

**AMERICAN FORCES PRESS SERVICE
JOINTNESS VITAL IN TRANSFORMING
TRAINING (MARCH 3, 2004)**

K.L. Vantran

WASHINGTON—Transforming joint training in the Defense Department is a continual journey, Paul W. Mayberry, deputy undersecretary of defense for readiness, said at the Defense Transformation Efforts and Opportunities Conference here last week.

“We are a nation at war,” he said. “Because of our successes in these theaters, some have questioned the need to transform, but in fact it is the conditions from these wars that have only reinforced our necessity to transform the way that we train.

“Today’s world is complex and filled with uncertainty and surprise,” he added. “We no longer fight against known enemies with standing armies, but rather against faceless networks of terrorists. These adversaries try to exploit our weaknesses and they’re agile enough to change their tactics on a daily basis.”

Today’s training, said Mayberry, must train commanders and staff at the strategic, operational, and tactical levels. “We must train forces from top to bottom,” he said. “(Forces) must be able to adapt plans and structures even while en route to theater. We must deliver training on demand as opposed to according to pre-set schedules.”

The challenge and fundamental question, said Mayberry, is “How do we prepare our forces to be successful under arduous conditions against both known and unknown threats often operating in non-traditional environments and employing tactics that morph daily?”

Mayberry said capabilities-based training is the cornerstone for training transformation. “We cannot prepare for everything; we cannot do it all,” he said. “We must have fundamental training systems that are sufficiently dynamic as well as responsive to changing and emerging requirements. (We) also have to be able to prepare and deliver our forces anywhere and any time.”

Three new joint capabilities support the training transformation vision: Joint Knowledge Development and Distribution Capability, Joint National Training Capability, and Joint Assessment and Enabling Capability.

The Joint Knowledge Development and Distribution Capability must be able to address “lifelong learning needs

of the total force,” said Mayberry. “Our leaders must think intuitively ‘joint.’ They must be ‘joint’ earlier in their careers. We must try to achieve a mindset of being ‘born joint.’”

It also is important to prepare forces collectively, said Mayberry. “We need to build a robust, live, virtual, and constructive training environment that will provide training at the tactical as well as operational levels of war.” The JNTC seeks to leverage the experiences and excellences of the Services’ major training centers, he added.

“(There is a) need to focus on measurement—to understand what we have done,” continued Mayberry. “Are we, in fact, having capabilities that will enable success? What is the return on our investment? Are we truly being transformational, or are we just simply re-labeling things that we had on the books?” This, he added, is the focus of the Joint Assessment and Enabling Capability. The goal is to enhance and measure joint performance, said Mayberry.

“Our ability to train and educate must be focused on the ultimate customer—the combatant commander,” he added. “(We must) provide an adaptability that will allow us to quickly turn to different and emerging training requirements.”

**AMERICAN FORCES PRESS SERVICE
(MARCH 22, 2004)
PARTNERSHIP INTEGRATES, IMPROVES
COMBAT SUPPLY SYSTEM**

Gerry J. Gilmore

WASHINGTON—The Defense Department’s top transportation and supply organizations have joined forces to fix a combat supply system that at times didn’t perform well during Operation Iraqi Freedom.

As U.S. and coalition forces raced toward Baghdad last year, some units reportedly experienced a shortage of “bullets and beans”—an alarming state of affairs in the deadly serious business of waging war.

The overseas logistics problems have been fixed, in part, through application of more integrated communications between supply procurers, transporters, and customers, two senior military logisticians told journalists during a March 18 press conference at Defense Logistics Agency headquarters at Fort Belvoir, Va.

Transformation of the U.S. military’s transportation and supply systems was well under way before Operation

Iraqi Freedom, explained Army Maj. Gen. Robert T. Dail, director of operations at U.S. Transportation Command headquarters at Scott Air Force Base, Ill. Dail, who was in Illinois, participated in the joint DLA-TRANSCOM press briefing through video-teleconference technology.

Today's use of radio-frequency-identification-tagged supplies, Dail pointed out, has improved the tracking of shipped supplies and reduced logistics confusion. During the Persian Gulf War more than a decade ago, many crated goods shipped to Kuwait had to first be opened to determine what they contained before being sent to front-line units.

However, Dail said, the recently fought Iraq War revealed communication problems between front-line combat units and their rear-line suppliers. Better integration across the supply and transport chains was needed, the general said.

Before and during the recent Afghanistan and Iraq conflicts, DoD policy called for TRANSCOM to deliver supplies and troops into overseas combat theaters, leaving responsibility to reorder and transport supplies for front-line units to combat commanders, Dail said.

"We would turn that (responsibility) over to a combatant commander," Dail explained, "and he would take care of the onward movement and supply of those forces." In Iraq, though, that system was sometimes found wanting, and the Army launched a 'white paper' investigation into the matter.

"What we have now is a rigid (logistics) support system that does not work well in a flexible, changing environment," Army Lt. Gen. Claude V. Christianson, the Army Staff's logistics chief, noted in an article published in the Jan. 15 issue of *Aviation Week's* "Net Defense."

