NATO Ministers Discuss 'Smart Defense' Initiative

AMERICAN FORCES PRESS SERVICE (OCT. 9, 2012) Jim Garamone

WASHINGTON—NATO defense ministers held discussions in Brussels today on the alliance's "Smart Defense" initiative and how to provide security during tough financial times, NATO Secretary General Anders Fogh Rasmussen said.

Rasmussen briefed reporters on the defense ministers' consultations, in which Defense Secretary Leon E. Panetta is participating.

"This is one of the most urgent challenges facing our alliance today," Rasmussen said, noting that during May's summit in Chicago, the alliance's heads of state and government endorsed the program for the NATO militaries to work together more closely.

"Today, we took stock of the progress we have made, and we discussed the work which lies ahead," he said.

Because NATO nations must work together to develop and field technologies and capabilities that one country alone cannot afford, the summit yielded a list of more than 20 multinational projects "that will give allies more capabilities, more effectively," Rasmussen said.

Smart Defense includes projects related to use of intelligence, surveillance, and reconnaissance assets, and it also looks toward improving joint logistics and maintenance. Other projects stress better force protection and better training.

Since the Chicago summit, Rasmussen said, NATO has kept up the Smart Defense momentum, agreeing to two more projects. "Over the coming months, I would expect us to agree to around 10 more, and dozens more ideas are under consideration," he added.

The effort reaches across the alliance, and all are involved. The secretary general stressed that the European allies are playing a central role in Smart Defense. "European countries are involved in every one of the 24 projects we have set in motion so far," he said. European nations are leading two-thirds of the projects, and one-third of the projects are purely European, he said.

The interest shows European allies are aware of their security responsibilities and are looking for smart ways to strengthen the alliance, the secretary general said.



U.S. Defense Secretary Leon E. Panetta, right, and NATO Secretary General Anders Fogh Rasmussen pose for a group photo with other NATO defense ministers and members of the North Atlantic Council in Brussels, Oct. 9, 2012.

DoD photo by Erin A. Kirk-Cuomo

Land, Sea Roles Changing, Dempsey Says

AMERICAN FORCES PRESS SERVICE (OCT. 10, 2012) Claudette Roulo

WASHINGTON—While the Navy's aircraft carrier fleet is sized correctly to carry out its mission, land forces are facing "significant changes," Army Gen. Martin E. Dempsey, chairman of the Joint Chiefs of Staff, said here today.

"At this point in time, I believe we've got what we need," Dempsey said in response to questions following his speech at a National Press Club luncheon.

After the Budget Control Act of 2011 imposed about \$500 billion in defense spending cuts over 10 years, he said, the Defense Department had to examine its strategic positions.

"Strategy that's not sensitive to resources is nothing more than rhetoric," he said. "There's always this balance between ends, ways, and means. So the means changed. We had to take a look at the ends and the ways."

Part of that strategy includes a rebalancing of forces in the Asia-Pacific region, he said.

The Pacific is largely a maritime domain, the chairman said. "You've got to go a long way before you find anything with dirt on it," he noted. This makes the Navy and its capabilities crucial to the region, he said, at the same time they're doing a "remarkable" job of meeting defense needs in the Gulf.

In addition, the Navy has successfully balanced that mission with the maintenance requirements inherent to a nuclear fleet, he continued, but there's always the question of what's next.

"Is it something smaller? ... Is it something submersible?" he asked, noting the Navy's asymmetric advantage under the sea.

As U.S. strategy evolves, the Defense Department will attempt to answer those questions while continuing to examine the makeup of the fleet, he said, but at least until 2020, he believes the carrier fleet is what the United States needs. As the chairman of the joint force, Dempsey said, he likes having four different Service chiefs around the table. The Navy's role in the future force, he added, is just one part of a larger picture.

The idea that land forces are no longer necessary is a bad one, the chairman said. "I'm not in the camp that says, 'You know, you'll never fight another significantly big land conflict," he added, noting that the nature of land combat is changing.

When he entered the Army during the Cold War, Dempsey said, it was built by assembling the large organizations first—the corps and divisions. "And then we said to ourselves, 'If we need something less than that, we'll disaggregate it," he said.

"I think that the era we're entering now requires us to think exactly the opposite," Dempsey said. "That is to say, we need to think about empowering the squad—the 10-man group of individuals with everything we can empower them with—and then figure out how to grow it from the bottom up."

That will take land forces in a different direction, he said, not just in the way they're designed, but also in the way they're equipped and trained.

"There are some significant changes coming ... in the way we think about building our land component," Dempsey said. "And I would suggest it's not from the top down, but rather from the bottom up."

New Strategy to Posture TRANSCOM for Post-War

AMERICAN FORCES PRESS SERVICE (OCT. 12, 2012) Donna Miles

WASHINGTON—A new, five-year strategic plan unveiled today at U.S. Transportation Command will posture it to ensure the military maintains its global mobility edge entering a post-war future, Air Force Brig. Gen. John E. Michel, TRANSCOM's chief change and learning strategist, told American Forces Press Service.

Air Force Gen. William M. Fraser III, TRANSCOM's commander, shared the most sweeping strategic planning effort in the command's 25-year history today with his staff at Scott Air Force Base, III., and, via teleconference, with all of TRANSCOM's components and partners around the globe.

Calling the plan "a vision for smart change," Fraser said its bottom line is to enhance a capability unique to the United States: "the extraordinary ability to rapidly project national power and influence—anywhere, at any time."

Fraser praised his organization for its hard work and dedication that has sustained the force over the past decade of conflict. But looking ahead, he emphasized that TRANSCOM will remain the crucial, although largely unsung, driving force behind everything the military does.



