Pentagon to Provide Shadow UAVs to Pakistan

AMERICAN FORCES PRESS SERVICE (JAN. 22, 2010)
Donna Miles

ISLAMABAD, Pakistan—The United States plans to provide Pakistan RQ-7 Shadow unmanned aerial vehicles to support their fight against extremists, Defense Secretary Robert M. Gates confirmed today during a roundtable session with Pakistani reporters.

The United States has been working with the Pakistani military for more than a year to enhance its own intelligence, surveillance, and reconnaissance capabilities, Gates said. "We share a lot of information that we acquire on the Afghan side of the border and from our satellites, but we also are trying to help the Pakistanis build their own capabilities."

In addition to the drones themselves, the United States also will provide training and other capabilities required to "coordinate these platforms and be able to get the maximum possible value out of them," Gates said.

The secretary first alluded to the new initiative last night, during an interview with Pakistani television reporters, but did not specifically mention the Shadow models, or the fact that a decision had been made about providing them, until today.

A senior defense official traveling with Gates told reporters the United States will provide 12 of the unarmed aircraft to help Pakistan in its offensive on extremists.

Funding would come from congressionally appropriated counter-insurgency funds Gates said enable the Defense Department to quickly provide equipment or training to help the Pakistanis in the fight.

Shadow UAVs are extremely popular within the U.S. Army, providing warfighters better situational awareness in their operations.

The Shadows are relatively small, with a 14-foot wingspan, and have an ability to oversee specific sites and feed video images.

Lynn: New Threats Require New Capabilities

AMERICAN FORCES PRESS SERVICE (JAN. 25, 2010)
Linda D. Kozaryn

LONDON—Developing new capabilities to deal with new and future threats requires defense cooperation and collaboration, Deputy Defense Secretary William J. Lynn III said here today.

The need for new capabilities is evidenced by today's threats, he said. Insurgents use roadside bombs that penetrate heavy armor. Rogue states seek nuclear weapons. Terrorists relentlessly attempt attacks using unconventional means. Criminals launch cyber attacks.

"Even our computers, as Google discovered this month, are no longer safe from attack," the deputy defense secretary told the members of Parliament and invited guests from think tanks, the media, and the academic community.

"We now face hybrid conflicts where even weak states and terrorists have access to the most sophisticated and deadly weapons," Lynn said. As a result of this new age of asymmetric warfare, defense officials on both sides of the Atlantic are confronting questions about the future of defense.

U.S. and British defense leaders are conducting strategic reviews and working to ease restrictions that prevent sharing certain technologies. Like their European counterparts, Lynn said, U.S. military leaders are struggling to equip forces in a time of fiscal austerity.

"Since spending defense dollars wisely is a common challenge, the Obama administration wants to ease the cost of developing new weapon systems for us both," he said.

This type of defense cooperation has been done before, he noted. During World War II, for example, the British Merlin engine powered the American-made P-51 Mustang fighter—the best fighter aircraft of the war. But export controls developed during the Cold War, and still in force today, make collaboration difficult. Because of the bureaucratic system, he said, "the most technologically advanced nation in the world is the least able to use its technology to aid its allies."

The U.S.-U.K. Defense Trade Cooperation Treaty, now before the Senate for ratification, is an important step in improving this system. "When ratified," Lynn said, "it will streamline export procedures, helping strengthen our ability to develop and acquire battlefield systems jointly."

The treaty will allow greater exchange of defense goods, services, and information. Companies in the United States and the United Kingdom will be able to collaborate more easily. "Our governments can focus on developing critical technologies instead of pushing licenses through bureaucratic labyrinths," Lynn said.

"Legally enforceable safeguards will ensure the integrity of sensitive materials transferred under the treaty, and each country will retain the right to unilaterally exempt technolo-

gies from its provisions," he added. "Ratifying the treaty, as we say in American English, is a 'no-brainer.'

"In an era where research and development is global," he continued, "we believe in building higher walls, but around fewer items. A system of export control that protects only truly unique capabilities is better for our national security, our economy, and our allies."

Countering new threats also requires new strategy, Lynn said. "We believe that the new challenges we face require significant shifts in how we train, equip, and structure our force," he told the group; and he highlighted three steps the United States is taking to align military capabilities with the new range of threats.

First, he said, U.S. defense officials are institutionalizing the armed forces' ability to wage irregular war by upgrading special operations forces and strengthening the battlefield enablers for irregular operations, including helicopter lift; mine-resistant vehicles; and intelligence, surveillance, and reconnaissance platforms.

Second, defense officials are restructuring forces to prepare for a range of potential conflicts, including those of longer duration, such as the operations in Afghanistan and Iraq.

Deputy Defense Secretary William J. Lynn III visits London for talks aimed at strengthening defense cooperation between the United States and the United Kingdom, Jan. 25, 2010.
DoD photo by Air Force Master Sgt. Jerry Morrison

"In the two wars we are fighting, it is not the intensity or scale of the initial combat phase that proved the most challenging," Lynn explained. "Rather, after eight years in Afghanistan and Iraq, we're finding that it is the duration of these conflicts that places tremendous stress on our military. These wars have now lasted longer than the U.S. participation in World War I and II combined."

As a result, he said, U.S. defense leaders have halted reductions in the Navy and Air Force and accelerated a planned increase of Army and Marine Corps ground forces.

Third, Lynn said, U.S. defense officials are broadening military capabilities to counter unconventional weapons—everything from weapons of mass destruction and anti-satellite technologies to roadside bombs and guerilla warfare.

"Battlegrounds used to be a meeting place of like-on-like forces—cavalry on cavalry, armor on armor. In the Cold War, it was nuclear versus nuclear," Lynn explained. But the superior conventional strength of U.S. forces, he added, has led potential adversaries to seek new means of attack.

