieving efficiency in the process, he said.



Three different mission types of Joint Light Tactical Vehicles are driven offroad during the technology development phase which concluded in May 2011.

U.S. Army photo

One such approach includes the possibility of buying less add-on armor, known as B-kits, for the vehicles because not every JLTV will need the added protection, and new, light-weight materials may likely become available in the future, Goddette said.

Due to its enhanced technological capabilities, the JLTV will be able to perform a wide range of missions and perform many roles Humvees are currently unable to do, Goddette said. At the same time, the Army has embarked upon a competitive Humvee recap program aimed at improving the survivability of the existing vehicle that is already in the Army inventory.

“The JLTV and Humvee-recap program are designed to complement one another as part of an integrated light tactical vehicle strategy designed to best prepare our force for a range of anticipated future contingencies,” Goddette said. “These two competitive efforts are also synchronized with one another to invest a limited amount of resources up front enabling a ‘try before we buy’ approach and capitalize on the vast experience our industry partners have gained over that past five years.”

With its off-road ability, blast-protections, and on-board electronics, the JLTV will bring a new set of capabilities to the Army and Marines.

There are two different variants or categories of JLTV:

- Combat tactical vehicle is a four-person, general purpose vehicle with a curb weight of 13,000 pounds and the ability to carry 3,500 pounds of payload and 3,500 pounds of add-on armor.
- Combat support vehicle is a two-passenger utility vehicle with a short cab/open bed for hauling equipment or putting on shelters.