Air Force Gen. William M. Fraser III, commander, U.S. Transportation Command, rolls out his new five-year strategy Oct. 12, 2012, at Scott Air Force Base, III. The strategy is the most comprehensive and collaborative in the command's 25-year history. The heart of the new strategic plan is to ensure the United States can deploy, sustain, and redeploy its forces as effectively and efficiently as possible.

U.S. Transportation Command photo by Bob Fehringer

"TRANSCOM is the secret sauce of every other combatant command," said Michel, who led the strategy development effort. "We make others go. We are kind of invisible, but you can't get to the fight, you can't be sustained in the fight, and you can't return to the fight unless we are there to make it happen."

As the United States draws down forces in Afghanistan and "pivots" toward the Asia-Pacific, that applies whether "the fight" involves humanitarian assistance and natural disaster responses, civic-action engagements, or kinetic operations, he said.

Posturing for that future, particularly in light of fiscal uncertainties, took some serious soul-searching at TRANSCOM, Michel explained. He and his team spent nine months developing the new strategy—the command's first to span more than a single year. They reviewed every process and procedure, he said, leaving no stone unturned as they challenged basic assumptions about how the command operates and allocates its resources.

It also required an analysis of what the future will look like and what demands are likely to be put on TRANSCOM. "The expectation of TRANSCOM comes down to, we have to be able to project national power and influence. We provide the mobility ... that makes that happen, " Michel said. "So an effort like this asks, 'What are the conditions of the future and how can we go farther, faster, and more efficiently than we have ever done before?""

Toward that end, the new strategy identifies four basic priorities.

- Preserve readiness capability through both organic and commercial assets. Michel called ensuring unparalleled global mobility TRANSCOM's "no-fail business," regardless of the nature of the mission it supports. "It is what we do in response to anything that happens in the world where America wants to have a presence," he said.
- Guaranteeing access to information technology to promote good decision-making. "In the future, the question becomes: 'How do we get people the information we can, in a timely fashion so they can make smart choices?'" Michel said. "I don't care if they are in Afghanistan, in Washington, or down the hall. We are in a world awash in data. So how can we help turn that data into something meaningful?"
- Improve TRANSCOM's business model, better aligning resources and processes to support the mission. The new

strategy introduces "a whole new corporate governance process," Michel said, with a commitment to create efficiencies and reduce operating costs. "We need to come up with up with a reinvigorated process ... to improve the internal work we do, to make sure we continue to be world-class in delivering what others expect of us," he said.

 Develop "enterprise-focused professionals" within a work culture focused on customer requirements. The biggest strength within TRANSCOM isn't its aircraft, ships, and moving parts, Michel emphasized. It's the people behind them. "So we are in the process of creating a culture that focuses on serving others," he said. "It all begins and ends with people."

"Transformation of this magnitude will not be easy," Fraser recognized in releasing the new strategy, "especially given the rapidly changing operating environment and the challenging fiscal landscape.

"But we clearly recognize change is necessary," Fraser continued. "We will build on past successes and position ourselves to reliably deploy, sustain, and redeploy your nation's forces more effectively and efficiently—all while keeping a keen eye on improving collaboration and creating a climate of trust, innovation, and empowerment throughout our workforce."

Working toward priorities identified in the new strategy, TRANSCOM will shape itself to better provide that support, regardless of what command or organization requires its services, Michel said.

"I don't care if I am doing that in Africa or I am doing that in Guam," he said. "People want to be able to reach TRANS-COM. They want to really quickly be able to say what they need and have TRANSCOM move into action."

Ensuring that process goes as smoothly, efficiently, and cost-effectively as possible is the heart of the new strategic plan, he said. It provides a blueprint that leverages the command's strengths and identifies areas for improvement to better translate customer requirements into "the most appropriate, cost-effective modality to achieve the effect they want," he said.

"We have to be much more deliberate and thoughtful about how we position ourselves for the future. That's why it was important for TRANSCOM to undertake what we are proud to say is the most comprehensive strategic planning and change effort ever," Michel summarized. "With this plan, we have a clear understanding of where we are today," he said, "and we are pretty compelled about where we need to go tomorrow."

DoD Develops Energy Strategy for Future Force

AMERICAN FORCES PRESS SERVICE (OCT. 17, 2012) Claudette Roulo

WASHINGTON—The Defense Department is developing an energy strategy that will carry it forward for decades, Sharon E. Burke, assistant secretary of defense for operational energy plans and programs said today at the Naval Energy Forum.

The challenge is to build a force that will serve the U.S. well into the 21st century—a future that isn't easy to foresee, Burke said.

Taking the long view is a "tough business," she said, but this is an especially interesting time for the nation and the Defense Department as policymakers figure out how they want to build the future force.

"It all comes down to mission and money," she said. That means determining whether energy plans can help accomplish a mission better and more reliably, and whether they can save money.

Afghanistan is the source of several lessons for energy planning, Burke said.

"The lessons that we're learning there have resonance for the future," she said.

DoD uses 50 million gallons of fuel in Afghanistan every month, Burke said, noting that the department can do better.

"Efficiency is not a dirty word," Burke said. "Efficiency and effectiveness can go together. ... I know warfighters need what they need to get the job done."

But it takes a huge amount of fuel to field a modern military force, in addition to what's expended to protect the movement of that fuel. And while contested environments are inherently risky, Burke said, the U.S. doesn't yet do enough to control the way it uses fuel—something that's changing.

Increasingly, the military is taking fuel off the battlefield through more energy-conscious operational planning, concepts of operation, specifications and requirements of major platforms, and the way equipment is used, Burke said. The military is extremely reliant on petroleum-based fuels

and lubricants and batteries, Burke said. Alternative fuels

receive a lot of attention, she noted, but new technologies like propeller coatings, solid-state lighting, and gas turbine refinements are contributing to the efficiency of the force.