U.S. and British officials also must prepare to counter attacks on the cyber domain, Lynn said, noting that the frequency and sophistication of cyber attacks have increased exponentially in the past few years. More than 100 foreign intelligence organizations are trying to hack into U.S. systems, along with criminals with world-class cyber capabilities. "Our networks are now under threat every hour of every day," he said.

"Your military and your economy are as dependent upon information technology as ours—and therefore just as vulnerable to the cyber threat," Lynn warned the group.

To deal with the cyber threat, the U.S. military is establishing a Cyber Command, and U.S. officials plan to work with allied nations to confront this type of warfare.

"The reality is that we cannot defend our networks by ourselves," Lynn acknowledged. "International cooperation is imperative for establishing the chain of events in an intrusion and quickly and decisively fighting back."

The United States and the United Kingdom are stalwart allies facing the same security challenges, and both must make hard choices on defense investment, Lynn concluded. "And soon, our defense industries will partner in the acquisition of new weapons to keep us safe."

JLTV Prototype Builds Underway

ARMY NEWS SERVICE (JAN. 27, 2010)
Kris Osborn

The Joint Light Tactical Vehicle, or JLTV Technology Development phase industry teams have begun to build government prototypes, engineering an unprecedented blend of mobility, payload capacity, and survivability—building a light tactical vehicle that will withstand IED attacks, drive quickly through diverse terrain, and transport beneath a CH-47 or CH-53 helicopter.

The three teams awarded contracts for the 27-month TD phase—BAE-Navistar, General Tactical Vehicles, and Lockheed-BAE—have incorporated design revisions from their independent preliminary and Critical Design Reviews.

"The Joint and International JLTV program is one of the first DoD acquisition programs to embrace the principles of "Competitive Prototyping." Through the efforts of three contractors to build JLTV variants, we can validate requirements and reduce risk," said Army Col. John Myers, the project manager for Joint Combat Support Systems.

"Independent CDRs provide the Army and Marine Corps with the opportunity to assess the technical maturity of each team's design relative to the TD phase requirements. As we progress from Preliminary Design Reviews to CDRs, each team further refined their design—then we move into the build process. What the government sees coming out of the CDR is what we should see in hardware when the vehicles are delivered for testing," said Army Lt. Col. Wolfgang Petermann, product manager for JLTV.

Prior to testing, a series of independent test readiness reviews will serve as a checkpoint, ensuring that the vehicles were built as designed; the idea is to make sure that what was delivered on paper is what is subsequently delivered in hardware, Petermann said.

"Shortly after the test readiness reviews, we will begin full vehicle testing, beginning with safety certifications. We will then move into performance and RAM [reliability and maintainability] testing. We will conduct user evaluations with soldiers and Marines to verify requirements suitability," Petermann said. "This is a robust test program not typically seen in a TD [technology development] phase."

The prototypes will undergo 20,000 miles of RAM testing per vehicle, Petermann said.

In addition to prototype testing, Each of the three JLTV industry teams delivered armor coupons and a number of ballistic hulls for blast-test evaluation at Aberdeen Proving Ground, Md.

Industry partners have also conducted a series of subcomponent tests to include examinations of the adjustable height suspension; power integration capabilities; Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) architecture; and blast-testing of the ballistic hulls, Petermann said.

"We have seen many mature individual technologies. The challenge will be seeing them integrated," Petermann said.

At the end of the rigorous testing schedule, the prototype vehicles will go through extensive prototype live-fire tests where they are attacked in combat-like conditions by weapons most likely to be used by current and future enemies.

The TD phase is aimed at informing and refining the requirements for the JLTV family of vehicles through prototyping in order to reduce risks and lower costs of production. Upon completion of the 27-month TD phase, the government will conduct a new, full, and open competition for a follow-on Engineering and Manufacturing Development (EMD) phase, leading to the awarding of two contracts.

"Our intent is to come out with an RFP [Request for Proposal] for the EMD phase, with a low-risk, executable, and affordable set of requirements. We anticipate an RFP release for April 2011—to be followed by a contract award in fourth quarter 2011," Petermann said.

Following a Milestone C decision in 2013, the Army plans to purchase 55,000 JLTVs, and the Marines plan to buy 5,500. Full production is slated for 2015, Petermann said.

The Army-Marine Corps JLTV program will produce a fleet of tactical vehicles that can support a range of mission sets.

"We are developing a family of vehicles and companion trailers that can be used in any operational environment: low-intensity conflict to high-intensity conflict—major combat operations to hybrid warfare. We have the SOCOM [Special Operations Command] requirements built into the vehicle, meaning no follow-on modifications will be necessary to accommodate their mission profiles—thus increasing commonality with the operating forces," said Marine Lt. Col. Ben Garza, JLTV program manager, Marine Corps.

Other requirements include building a vehicle that can generate 30 kilowatts of exportable power, drive when tires are shot, accommodate scalable armor solutions, extra spall liner, and embedded diagnostics.

"The unarmored Humvee used to have great payload capacity and off-road mobility, but when you added armor it threw it off balance. We want to regain that off-road mobility we had with increased survivability—all on one transportable platform," Garza said.

Currently, there are three payload categories, which cover 10 JLTV configurations. Category A, the smallest category, will have a combat transport weight of 14,322 pounds and support a 3,500-pound payload while armored. Category B is somewhat larger, supporting a 4,500-pound payload while armored; Category C supports a 5,100-pound payload while armored. The Category C vehicles will also address shelter and ambulance requirements. The entire family of JLTV is transportable by tactical assets (CH-47, CH-53, C-130), greatly reducing the burden on strategic assets such as the limited quantity of C-17 and C-5 aircraft.

Also, JLTV family of vehicles will be able to adjust its suspension to a height of 76 inches or less in order to board Maritime preposition force ships, Garza said.

Gates Announces Independent Panel to Assess DoD Quadrennial Defense Review

DEPARTMENT OF DEFENSE NEWS RELEASE (JAN. 29, 2010)

Secretary of Defense Robert M. Gates announced today his appointments to a congressionally mandated independent panel selected to review the Department of Defense Quadrennial Defense Review.

The bipartisan panel is required by law to submit by July 2010 a report to Congress assessing the QDR, its recommendations, stated and implied assumptions, and any vulnerabilities of the strategy and force structure underlying the report.

The panel's assessment will include analyses of trends, asymmetries, and concepts of operations that characterize the military balance with potential adversaries, focusing on the strategic approaches of possible opposing forces.

The panel consists of 20 members, eight of whom are selected by Congress. The 12 members announced by the secretary of defense are:

- William J. Perry, co-chair
- Stephen J. Hadley, co-chair
- Richard L. Armitage
- Jack Dyer Crouch II
- Rudy F. deLeon
- Joan A. Dempsey
- Sherri W. Goodman
- Retired Navy Adm. David E. Jeremiah
- Retired Army Gen. George A. Joulwan
- Alice C. Maroni
- Retired Marine Lt. Gen. Paul Van Riper
- Retired Air Force Gen. Larry D. Welch

Members appointed by Congress are:

- Charles Curtis
- Eric S. Edelman
- Retired Army Gen. John (Jack) Keane
- Richard H. Kohn
- John F. Lehman Jr.
- Retired Army Lt. Col. John Nagl
- Retired Army Maj. Gen. Robert H. Scales Jr.
- James M. Talent

The report of the QDR, due to be released Feb. 1 alongside the fiscal 2011 budget request, is a legislatively mandated review of DoD strategy and priorities. The 2010 QDR report will assess challenges the nation faces and rebalance DoD's strategies, capabilities, and forces to address today's conflicts and tomorrow's threats.

Gates Pledges Mine-Resistant Vehicles to Allies

American Forces Press Service (FEB. 5, 2010)
Fred W. Baker III

ISTANBUL—Defense Secretary Robert M. Gates today pledged surplus mine-resistant, ambush-protected vehicles along with expanded access to classified information to U.S. allies to help in combating the threat of improvised explosive devices in Afghanistan.

"The United States will now do whatever we can within the limits of U.S. law, and as soon as we can, to provide as many

Defense Secretary Robert M. Gates conducts a news conference in Istanbul after meeting with fellow NATO defense ministers and those of other countries supporting the effort in Afghanistan, Feb. 5, 2010. DoD photo by Cherie Cullen

surplus MRAPs as possible to allies, especially to those operating in high-risk areas," Gates said at a news conference here after meeting with the defense ministers of 44 International Security Assistance Force partner nations.

Gates promised to sell, loan, or donate surplus U.S. bomb-detecting equipment, including the MRAPs, along with route-clearing robots and ground-penetrating radars.

Gates credited the MRAP vehicles with already saving "thousands of lives" in Afghanistan.

The MRAPs that are likely to make their way to allied forces are those that are coming from Iraq. Gates said the drawdown there has given U.S. forces a surplus of the vehicles. Law dictates that the needs of U.S. troops must be met first before any such equipment can be sold or loaned to other countries.

The MRAPs in Iraq are the older versions more suited for on-road travel, as opposed to the newer all-terrain vehicles known as M-ATVs now being fielded in Afghanistan. Still, Gates said, they are better protection against the killer bombs than what the allies are using now.

A U.S. official speaking after the announcement said some countries have expressed interest in buying the newer M-ATVs, and that sales of those vehicles will be expedited when possible.

The United States currently has loaned about 50 MRAPs to Polish forces fighting in Afghanistan. They are the only other country's forces to use the vehicles.

About 8,500 MRAPs are in Iraq, and more than 4,100 are in Afghanistan. About 2,200 more are in Kuwait, Qatar, and Bahrain. The United States has fielded about 800 M-ATVs in Afghanistan.

Gates traveled here yesterday to meet with NATO and the International Security Assistance Force partners partly to lobby for more trainers and mentors needed to bolster the efforts in Afghanistan. NATO has committed to sending about 9,000 extra troops.

Nearly all of the 40,000 combat troops requested by Army Gen. Stanley A. McChrystal, commander of the ISAF and U.S. forces in Afghanistan, have been committed, but about 4,000 more trainers and mentors are needed.

Another meeting is planned for the end of this month in which commitments will have to be made. The two-day conference here is the start of the efforts to persuade the partners—many of whom already had planned to reduce the number of their forces in Afghanistan—to deliver more troops.

NATO Secretary General Anders Fogh Rasmussen said today that Gates' promise of more counter-IED support will help to bolster that commitment from ISAF partners. In fact, Rasmussen said, NATO has outlined its priorities, with fighting the IED threat at the top of the list.

Gates called on NATO to provide more trainers, saying they are "needed immediately," and that "this is a critical moment in Afghanistan."

The secretary said that the newly implemented U.S. strategy, alongside fresh NATO and ISAF resources, will pave the way for success in Afghanistan.

"I believe the pieces are being put in place to make real and measurable progress," Gates said. "I'm confident that we can achieve our objectives, but only if the coalition can muster the resolve for this difficult and dangerous mission."

Army Ground Combat Vehicle Request for Proposal Released

DEPARTMENT OF DEFENSE NEWS RELEASE (MARCH 2, 2010)

The Army released last Thursday a request for proposal for the technology development phase of the Infantry Fighting Vehicle being developed under the Ground Combat Vehicle (GCV) effort. The Army has worked extensively with the Office of the Under Secretary of Defense for Acquisition, Technology and Logistics to develop this program. The GCV acquisition program will follow Department of Defense best acquisition practices and be a competitive program with up to three contract awards. The GCV development effort will consist of three phases: technology development, engineering and manufacturing design, and low rate initial production. The Army anticipates awarding the first contracts for the technology development phase in the fourth-quarter of fiscal 2010.