The U.S. can have a more effective force when it needs less fuel in the first place, Burke said, due to lowered risk provided by transporting less fuel and reduced operational costs.

Economy of force is going to matter in the long view, because Afghanistan has been just a small taste of what anti-access/ area denial requires of the military. And that was against a relatively ill-equipped foe, she said. "It's not going to get any easier."

Energy considerations are becoming part of the acquisition process, she said, noting "the supply side matters."

"When you're talking about the tactical edge," she said, "with these small combat outposts, moving the fuel to that last tactical mile is the most dangerous, the most difficult, and sometimes, the most tactically operationally significant."

Finding ways to make those outposts less dependent on the supply line, while ensuring forward-deployed personnel still have the energy they need to operate, is a very worthy effort, Burke said. Solar power, she added, is one method being tested to give troops a way to operate without the burden of being tied to a logistical system.

Efficiency and supply line concerns are important, Burke said, but building capability into the future force is essential. "Once we field a force, our ability to improve it, to make it fundamentally better ... is limited," she said. DoD can do some very important things, like rapid fielding of new equipment and refurbishing older equipment, but that isn't the most efficient means of solving problems.

"We have to get into how we actually plan, require, and acquire," Burke said. "We have to get to a point where we're not making convenient assumptions that we'll have perfect access and perfect allies and perfect supplies and everything will arrive where we need it, when we need it ... because that's not the world that we live in now, and it's not the world that we're going to be living in for the long view.

"I think we need to be challenging ourselves more," she added. "We need to see energy as the enabler that it is—as a critical enabler that you can't take for granted."

Air Force Releases RFP for Next Search and Rescue Helicopter

AIR FORCE NEWS SERVICE (OCT. 22, 2012)

WASHINGTON—The Office of the Assistant Secretary of the Air Force for Acquisition announced today the posting of the Combat Rescue Helicopter (CRH) Request for Proposal (RFP) to the Federal Business Opportunities website, signaling the official launch of this high-priority Air Force acquisition program.

The RFP defines an integrated, capability-based, best-value approach. It also includes specific factors for assessing the capabilities and risks inherent in each offer and identifies four goal requirements: hover performance, combat radius, payload, and cabin space.

The primary mission of the CRH air vehicle is to recover isolated personnel from hostile or denied territory; it will also execute humanitarian missions, civil search and rescue, disaster relief, casualty and medical evacuation, and non-combatant evacuation operations.

The program will replace the Air Force's aging HH-60G Pave Hawk helicopter fleet with new air vehicles, training systems, and product support elements as required for the personnel recovery mission.

The CRH requirement is for 112 aircraft. The Air Force plans include leveraging in-production air vehicles and training systems while integrating existing technologies to deliver this new combat capability.

Prior to this announcement, officials from Air Combat Command, Department of the Air Force and Office of the Secretary of Defense participated in a rigorous acquisition review process for CRH. The review ensured the source-selection process is executable as written, reduces risk, and will deliver the warfighter a product that meets the requirement at an affordable price.

More information can be found at https://www.fbo.gov/spg/USAF/AFMC/ASC/FA8629-12-R-2400/listing.html.

Industry Partnerships Key to Mobility Strategy, Official Says

AMERICAN FORCES PRESS SERVICE (OCT. 25, 2012) Claudette Roulo

WASHINGTON—The Defense Department's partnerships with industry, particularly in the mobile realm, are essential to its future success, the department's deputy chief information officer for command, control, communications and

computers, and information infrastructure said here yesterday.

"I think that's what's going to make or break us in the future," Air Force Maj. Gen. Robert E. Wheeler told attendees at the 2012 Security Innovation Network conference.

DoD's plans for mobility, spectrum policy and programs, and national leadership command capabilities all are interconnected. he said.

Mobility—the ability to perform the department's functions in various locations—hinges on the effective use of the wireless spectrum across all of DoD's systems, Wheeler said. This includes planning for the president's order to free up 500 megahertz of the spectrum, as well as future technological changes. National leadership command capabilities tie back to mobility as well, he added, because the president and other senior leaders need the ability to make decisions while on the move, anywhere in the world.

"They're all tied together," he said, "and there's a thread that goes between them all."

Wheeler said that DoD's agility—its ability to change quickly in response to technology—worries him.

"This is an area that DoD is getting better at, but we're still not perfect yet," he said. "Our acquisition programs are known throughout the world to be large, ... but not to be very fast."

That's something that has to change, especially in regard to "tech-heavy" areas, Wheeler said. "We're trying to make sure that the way we write our programs and build them [includes] that ability, the agility, to move and to change quickly, unlike in the past."

The need for speed must be balanced with security, he said, and DoD is working with industry to accomplish that from the beginning of the acquisition process. "No matter which way you look at this, we have to have cybersecurity dialed in from the beginning," he added. "It has to be dialed in at the right level and dialed in at the right speed."

DoD also has to be able to move more quickly in the mobility arena, he said. Mobility is an important part of being able to keep up with change, he added, noting that decisions now are made at a much higher rate than in the past, and DoD is going to become much smaller in the future.

"What do we have to have? Access to information any time, anywhere, and on any device," Wheeler said. Without communications, DoD can't conduct operations, he said.

DoD released its mobile device strategy earlier this year, and will release the implementation plan in the next few days, the general said. The bottom line, he said, is that DoD's approach to mobile devices provides cost savings to the nation, increases communications security, and jumps the productivity curve.

DoD has an "intense" interest in adapting commercial mobile technology, Wheeler said, noting that mobility pilot programs are ongoing throughout the department. All of them use mobile devices to communicate in one of three ways: off the network, or via commercial Internet; secure but unclassified; or classified.

Each of the three "bins," he said, has unique security requirements and will have its own application store where users can download mission-related apps.