The technology development phase involves risk reduction, identification of technology demonstrations, competitive prototyping activities, and planned technical reviews. Industry will have 60 days to submit proposals to the Army for this development effort.

The Ground Combat Vehicle effort is part of a holistic Army plan to modernize its combat vehicle fleet. This includes incorporating Mine-Resistant Ambush Protected vehicles into the fleet while modernizing current vehicle fleets including Stryker. The first Ground Combat Vehicle will be an Infantry Fighting Vehicle offering a highly survivable platform for delivering a nine-man infantry squad to the battlefield. The GCV is the first vehicle that will be designed from the ground up to operate in an improvised explosive device environment. It is envisioned to have greater lethality and ballistic protection than a Bradley, greater IED and mine protection than an MRAP, and the cross-country mobility of an Abrams tank. The GCV will be highly survivable, mobile, and versatile, but the Army has not set specific requirements such as weight, instead allowing industry to propose the best solution to meet the requirements.

Prior to the release of the RFP, the Army engaged with industry through a series of industry days to inform them of the government's intent for GCV development and gain their feedback from potential contractors about GCV requirements and emerging performance specifications. In response to these initiatives, the Army received significant feedback and insights on requirements, growth, training, test, and the program at large, thereby informing the requirements process and indicating the potential for a competitive contracting environment.

For further information, contact Lt. Col. Jimmie Cummings, Army Public Affairs, 703-697-7591, jimmie.cummings@us.army.mil .

Lockheed to Speed Development of Joint Strike Fighter

AMERICAN FORCES PRESS SERVICE (MARCH 4, 2010)
Jim Garamone

WASHINGTON—Defense Department leaders and Lockheed Martin executives explained to international partners changes that have been made in the Joint Strike Fighter program.

Ashton B. Carter, the department's under secretary of defense for acquisition, technology and logistics, and Robert Stevens, chief operating officer for Lockheed Martin, the prime contractor for the program, explained what measures Defense Secretary Robert M. Gates has taken to right the program.

A department study of the program completed in October found the development phase of the revolutionary aircraft had slipped by 30 months. Gates has made changes that will reduce the slippage to 13 months, Carter said during a phone interview from Dallas today.

Carter was able to report to the partners that the Joint Strike Fighter program now has a realistic plan and "not a blindly optimistic one" or a "fatalistic one."

The under secretary also said the study identified management measures to improve performance over the coming years. "I want to emphasize that this process of independent review and aggressive management to specific milestones will continue," he said.

Carter emphasized that the review turned up no fundamental technological or manufacturing problems with the JSF program and no failure to make military capabilities. He reiterated that the Joint Strike Fighter will be the backbone of collective air superiority for the next generation.

The report showed the JSF program was taking longer and costing more than either the government development office or the contractor had predicted, Carter said. "This schedule and cost trend was unacceptable for the taxpayers of the U.S. and for the other eight nations," he said. "The schedule slip was estimated at 30 months in the development program. The cost of the airplanes had grown since 2002 and that for a variety of reasons the JSF program would breach the Nunn-McCurdy threshold."

The Nunn-McCurdy law requires that Congress be notified of a cost growth of more than 15 percent in a program. It also calls for cancellation of programs for which total cost grew by more than 25 percent over the original estimate.

"We didn't wait for the Nunn-McCurdy paperwork to play out," the under secretary said. "We began to review and restructure the JSF program as though it were already in Nunn-McCurdy breach, and the results of that review and restructuring were subsequently described by Gates."

Gates announced the restructuring of the JSF program—the most expensive acquisition in U.S. military history—in early February. The objective is to restore the schedule in the development program.

"We assessed that this was feasible and was possible to reduce the slip in the development program from 30 months to 13 months and that we could realistically plan on that basis provided we took some immediate management steps," Carter said.

That means procuring one more carrier variant aircraft and additional regular aircraft to conduct flight testing "with the idea of hastening the completion of the program," he said.

The changes also call for development of aircraft software capability.

"All of these steps were directed in the restructuring, and that's the first steps in the effort to buy back some of the slips in the development program," Carter said.

The defense secretary did not believe it was reasonable for the customers to bear all the costs of those actions, and decided DoD would withhold $614 million of the award fee from the contract, Carter said. "We will be adjusting contract structures in the future to align contractor performance to what we need," he said.

The restructuring allows for contractors to adopt a more realistic schedule and production ramp, and gives Lockheed Martin and subcontractors every opportunity "to accelerate production and make affordable aircraft, faster," he said.

Budget Balances Security, Economics, Lynn Tells Congress

AMERICAN FORCES PRESS SERVICE (MARCH 4, 2010)
Lisa Daniel

WASHINGTON—The fiscal 2011 defense budget request includes modest but necessary spending increases in line with President Barack Obama's effort to balance national security with economic needs, the deputy defense secretary told members of Congress today.

The $708 billion request "reflects the administration's commitment to modest, steady, and sustainable growth in defense spending," William J. Lynn III told the House and Senate budget committees in prepared testimony. "Even as the president imposes a spending freeze on domestic agencies, he has made a strategic choice to continue funding modest growth in the military and in other national security agencies."

The request includes $549 billion in discretionary budget authority for baseline defense programs, an increase of more than $18 billion over the current year. Lynn, accompanied by Robert Hale, Pentagon comptroller, said the increase is necessary to increase pay and benefits to match inflation and fund programs such as health-care expenses, which are growing beyond the rate of inflation.

Deputy Defense Secretary William J. Lynn III, right, and Pentagon Comptroller Robert Hale testify at the House Budget Committee on the fiscal 2011 Defense Department budget request in Washington, D.C., March 4, 2010. DoD photo by Air Force Master Sgt. Jerry Morrison

"Because the total cost of sustaining the force is growing faster than inflation, [the Defense Department] needs real growth simply to maintain present force levels," Lynn said. "Sustaining our current size and capabilities is essential to prosecute current wars, meet U.S. commitments worldwide, and conduct unanticipated operations, including relief efforts for natural disasters.

"We cannot afford to make cuts in the size of our force or our operations while we are at war," he added.

The budget reaffirms the commitment to the all-volunteer force, Lynn said, with $138.5 billion for military pay and allowances that includes a 1.4 percent pay raise; $2.2 billion for programs to support wounded warriors; $50.7 billion for medical coverage for 9.5 million beneficiaries; $8.1 billion for family support programs; and $18.7 billion for military construction and family housing.

Lynn noted health care as an area of large growth, but one in which the department also has found savings in the budget. "Health care is one area in particular where the introduction of efficiencies may yield cost savings," he said. "If present trends continue, we can expect health care to consume 10 percent of [the department's] budget by 2015."

The request continues the "rebalancing" of the defense posture for the current wars while preparing for future conflicts by providing more rotary-wing aircraft; hiring 1,500 new helicopter pilots; and increasing funding for intelligence, surveillance, and reconnaissance support, electronic warfare platforms, and special operations.

The budget includes $189 billion for conventional and strategic modernization, including $10.7 billion for continued development of the F-35 Lightning II joint strike fighter and procurement of 42 of the aircraft; $25.1 billion for procurement of new ships, equipment, and research and development; $9.9 billion for missile defense; and $3.2 billion to restructure the Army's Future Combat Systems program.

"These advanced weapons and capabilities are essential to keep us ahead of our adversaries," Lynn said. "We need weapons systems that give U.S. forces an overwhelming advantage in combat, which will both save lives and shorten conflicts."

Another priority, the deputy secretary said, is reforming the acquisition process. The base budget request will allow the department to bolster its acquisitions workforce for the eventual hiring of 20,000 workers to replace contractors. The "in-sourcing" ultimately will reduce costs and operational risks and ensure that every defense dollar is spent wisely, he added.

The ax must fall on programs the department doesn't need or that are costing more than expected, Lynn said. "An important component of acquisition reform is having the discipline to curtail or end unneeded and troubled programs," he told the legislators. The budget request calls for cutting seven major systems: the Next Generation Cruiser, the Navy

Intelligence Aircraft, the Third Generation Infrared Surveillance System, the Net Enabled Command and Control System, the Defense Integrated Military Human Resources System, more C-17 Globemaster III transport jets, and an alternate engine for the joint strike fighter.

Besides the base budget, the request includes $159.3 billion for operations in Iraq and Afghanistan. That includes $89.4 billion for operations, $12 billion for force protection, $3.3 billion to counter roadside bombs, $13.6 billion to grow and train Afghan and Iraqi security forces, $2 billion for coalition support, $1.3 billion for the Commanders' Emergency Response Program, and $21.3 billion for the reconstruction and resetting of equipment.

"Building the capacity for partner nations to support U.S. counterterrorism operations has emerged as a crucial national security priority," Lynn said.

Army Debuts New Tool to Defeat IEDs

ARMY NEWS SERVICE (MARCH 9, 2010)

DETROIT ARSENAL, WARREN, Mich.—Soldiers spoke and the Army listened. Officials will debut a new device designed to combat the deadly threat of improvised explosive devices during a Florida conference later this month.

The U.S. Army Research, Development and Engineering Command's tank and automotive center will publicly display its newest technology for the first time at the National Defense Industry Association's Ground Robotic Capabilities Conference and Exhibition March 16-18 in Miami, Fla.

The TARDEC will display military robots in an industry-wide push for interoperability during the event. To highlight the theme "Dual Role of Robotics Technologies–Public and Private Sector," the conference will bring warfighters, first responders, and government and industry technology professionals together to address increased responsiveness to user needs.

The center will introduce Tanglefoot, a device designed to be attached to more than 8,000 currently fielded robots. Tanglefoot combines an interface kit, wire rake, and mast to create a simple, low-cost, universal tool to assist the defeat of IEDs and route clearance.

Improvised explosive devices are the most deadly threats to United States and coalition forces today and are responsible for nearly two-thirds of casualties in Iraq and Afghanistan, according to the Defense Manpower Data Center.

The conference's focus includes how the best ideas from the military, automotive industry, and NASA can be shared.

"The Tank Automotive Research, Development and Engineering Center plans to take advantage of the conference to spur cooperation between government agencies and private partners," said Dave Thomas, TARDEC Intelligent Ground Systems associate director. "This year, TARDEC will unveil a technology that was directly requested from our warfighters as well as focus on how we can get the entire robotic community working together on communications challenges."

The TARDEC develops and integrates the right technology solutions to improve current force effectiveness and provide superior capabilities for the future force.

Army officials said the Tanglefoot initiative demonstrates the importance of collaborative efforts. "The teaming of TARDEC and the Robotics Systems Joint Project Office made this possible, said Maj. Chad Harris, assistant project manager for maneuver support systems.

"The Tank Automotive Research, Development and Engineering Center rapidly developed and tested the device, then transferred it to us for fielding. This collaboration helps the warfighter get the best equipment he or she needs to be effective."

At the show, TARDEC will also demonstrate how multiple robots can be operated by a single controller. While TARDEC will demonstrate this capacity with PackBot and Omni Directional Inspection System robots and an iPod Touch, an iPad—or similar device—will be leveraged to show this awesome capability and how diverse systems can work together to better optimize and integrate future technology.
Media contact: Tank-Automotive Research, Development and Engineering Command Public Affairs at dami_pao@conus.army.mil.