The Pentagon has issued an open request for proposals to build the mobile applications store, Wheeler said. Applications submitted to the store will be approved, disapproved, or returned for revision within 90 days, he added.

"The key to us is streamlined certification," Wheeler said. "If somebody says [certification will take] six months to a year, it's useless. ... Things change too dramatically. Even 90 days is probably a little bit too long."

Mobility also is tied to spectrum policy, the general said.

The president has asked for the federal government and commercial industries to clear 500 MHz of spectrum to use for economic development, he said. That could enable broadband companies to put a 4G network, for example, across the nation, including in rural areas, he added.

A change like that would have an extremely significant economic impact on the country, Wheeler said, similar to the impact of GPS and other breakthroughs.

"I would argue that it would transform the nation," the general added.

But vacating spectrum is costly and time-consuming, Wheeler said, as it requires equipment replacement and new acquisition strategies. And because U.S. allies have bought equipment that frequency shifts would affect, it also has international implications. Those allies may not be able to

simply change to a different frequency, because their home country's spectrum also may be crowded, he explained.

"In the future, we have to have the ability to go to multiple bands with our equipment," Wheeler said, and to be costeffective, that ability needs to be built into the planning process from the beginning.

Spectrum crowding isn't strictly a negative issue, the general said. "Scarcity is the mother of all inventions," he said, noting that new ways to use the communications spectrum have been developed that probably wouldn't have been had there been enough spectrum to go around.

For example, he said, some new technologies allow a frequency to be shared, rather than owned by a single user who may not use its full capacity. In the short term, Wheeler said, DoD is shifting the focus to sharing frequencies instead of clearing and auctioning off frequencies.

Long-term spectrum plans include exploring the concept of a national spectrum research facility and developing a long-term spectrum strategy, the general said.

DoD is working on increasing system flexibility, operations agility, and refreshing and updating the regulatory framework, Wheeler said.

"While we're working very quickly to do this, we also have to have the regulatory requirements—to include laws—that allow us to do some of that sharing," he said. But that can be a slow process, he added, so the regulatory process has to become faster and work in tandem with the acquisition process.

Long-term Defense Department strategy has to connect to the national and commercial strategies, Wheeler said. "Connecting those dots is something that we have been trying to do for about the past decade correctly, and I actually think we're getting close," the general said.

Industry can help by understanding the budget and political environments, Wheeler said. "It's an environment where, obviously, all of the budgets are restricted right now ... as our nation comes out of the economic slump," he said.

Despite what many view as a negative economy, Wheeler said, he sees a lot of opportunity for development. "Watching all the innovation [coming] out of scarcity in the Department of Defense ... shows me that there's probably more opportunity now than there's been in many years to fix some of the problems that have been difficult in the past."

Success will consist of a partnership between government and industry, Wheeler said, noting that many companies are finding out they need the same levels of cybersecurity and innovation as DoD does.

"If you come in and make it more secure, cheaper for the department overall, and help us with productivity, you're going to get in the door, because that's what we need," the general said. "It's good for the taxpayer, it's good for the nation, and I don't care what agency you're going into—they're going to need your help."

DoD Official Encourages Private-sector Technology Innovation

AMERICAN FORCES PRESS SERVICE (OCT. 25, 2012) Amaani Lyle

WASHINGTON—The Defense Department has stepped up efforts to encourage private-sector innovation and its adaptation into the federal government, a senior Pentagon official said here yesterday.

John R. Mills, DoD chief information officer special assistant for cybersecurity, described the department's outreach strategy in a panel discussion during a Security Innovation Network workshop.

"Our objective is to accelerate the intake of innovation here," Mills said. "We have to learn to deliver the best possible national security to the American people in a world where we no longer necessarily drive technology."

Much progress, he said, is now housed in the private sector, prompting the Defense Department, the Services, and agencies such as Defense Information Systems Agency, Defense Advanced Research Projects Agency, and National Security Agency to create critical entry points for small-business innovators into the vast cyber constellation.

"We are totally involved in taking that in for national security, and ... there are things we can share outwardly," Mills said. "We have to operate at the speed of innovation here."

Defense officials have many ways to identify innovation in a large environment and connect that innovation to opportunity, Mills said. One of those ways involves the incessant pursuit of the next "cyberwave," he said, adding that the military aims to harness the efforts of national and DoD laboratories, and with interagency partners.

Part of the task will be to catalog the array of outreach efforts for technology, procurement, and cyber while creat-

ing a framework within the Defense Department to conduct cyber pilot programs and focus on metrics.

DoD officials, Mills explained, will seek strategies from small-business owners, whether their products or services are holistic or "piece part." The Pentagon also has obtained legislative support to help in codifying ventures such as cyber pilot programs so they have meaning and definition in regulation, Mills said.

Phillips Outlines Aviation Modernization Priorities

ARMY NEWS SERVICE (OCT. 31, 2012)

Kris Osborn

WASHINGTON—Lt. Gen. Bill Phillips praised the Army's industry and academic partners while outlining a handful of key aviation modernization priorities, Oct. 17, at an American Helicopter Society event in Arlington, Va.

Phillips, the principal military deputy, Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology, or ASA(ALT), spoke to AHS about the purpose of Army acquisition and commitment of aviators currently sustaining a high op-tempo mission rate in Afghanistan.

Phillips also delineated a handful of key Science and Technology, or S&T, and acquisition efforts and successes fundamental to Army Aviation. They included the multi-year procurement programs for the CH-47 Chinook F and Black

Hawk M helicopters, ongoing Armed Aerial Scout demonstrations, and the Future Vertical Lift program aimed at engineering a fleet of next-generation aircraft.