General Leads Effort Against IEDs

Ian Graham
Emerging Media, Defense Media Activity

WASHINGTON, March 12, 2010 – Improvised explosive devices are one of the most deadly threats to servicemembers deployed to Iraq and Afghanistan. Though they're often as unsophisticated as a homemade pipe bomb, they have forced the U.S. military to dedicate entire units to finding and destroying them.

Army Lt. Gen. Michael L. Oates, director of the Joint IED Defeat Organization, discussed the effort to provide comprehensive counter-IED support to warfighters, as well as

The U.S. Army will unveil the newest technology to assist soldiers in finding and disarming improvised explosive devices during the National Defense Industry Association's Ground Robotic Capabilities Conference and Exhibition in Miami, Fla., March 16-18.
Courtesy photo

the organization's direct support of the surge in Afghanistan, during a "DODLive" bloggers roundtable today.

"Although [the organization is] only four years old, a lot of great things have been done," he said. "But we have a ways to go yet in ensuring that we can provide the equipment and training that's necessary for our soldiers as the enemy adapts its techniques and procedures."

Oates said he has seen a number of differences between Iraq and Afghanistan concerning the IED threat. Two to three years ago in Iraq, the issue was military-grade weaponry being sold and used in IEDs, with fairly sophisticated detonation equipment that Oates said he believes came from Iranian sources. Since then, the threat has dwindled.

In Afghanistan, the volume of IEDs has about doubled, he said, and the casualty numbers reflect that growth. The quality of explosives is much lower—they're largely homemade explosives, centered on potassium chlorate and ammonium nitrate fertilizers with "very rudimentary" detonation mechanisms such as trip-wires, pressure plates, or remote control.

"In Afghanistan, we've seen evidence of support coming from Pakistan, so we're working with the Pakistani government to shut out these shipping routes to keep the fertilizers away from bomb makers," Oates said.

But whether the explosive is a military-grade bomb or something made in a garage with household products, both have still proven a very dangerous threat to troops on the ground.

"The effectiveness is still good in both [Iraqi and Afghan IEDs]," Oates said. The fertilizer bombs are still effective because they provide a unique challenge for detection, he added.

Because of the nature of fertilizer bombs in Afghanistan, the government there has banned ammonium nitrate-based products. No such fertilizer is produced in Afghanistan, so in theory, the ban will help to weed out bomb-makers from people who use ammonium nitrate products legitimately.

"But the enemy, as you know, adapts, and we have to stay ahead of the game," Oates said. "As ammonium nitrate becomes more difficult to employ against us, they'll shift to some other forms. We're already anticipating and preparing for those contingencies."

The Pakistani government has discussed placing restrictions on ammonium nitrate and potassium chlorate, since their country has been the primary source for the chemicals. But the same chemicals used in IEDs in Afghanistan are used for mining, farming, road construction, and in products like safety matches.

"This is a very complex challenge, because a flat-out ban on these chemicals will affect commercial industry," Oates said. "A lot of these homemade explosive chemicals are used for very benign purposes."

Oates said getting the resources needed to Afghanistan has been a problem of physics—a lack of enough room on transport vehicles to carry all of the equipment requested. It hasn't been a critical problem, he said, but it is a limiter.

Congress has allowed the Joint IED Defeat flexibility for spending, Oates said, a benefit the Services as a whole don't enjoy. As the warfighters see a new threat, the organization can respond as rapidly as possible to get troops more suitable equipment and training.

"There is a tyranny of time to acquire, produce, and transport [those resources], so nothing happens overnight," Oates said. "But I can assure you we are in the 'urgent response' mode, as often as we can push industry and training to make [quick response] happen. Our business is very serious; it's a matter of life and death."

Graham is assigned to the Defense Media Activity's emerging media directorate.

Official Announces Plans to Curb Fighter Program's Cost

American Forces Press Service (MARCH 12, 2010)
Jordan Reimer

WASHINGTON—The Defense Department will require a shift to a fixed-price contract in its negotiations with Lockheed Martin for the initial production phase of the F-35 Lightning II joint strike fighter, a defense official said here today in a briefing at the Pentagon.

The department also will conduct an internal analysis of what the full production cost should be to better negotiate with the contractor, said Ashton B. Carter, under secretary of defense for acquisition, technology and logistics.

Taken together, Carter said, these measures will reduce costs of a program that has met with significant production delays and cost overruns since its inception in October 2001.

"The secretary believed—and this is a principle that's important—that the investments needed to get back the development schedule oughtn't to be made solely by the taxpayer—that the responsibility for that should be shared, and it is being shared, with the contractor," Carter said.

The joint strike fighter—the most expensive acquisition in U.S. military history—will replace a wide range of aging fighter and strike aircraft for the Air Force, Navy, Marine Corps, and eight international partners. The F-35 is "the heart of the future of our tactical combat aviation," Defense Secretary Robert M. Gates said in a visit to a Lockheed factory in August. "The importance of this aircraft cannot be overstated."

The U.S. military ordered a total of 2,443 jets, with an additional 730 purchased by the eight other countries. Initially projected to cost around $50 million per aircraft, the current estimate is about $80 million to $95 million each, in inflation-adjusted dollars.

These two new initiatives come on top of Gates' announcement last month that he was withholding $614 million in performance fees from the contractor due to the program's setbacks.

With today's announcements, the department is moving away from a cost-plus arrangement, which reimburses companies for their expenses in addition to providing an extra payment to guarantee them a profit. Instead, in switching to a fixed-price structure, the department and the contractor will set the price beforehand, and the final payment will not depend on the total amount of time or resources expended to complete the project.