"Army Aviation is one of the most deployed assets in the Army. Our op-tempo is very high and we are sustaining an 84 percent mission capable rate. We are now up to 5.5 million manhours and still flying in Afghanistan. Everyone at the highest levels of the Army recognizes the value of aviation to the fight," Phillips told an enthusiastic crowd of AHS members.

Phillips made a point of praising the Army's industry partners involved in the Chinook and Black Hawk multi-year procurement programs, citing the cost savings to the Army and the increased stability they bring by helping to sustain the industrial base. In particular, the CH-47 F multi-year contract has achieved \$449 million in savings thus far, and the UH-60 Black Hawk M multi-year has reached more than \$1.18 billion in cost avoidance.

"One thing that has really helped Army Aviation is having multi-year programs we can show our stakeholders. Today, [the Office of the Secretary of Defense] holds them up as a model for executing a multi-year strategy for a major platform. These allow our industry partners to have long-term strategies to help build much greater capability," Phillips said.



Lt. Gen. William N. Phillips speaks to the American Helicopter Society about aviation modernization, Oct. 17, 2012, in Washington, D.C.

U.S. Army photo

Phillips also praised the ongoing Future Vertical Lift/Joint-Multi-Role Technology Demonstration effort, an S&T program designed to engineer, build, and deliver a next-generation helicopter with vastly improved avionics, electronics, range, speed, propulsion, survivability, operating density altitudes, and payload capacity. The Future Vertical Lift, or FVL, program seeks to begin designing "demonstrator" aircraft by 2013 and conduct a first flight in 2017 as a series of first steps toward developing a next-generation fleet of helicopters by 2030.

"Part of the message is that the Army and [the Office of the Secretary of Defense] are committed to Future Vertical Lift," Phillips said, citing the Strategic Plan for Future Vertical Lift, which was recently signed by Ashton Carter, deputy secretary of Defense.

Phillips mentioned a DoD-wide push for greater energy efficiency within the context of the FVL discussion, specifying the importance of the Improved Turbine Engine Program, or ITEP, to engineer a next-generation, more fuel-efficient helicopter engine. The ITEP program, which will also contribute to the Apache and Black Hawk modernization efforts, will provide a reduced maintenance burden, reduced production and maintenance costs, more power, and an increased high-altitude capability.

Within this discussion of next-generation capabilities, Phillips also cited the recent success of the Apache Block III aircraft's Initial Operational Test & Evaluation, or IOT&E, wherein the aircraft performed a new level of Manned Unmanned Teaming, or MUM capability with Gray Eagle Unmanned Aerial System, or UAS, participating in the exercise. Level IV MUM, demonstrated last spring at the AH-64 Apache Block III IOT&E, Fort Irwin, Calif., allows Apache pilots to not only view video feeds from nearby UAS, but also control the flight path and sensor payload.

"The Apache pilot can sit on the ground and call up video from a UAS that is flying over the target area. Before they ever take off, they can sit there and know exactly what the target looks like in real time. This saves them fuel and time and helps them get the intel they need before they start their mission," Phillips explained.

Phillips also cited the importance of developing and fielding aircraft survivability technologies designed to protect helicopter crews from incoming enemy attacks. In particular, he mentioned efforts to field the Common Missile Warning System—an advanced flare system able to divert approaching enemy fire and Advanced Threat Infrared Countermeasures, or ATIRCM—an infrared laser-"jammer" able to throw

incoming missiles off course. Phillips also cited a now indevelopment next-generation, more lightweight ATIRCM-like capability called Common Infrared Countermeasures, or CIRCM.

Phillips said academic, industry, and Army partners from TRADOC, G8 (programs) and G3 (operations) all work together to further important common goals.

"Army Aviation is doing remarkable work, thanks to the efforts of people who come together with various backgrounds to blend requirements, resources, acquisition, and sustainment. If you look at what aviation has done with its portfolio, they have been incredibly successful," he said.

In conclusion, Phillips paid tribute to the heroism and sacrifice of Chinook pilot Chief Warrant Officer 2 Bryan J. Nichols, 7th Battalion, 158th Aviation Regiment, who lost his life earlier this year when his helicopter came under attack in Afghanistan. Phillips cited a letter from Nichols' 10-year-old son Braydon, honoring and remembering his father's service.

"Braydon is proud of his dad. That is what we are all about—and it is all of us together," Phillips explained.

Osborn is with the Office of the Assistant Secretary of the Army (Acquisition, Logistics & Technology).

Upgraded Apache Helicopter OK'd for Production

PEO AVIATION PUBLIC AFFAIRS OFFICE (NOV. 1, 2012)

WASHINGTON—The Defense Acquisition Board decision regarding full-rate production for the Apache Block III helicopter program was announced Oct. 24, by Army officials at a briefing in Washington, D.C.

Additionally, Apache project manager Col. Jeffrey Hager confirmed that the Apache Block III is being re-designated as an AH-64E model.

The announcement event was attended by 20 media members representing national and industry-related publications.

According to the Apache Project Office, the Defense Acquisition Board, or DAB, granted approval for full-rate production, or FRP, in August and the Air Force communicated the model designation change in a September memo to the Army. Actions are under way to begin implementation of the E model designation for subsequent use by the military and industry.

"The DAB's decision really secured Apache production for the next several years," Hager said. "We've got fiscal re-

quirements, but securing that production through a full-rate production decision was just huge for this program. It's probably the single largest decision that we've had since Block I's and Block II's went into production. It's that monumental."

One of the other key components, Hager said, that resulted in the DAB decision is the fact that the Block III had been designated an ACAT C program.

"We're no longer a D program and therefore don't need DoD oversight. Our Army acquisition executive, Ms. Heidi Shyu, is in charge of the Apache program and the development production that we have for Block III as we go forward from this point. So that was a big designation for us," Hager said.

The designation of the E model, he added, accurately recognizes the aircraft's advancements including an improved drive system, increased engine capabilities, technologically advanced composite main rotor blades, and sensor enhancements.

"At the end of the day, the only real measure of how well a system is performing falls to the user and how easy or difficult the aircraft is to maintain," said Col. John Lynch, Attack/Reconnaissance TRADOC capabilities manager. "Basically, the Block III exceeded expectations that were laid out on the sustainment side."

Upgrades to the aircraft over previous models include advanced rotor blades and significantly increased aircraft handling, performance, and agility at higher altitudes. Situational awareness is enhanced with electro-optical and infrared sensors for the operational benefit of aviators and battle-field commanders.

"The Apache fleet continues to do very well in Afghanistan and Kuwait," Lynch said. "It's maintained an over 80 percent readiness rate while averaging over 60 flight hours per month. We're almost at one million combat flight hours with the Apache."

First delivered in October 2011, Apache Block III helicopters are in production at the Boeing Company in Mesa, Ariz. Fielding of the AH-64E will occur over the next decade.

The Apache Block III helicopter, unveiled in October 2011, has been re-designated the E model. The Apache Project Office announced the name change during an Oct. 24, 2012, press conference in Washington, D.C.

Pentagon Moves to Refine Acquisition Process, Official Says

AMERICAN FORCES PRESS SERVICE (NOV. 5, 2012) Army Sgt. 1st Class Tyrone C. Marshall Jr.

WASHINGTON—The Defense Department continues to do all it can to enhance the defense acquisition process, improving the Pentagon's buying power and maximizing value for taxpayers' money, a senior Pentagon official said today.

Frank Kendall, undersecretary of defense for acquisition, technology and logistics, shared his latest efforts to improve the process as he spoke during the 31st Annual Government Contract Management Conference here.

"The essence of [my] job has always been about getting as much value as possible for the taxpayers," he said. "[Former Defense] Secretary [Robert M.] Gates saw the kind of coming storm with the deficit problem that we have and realized early on that defense was going to have to do its share."

In response, Kendall said, he and his predecessor, Ashton B. Carter, who now serves as the deputy defense secretary, developed the 'Better Buying Power' initiative just over two years ago and have been implementing its principles ever since.

"We're going to move from them onto what I'm going to call 'Better Buying Power 2.0," he said. "It's one of several things I'm doing to kind of move the acquisition process."

Kendall explained he refers to the entirety of the acquisition enterprise when he speaks of acquisition.

"It includes technology, it includes logistics; so my idea of acquisition is the total set of things," he said.

Acquisition, he added, involves not just buying new equipment and equipping the nation's forces, "but also sustain[ing] the force over time. So the readiness side of it is very much a part of this."

The undersecretary explained some of the efforts he has undertaken to enhance the defense acquisition process, including updating the flagship guidance for defense acquisitions.

"I'm re-writing [DoD] 5000.02, the DoD instruction that covers the acquisition system and how we do business," Kendall said. "What I found is that there had been a lot of laws that had been passed that needed to be integrated into the document."

Secondly, "the document really lays out ... one thing called the acquisition system," Kendall said.

"There are so many different types of products that we buy, and so many different ways to structure programs around the type of product that you're buying, that I really felt that we needed something that emphasized those different ideas," the undersecretary said.

The new guidance, he said, will include several models for structuring programs. Kendall noted DoD 5000.02 was 20 pages long when he began his career and has now ballooned to about 200 pages.

"Another thing I'm doing—it'll be probably around the first of the year—is putting out a report on the performance of the acquisition system," Kendall said. "I have a very strong belief that we need to be data-driven in what we do.

"I have a sign outside my door that says 'In God We Trust, all others must bring data,' he continued. "We're going to try to take a look ... at what actually works. Try to look at the data and try to understand what actually works and how much it works."

Kendall noted the report, which he described as "the beginning of a long journey," will start to put some quantitative analysis and data analysis into the defense acquisition equation.

"It's about putting it out in the public domain so everybody that thinks they're an expert on acquisition ... can go back and look at this data and see if there's anything in the history that tells us what works and what doesn't," he said.

Defense Officials Preview 'Better Buying Power 2.0' Initiative

AMERICAN FORCES PRESS SERVICE (NOV. 13, 2012) Karen Parrish

WASHINGTON—Deputy Defense Secretary Ashton B. Carter today unveiled a proposed new phase of the Defense Department's "Better Buying Power" initiative that since 2010 has shaped the department's acquisition arm to "do more without more."

Carter told reporters during a Pentagon briefing that when he, as undersecretary for acquisition, technology and logistics, and then-Defense Secretary Robert M. Gates announced the first round of "efficiencies" aimed at trimming defense spending, Gates "foresaw, correctly, that the days of ever-increasing defense budgets were coming to an end." Better Buying Power, introduced in September 2010, was the acquisition contribution to the efficiencies initiative, Carter said.

"It was directed at the \$400 billion that the department spends annually on goods and services, ... to get more capability for the warfighter and more value for the taxpayer by obtaining greater efficiency and productivity in defense spending—what economists call 'productivity growth,'" he explained.

Now, after planning for a \$487 billion decrease in spending over the next decade, the department will incorporate some lessons its members have learned since 2010 when it rolls out the final version of Better Buying Power 2.0 early in 2013, Carter said.

The deputy secretary said hundreds of examples exist of Defense Department acquisition executives putting the Better Buying Power principles into practice. "Each of these examples shows what we can achieve if we rededicate ourselves to acquisition best practices," he added.

Carter then handed the briefing off to Frank Kendall, undersecretary of defense for acquisition, technology and logistics. Kendall noted the department's proposed plan for the updated initiative will be open for review and comment for two months before a final version takes effect.