"[The secretary] directed that in order to ensure discipline in the transition from development to production," Carter said.

The director of defense procurement and acquisition policy will conduct the "should-cost" analysis for the final production rollout of the F-35 aircraft. Carter stressed that it's important for the department to have its own estimate of what the program's cost should be to better determine a negotiated price, rather than relying solely on the contractor's figures.

Ashton B. Carter, under secretary of defense for acquisition, technology and logistics, holds a Pentagon news conference March 12, 2010, to talk about the acquisition reforms being instituted to keep the joint strike fighter program on track and affordable.
DoD photo by R.D. Ward

"We will be looking at the cost structure of [the joint strike fighter] in all its aspects—assembly, parts supplies, staffing, overhead and indirect costs, cash flows, contract structures, fees, and life-cycle costs," Carter said in a prepared statement before the Senate Armed Services committee yesterday.

Taking immediate steps to save costs is particularly necessary, not only to benefit the taxpayer, but also because the program is in jeopardy of crossing the Nunn-McCurdy threshold, a law that requires that Congress be notified of a cost growth of more than 15 percent in a program. Nunn-McCurdy also calls for cancellation of programs for which total cost grew by more than 25 percent over the original estimate.

Rather than wait for the program to cross the Nunn-McCurdy line, the defense officials began to review and restructure it as though it was already in Nunn-McCurdy breach, Carter explained.

Carter said he understands that these new initiatives will not be easy for Lockheed and its subcontractors to accommodate, but he underscored that these decisions are crucial to moving the program forward in a way that is acceptable to the military and the American public.

"The emphasis must be on restoring a key aspect of this airplane when the JSF program was first launched: affordability," he told Congress.

Army Developing New Ground Combat Vehicle

ARMY NEWS SERVICE (MARCH 16, 2010)
Kris Osborn

The Army—in close cooperation with its industry partners who have 60 days to respond to the Request for Proposal—aims to produce competitive prototypes by 2015 and production vehicles within seven years by 2017.

"It is important to note that within the RFP you are not going to see a weight requirement. What you will see and what we

are emphasizing is the Ground Combat Vehicle has to be a versatile vehicle. This will probably be one of the most versatile vehicles that the Army has ever designed. If you look at survivability or armor protection, we are going to have a modular design, meaning we can have scalable armor kits so the commander can decide how protected that vehicle needs to be for the mission," said Vice Chief of Staff Gen. Peter Chiarelli. "We are giving commanders the capability to tailor survivability for a given situation."

The Army Acquisition Executive, Dean G. Popps, credited the under secretary of defense for acquisition, technology and logistics, the DoD's defense acquisition executive, and his team for their assistance in getting the Army to the RFP release date as planned. "Dr. Ash Carter, his staff, and OSD key players provided critical insights, guidance, and strategies during the Material Development Decision Defense Acquisition Board [MDD-DAB] process and during RFP peer review. Their efforts and oversight were exceptional," said Popps.

"We have learned from the Future Combat System program —over 40 technologies—and we have incorporated that inside of a Ground Combat Vehicle construct. FCS—plus what we know today from eight years of war—has resulted in the release of an RFP for Ground Combat Vehicle. We could not have done this without industry; this is a partnership between our Army and industry to make sure we do the right things—to make sure we put this capability in the hands of the warfighter," said Lt. Gen. Bill Phillips, military deputy to the assistant secretary of the Army for acquisition, logistics and technology.

Industry will work with the Army to examine potential material solutions for the vehicle's requirements, which seek to manufacture an unprecedented blend of protection, mobility, and emerging technologies in a single, highly survivable infantry carrier.

The initial phase of the Ground Combat Vehicle Program is being executed by the Program Executive Office for Integration, primarily because of the residual expertise inherent in that PEO from the Manned Ground Vehicle research and development era. At an appropriate time, in the coming 12-14 months, the current plan calls for the program to move to PEO-Ground Combat Systems in Warren, Mich. All of the Army's PEOs report to the Army Acquisition Executive.

The Army plans to award up to three technology development contracts by the fourth quarter of this year, marking a roughly 27-month period in which to test and mature subcomponents and other material elements of the designs prior to the prototyping phase in 2015, Army officials said.

"The [Ground Combat Vehicle] will address capability gaps we have identified from eight years of war—such as mobility for our soldiers both inside and outside cities [and] improved information sharing for both mounted and dismounted soldiers while on-the-move. The Ground Combat Vehicle will be required to carry an entire infantry squad in one vehicle and protect it with sufficient space and electric power to accept network and other improvements as they occur," said Lt. Gen. Michael Vane, director of Army Capabilities Integration Center, Fort Monroe, Va.

Approaching the vehicle's development in an incremental fashion—thus allowing for it to adjust to and incorporate technological change—will increase the Army's ability to innovate and respond to the fast pace of change anticipated on the battlefields of today and tomorrow, Vane said.

Alongside formally releasing the RFP, the Army is also concurrently conducting an Analysis of Alternatives in order to ensure that its plans for the Ground Combat Vehicle represent the best solution for the future, Mehney added.

"We are making sure that the [Ground Combat Vehicle] is the right material fit for the requirements we have been given. The Analysis of Alternatives is taking place at the same time as the RFP. It is our intent to complete the AoA by late summer 2010," he said. "This will precede the contract award, so if the analysis of alternatives says you need to do something differently than have a new vehicle program, we can respond to that prior to the contract award."

ATEC Teams Assess Effectiveness of Systems in Combat

Army News Service (March 16, 2010)
Mike Cast

ABERDEEN PROVING GROUND, Md.—The Army Test and Evaluation Command has been deploying teams to the Iraq and Afghanistan theater to assess new systems under combat conditions.