Kendall described the seven broad focus areas for the new defense buying initiative:

- Achieve affordable programs;
- Control costs throughout the product life cycle;
- Offer incentives for productivity and innovation in industry and government;
- Eliminate unproductive processes and bureaucracy;
- Promote effective competition;
- Improve tradecraft in acquisition of services; and
- Improve the professionalism of the total acquisition workforce.

Kendall noted the new version includes some 36 initiatives grouped under those seven headings. In some cases, he said, they replace the original 23 initiatives in five focus areas.

"It turns out that defense acquisition is a pretty complicated subject," he noted. "And there aren't easy, simple solutions that are going to ... reform acquisition and make everything ... better overnight with one or two policy changes."

Lack of productivity—both in government's bureaucratic processes and in industry "cycle time"—is one complicated area the acquisition chief said he thinks a lot about, and



Deputy Defense Secretary Ashton B. Carter offers opening remarks as he introduces Frank Kendall, undersecretary of defense for acquisition, technology and logistics, to brief Pentagon reporters about the Defense Department's "Better Buying Power 2.0" initiative, Nov. 13, 2012.

DoD photo by Glenn Fawcett

Sequestration would trigger an additional \$500 billion in across-the-board defense spending cuts over the next decade if Congress fails to agree on an alternative.

"It's a horrible way to take money out [of the defense budget]," he said. "It really flies in the face of everything we're trying to accomplish here."

U.S. to Locate Key Space Systems in Australia

AMERICAN FORCES PRESS SER-VICE (NOV. 14, 2012) Cheryl Pellerin

PERTH, Australia—Defense Secretary Leon E. Panetta and Australian Defense Minister Stephen Smith have agreed to place two key space systems in Australia.

which carries over from the original 2010 initiative. Cycle time, he said, translates into "how long it takes us to get products to the field" — and he added that he's "very unhappy" with the answer.

"It's taking much too long, as far as I'm concerned," Kendall said. "And I have several efforts under way to try to understand what the root cause of that is." Delays can occur at many stages, he noted—in setting and changing requirements, in testing, and even in production.

"Is industry not as agile as it once was? There are a number of possible causes there, and it's probably some combination of them all, together. ... But I would definitely like to reduce cycle times," he said.

The new effort brings new approaches, but the same aim, to defense acquisition as 2010's Better Buying Power initiative, Kendall said: to give troops fighting the nation's wars the best equipment, and to get good value for every taxpayer dollar.

Kendall said he sees results from the two-year-old effort, but he echoed defense leaders' statements for months past when he warned that such progress, and any plans to achieve deliberate cost savings, will wither if the Budget Control Act's sequester mechanism takes effect in January.

One system, an Air Force C-

band space-surveillance radar, will move from Antigua in the West Indies to Western Australia in 2014. It will track space assets and debris, increase the security of spacebased systems, and increase coverage of space objects in the Southern Hemisphere.

The other system is an advanced U.S. space surveillance telescope designed and built by the Defense Advanced Research Projects Agency. In Australia, the system will help to leverage space surveillance capabilities for both nations, officials said.

The United States and Australia also are discussing establishing a combined communications gateway in Western Australia. The system would give operators in both nations access to wideband global satellite communications satellites.

"All of that represents a major leap forward in bilateral space cooperation and an important new frontier in the United States' rebalance to the Asia-Pacific region," Panetta said during a news conference after a series of meetings here today during the 2012 Australia-United States Ministerial Consultations.



U.S. Defense Secretary Leon E. Panetta (right) and Australian Defense Minister Stephen Smith sign a memorandum of understanding in Perth, Australia, Nov. 14, 2012.

DoD photo by Erin A. Kirk-Cuomo

The C-Band mechanical tracking ground-based radar is useful in space surveillance and can identify space objects in low Earth orbit. It can accurately track up to 200 objects a day and can help to identify satellites, their orbits, and potential anomalies according to a fact sheet about the system.

When the radar is relocated to Australia, it will be the first low-Earth-orbit space surveillance network sensor in the Southern Hemisphere. The new location will give needed southern and eastern hemispheric coverage that will lead to better positional accuracies and predictions, the fact sheet states.

The system will provide a critical dedicated sensor for the U.S. Space Surveillance Network, the main system that the United States and its partners rely on to detect, track, and identify objects in space.

C-band radar also can help in tracking high-interest space launches from Asia.

A senior U.S. defense official said the United States will get the system up and running once it is in Australia, then will train Australians to operate the system.

Relocating and getting the system running will cost about \$30 million, and after that will cost \$8 million to \$10 million a year to operate, the official said.

The second system, the DARPA space surveillance optical telescope, will offer an order-of-magnitude improvement over ground-based electro-optical deep space surveillance, or GEODSS, telescopes in search rate and the ability to detect and track satellites, officials said.

Existing telescopes can't provide a full picture of objects such as microsatellites and space debris. The SST gives a wider field of view and can better detect and track small objects at deep-space altitudes—about 22,000 miles above Earth's surface—associated with geosynchronous orbits.

A geosynchronous orbit is an orbit around Earth that's about 23 hours, 56 minutes and 4 seconds around, matching the planet's rotation period. For an observer on the ground, an object in geosynchronous orbit returns daily to the same position in the sky.

The SST telescope achieved first light in February 2011 and then went through an extensive checkout period and fine-alignment phase that readied the system for a demonstration beginning in October 2011. The DARPA test and evaluation period was completed in August.

The telescope is now based in New Mexico, but moving it to Australia will allow it to cover a more densely populated

region of the geostationary satellite belt, according to a fact sheet.

New DoD Space Policy Addresses Safety, Security, Access

AMERICAN FORCES PRESS SERVICE (NOV. 21, 2012) Cheryl Pellerin

WASHINGTON—The new Defense Department space policy, updated to reflect the fast-growing use and sometimes misuse of the space domain, addresses issues of safety, sustainability, and security in space for the 21st century and beyond.

The policy, signed Oct. 18, 2012, by Deputy Defense Secretary Ashton B. Carter, follows the release in 2010 of President Barack Obama's National Space Policy, and in 2011 of the National Security Space Strategy—the first such strategy to be cosigned by the defense secretary and the director of national intelligence.

DoD's space policy also reflects the 2012 DoD Strategic Guidance, which acknowledged growth in the number of spacefaring nations and threats.

According to the guidance, the United States will continue to lead global efforts with allies and partners to assure access to and use of the global commons of space by strengthening international norms of responsible behavior and maintaining interoperable military capabilities.

"Space capabilities have long provided strategic national security advantages for the United States," Carter said in a statement. "This updated space policy," he added, "institutionalizes the changes the department has made in an increasingly constrained budget environment to address the complex set of space-related opportunities and challenges."

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

In an interview with the Pentagon Channel and American Forces Press Service, Dr. John F. Plumb, acting deputy assistant secretary of defense for space policy, described the policy's main points.

"One is that the Department of Defense will deter attacks on our space systems and the systems of our allies, and [the policy] lays out some ways we're going to do that," Plumb said.

Methods to deter disruptions or attacks against space-based systems, according to the policy, include supporting the development of international norms of responsible behavior related to the space domain, building coalitions to enhance collective security, enhancing the resilience of the U.S. space enterprise, and being able to respond to an attack on U.S. or allied space systems using all elements of national power.

The policy also "makes a declaration of how the United States will view interference with our space systems," the acting deputy assistant secretary said, adding that such interference would be seen as an infringement of U.S. rights and would be "irresponsible in peacetime and during a crisis could be escalatory." Plumb noted, "The policy states this very clearly and it's a message we want to make sure people understand."

One of the international norms of responsible behavior will target a growing problem for spacefaring nations—space debris.

"Today there are 60 countries operating in space [and] there are thousands of pieces of debris, pieces of [derelict] rockets or old satellites ... flying around in space," he said.

According to the NASA Orbital Debris Program Office, more than 21,000 pieces of orbital debris larger than 10 centimeters exist in orbit, along with 500,000 smaller pieces and more than 1 million pieces smaller than 1 centimeter.

"We need to have an international system of norms of responsible behavior for operating in space to mitigate debris," Plumb said. "That's something we're working on and it's something the strategy points toward."

Generally, the policy identifies how DoD will promote international cooperation and commercial partnerships, drive changes within DoD space architectures and acquisition processes, and work to shape the space environment.

Saving money on expensive space assets is another goal of the department, Plumb said, and working with allies and commercial partners can help accomplish this. The Defense Department has begun to work with commercial space companies to reduce department costs and to help energize the industrial base.

"We [also] need to make sure that U.S. companies are able to compete fairly for international contracts," Plumb added, referring to satellites and many systems, subsystems, parts, and components that are controlled by the U.S. government

for security reasons, but that already are being sold commercially by companies around the world.

In April, for example, officials from the Defense and State departments released a report that urged Congress to move communications and some remote-sensing satellites off the tightly controlled U.S. Munitions List and into the commercial enterprise.

The policy also directs DoD to expand international cooperation in space matters, Plumb said, which "allows you to leverage capabilities together so instead of having to build your own system you can use somebody else's system."

He added, "It also buys you a sense of collective security. If you're operating as a coalition in space, you have more partners relying on the same assets. An attack on those space assets by an adversary would no longer necessarily be against you, but against a coalition."

As an example, during a trip to Perth, Australia, last week, Defense Secretary Leon E. Panetta announced that the United States would place two key space systems in Australia.

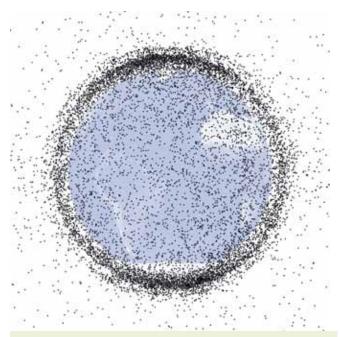
One system, an Air Force C-band space-surveillance radar, will track space assets and debris, increase the security of space-based systems, and increase coverage of space objects in the Southern Hemisphere.

The other system is an advanced U.S. space surveillance telescope designed and built by the Defense Advanced Research Projects Agency. In Australia, the system will help to leverage space surveillance capabilities for both nations, officials said.

DoD also must be ready to mitigate the effects of attacks on its space systems, Plumb said. One way to do that, spelled out in the policy, is to plan for resilience in space systems, he added.

"Resilience means being able to survive an attack," the acting deputy assistant secretary said, and it means strategically distributing space capabilities among different satellites rather than putting many on one satellite.

"If that [one] satellite goes down," he said, "whether it's due to a solar flare or an attack or bad wiring, we don't want to



Orbital debris, or space junk, is any man-made object in orbit around the Earth that no longer serves a useful purpose. This image was made from a model used to track debris in low-Earth orbit.

NASA image

lose all these mission capabilities. These things are very expensive, so resilient architecture would be more distributed."

The second part "of mitigating the ability of an adversary to attack us would be to make sure that we can operate effectively on the battlefield even if our space capabilities are being degraded," Plumb added.

The growing threat to U.S. and allied space systems, he said, is real.

"Other nations and nonstate actors are developing direct ascent anti-satellite weapons, jammers, and ground-based lasers, all designed to interfere with or destroy satellites," Plumb said.

"We need to be prepared and enhance our resilience so these types of capabilities don't prevent us from operating in space," he added. "So we need to move forward with the way we operate in space, for future conflicts in particular. This space policy gives us a good pathway forward."