Included among the most recent systems that ATEC Forward Operational Assessment Team 13 has assessed are the Mine-Resistant, Ambush-Protected vehicle, along with a variety of mine-roller systems and unmanned aerial systems.

One of the systems assessed by the team was the Self-Protection Adaptive Roller Kit, or SPARK, which is used in front of tactical vehicles to set off a buried improvised explosive device before the vehicle is on top of it. SPARK rollers have

Army Maj. Melinda Kalainoff, left, a member of the Army Test and Evaluation Command's Forward Operational Assessment Team 13, gets a briefing on the Puma unmanned aerial system from Army Spc. Josh Coryell at Forward Operating Base Kalagush in Afghanistan. Courtesy photo

saved numerous lives in theater, according to T. R. Masino, the Developmental Test Command's coordinator for the FOA program.

This team also recently assessed the Sky Warrior Extended Range Multi-Purpose Unmanned Aerial Vehicle and the Hunter Viper Strike.

"The feedback from FOA Team 13 has been well received by troops in theater, although they found some things that needed improvement," Masino said. "The FOA teams continue to be relevant and have been right at the forefront in evaluating the latest things the Army needs to know about."

The first such team deployed to Kuwait in the early stages of the war in Iraq to assess the performance of Army vehicles that soldiers were driving more rapidly in theater than expected when tested, to keep from becoming easier targets than they would be at slower speeds. Since then, 13 ATEC forward operational assessment teams have deployed to the area of operations for both Afghanistan and Iraq, with the critical mission of assessing the performance of everything from counter-IED technologies to unmanned aerial and ground systems that can gather intelligence on enemy activities.

Deployed teams stay in theater for several months, although some team members have stayed there for as long as a year, and their mission may require working six or seven days a week and sometimes workdays as long as 14 hours or more.

Maj. Samuel Ancira of the Operational Test Command said the workweek he and his colleague in Kuwait have had to put in has been "hectic."

"The typical workday is approximately 12-14 hours, six days a week, with Sunday being a half day consisting of six hours of work after church services," he explained.

A large number of the forward-deployed team members have been ATEC soldiers, but many civilian ATEC employees have volunteered to participate in the deployments from ATEC's three primary test and evaluation organizations: the Army Evaluation Center, the Developmental Test Command, and the Operational Test Command. Several of the team members said they don't mind the rigors of the mission because they know how crucial it is to the soldiers facing the threat of serious injury or even death, day in and day out.

ATEC's Col. Brian Dosa, commander of the 13th FOA at Camp Victory, emphasized the importance of FOA team

members working as the "mouthpiece of the soldier." In that role, they have obtained critical feedback from soldiers and Army units that can lead to weapon-systems improvements; changes to tactics, techniques and procedures; and adjusted test-and-evaluation procedures back in the United States at ATEC's various test facilities and ranges.

One result of the team's deployment is a stateside test-and-evaluation program that as closely as possible reflects the realities of operations in theater.

Soldiers on the receiving end of ATEC's forward support very much appreciate what the command is doing for them, said Capt. Brian Hartigan of the 37th Engineer Battalion, 20th Engineer Brigade, a unit that is normally stationed at Fort Bragg, N.C.

"I was impressed on a daily basis with the level of commitment that these guys showed, not just for their specific project, but to supporting the guys on the ground," he said of FOA Team Speicher. "Not only were they willing to go outside the wire and put themselves in harm's way, they were hungry for the real-time data that our soldiers were providing them."

"The ATEC forward operational assessment team here in support of OIF is essential to the collection process of (determining) what works in theater and what does not," said Command Sgt. Maj. Robert Liles of the 49th Military Police Brigade, a unit assigned to Camp Liberty. "It allows decision makers at the highest level to capture what the maneuver commanders see as a relevant force enabler and what is not. Ultimately, it's the soldiers that pay the price of the good-idea guy with no experience of ever being on the ground."

Some of the systems under assessment during ATEC's 13th FOA team rotation include mini-robots for clearing explosive ordnance; systems designed to protect soldiers or to support intelligence, surveillance, and reconnaissance operations; enhanced armor protection for various heavy wheeled vehicles used regularly in the combat theater; along with a variety of unmanned aerial systems.

"Generally speaking, soldiers are pleased with the equipment they have received," said Maj. Melinda Kalainoff of the Operational Test Command of her stint with one of the teams in Afghanistan. "They were eager to tell us about their equipment, and they are never at a loss about their opinions and recommendations."

"To get the ground truth, you need to get on the ground and talk directly to the user, the soldier, and that is what we do. We were speaking with a captain about how fast the acquisition system has to work to meet the needs of the soldiers, and he said, 'The Army really tries to make things better.' He gave the example of the Puma [unmanned aerial system] as well as all the cold-weather clothing items that soldiers have received," Kalainoff said.

The data FOA team members collect from soldiers include written feedback, face-to-face recorded interviews, telephone interviews, and slide presentations. Some participants in the forward operational assessment program have gone on missions with units in their area to get a real-time look at how systems are operating.

Kalainoff said there were times when problems with equipment in theater surfaced while testing was taking place simultaneously back in the United States. That made it possible to modify the test plan to address the emerging issue, she said.

"In other cases, the problem may be such that additional testing is initiated by a theater-level concern," Kalainoff added. "The FOA team can serve as a liaison to link the combatant commander in theater with the tester in the continental United States and facilitate information flow."

"We were providing data no less than on a weekly basis as part of an assessment," added Sgt. 1st Class Dedrick Waterford, one of Kalainoff's colleagues from ATEC's Operational Test Command. "Our efforts there directly affect the test and evaluation process by gathering additional information that maybe was omitted during rapid fielding initiatives that brought new equipment to soldiers sooner."

Cast writes for the U.S. Army Developmental Test Command.