Addressing digital communicators at a conference here Jan. 21, retired Navy Vice Adm. Arthur K. Cebrowski, director of the Pentagon's Office of Force Transformation, noted that supply problems in Iraq resulted, in part, because logisticians use separate information and command and control systems apart from those that warfighters use. "The fact of the matter is that there is dysfunction from both of those things, and that has to change," Cebrowski, DoD's chief transformation proponent, declared.

As part of initiatives to improve the military's supply system, Dail said TRANSCOM was designated as DoD's overall supply distribution process manager. TRANSCOM,

Dail said, promptly formed a partnership with DLA, and logistics technicians were sent to join forward-deployed division headquarters staffs. Now, Dail explained, "We have deployed our experts into overseas areas, armed with information technology—the latest in (logistics management) systems—and they are providing a real-time visibility of the requirements that our military members need to support their operations overseas."

That change, Dail asserted, has produced "a tremendous improvement" in how the military provides supplies and services to deployed soldiers, sailors, airmen, and Marines.

"No longer are we just looking from the national level at providing forces and delivering goods to overseas airports and seaports," Dail noted, "but now, we're looking at delivering them and tracking them all the way to forward locations, and northern locations in Iraq, far-forward locations in Afghanistan."

Army Maj. Gen. Daniel G. Mongeon, director of DLA's logistics operations, echoed Dail's assertions during the press briefing, noting the DLA-TRANSCOM partnership "brings together complementary capabilities and skills essential to effectively and efficiently supporting our military services."

The Army, Navy, Marines, Air Force, and Coast Guard, Mongeon noted, "rely on DLA to provide a huge variety of items," including food, fuel, medical supplies, clothing, construction materials, and more than 90 percent of weapon systems repair parts.

In mid-January, a Deployment and Distribution Operations Center (DDOC) was set up in Kuwait to facilitate U.S. Central Command's supply and personnel distribution systems, Mongeon noted. Army Brig. Gen. John C. Levasseur, director of DLA's reserve mobilization office, left for Kuwait in February to assume directorship of the DDOC from Air Force Brig. Gen. Brad Baker. And, Mongeon said DLA plans to establish a forward-deployed supply depot to better support and improve CENTCOM's logistics operations.

The partnership with "supply-chain integrator" DLA, Dail pointed out, leverages TRANSCOM's "awesome capability" to deliver forces and material around the globe, armed with greatest and latest information technologies to support our professionals.

**ARMY NEWS SERVICE (MARCH 24, 2004)
TRANSFORMATION ON TRACK, ARMY
LEADERS TELL SENATORS**

Sp. Lorie Jewell, USA

WASHINGTON—Senior Army leaders gave emphatic assurances that efforts to transform the Army and properly equip the current force fighting in Iraq and Afghanistan are at top speed during their recent testimony to the Senate Armed Services' Subcommittee on Airland.

Sens. Jeff Sessions (R-Ala.) and Joseph Lieberman (D-Conn.) said that while they support the Army's transformation plans, they are concerned about the cost of developing future combat systems while concurrently restructuring and modernizing the current force.

"I am concerned that current operations will create resource challenges that can adversely affect transformation," Sessions said.

Claude Bolton Jr., assistant secretary of the Army for acquisition, logistics and technology, said the money being spent on changing the current force into a future force is closely managed. Leaders are mindful of the need to strike a balance between what they need for the future and current needs with available resources, Bolton said.

Bolton added that since he took his position three years ago, 30 programs have been cut.

"I think we've done that well, based upon feedback I've gotten from the Congress, industry, and the Army," Bolton said. "And that is to put funds where we need it for the current force as well as the future force."

Army vice chief of staff Gen. George Casey acknowledged "the pendulum has swung" from the future back to the current, but stressed that Army leaders are planning and implementing change with minds focused on maintaining program stability for the future combat systems. He added that the Army fully intends to stick to its budget.

With all of the activity going on—325,000 soldiers deployed in 120 countries combined with the mobilization of more than 150,000 National Guard and Army Reserve soldiers, Casey said it may not seem like the best time to undertake fundamental change across the Army.

"But we think it's just the opposite," Casey said. "It's an opportunity we can't pass up."

The Army is working toward three main goals, Casey said: reduce stresses on the force, improve capabilities, and transform into a more versatile, agile, joint, and expeditionary force in the current decade.

The major initiatives to make that happen, he added, are rebalancing the active and reserve component forces to improve strategic flexibility; reorganizing combat formations into modular brigade-based units to improve self-sufficiency and facilitate force packaging; and a force stabilization program to increase unit readiness, reduce personnel turbulence and make life more predictable for soldiers, units, and families.

"What we are doing now, we intend to set us up for the future force," Casey said.

Casey said the fiscal year 2005 budget request will give combatant commanders the land power capabilities they need to fight the global war on terror, facilitate homeland defense, and continue to meet worldwide commitments. It also covers the transformation program, base operations, and 15 critical recapitalization systems. The budget request does not fund ongoing missions in Iraq and Afghanistan or recovery from those missions, the general added.

Lieberman said he is worried the cost factor won't allow the Army to do everything it's aiming for. He noted that while the Army received \$42 billion of the \$65 billion in fiscal year 2004 supplemental appropriations, it still had to deal with close to \$3 billion in war-related requirements that were not funded. In the Army's fiscal year 2005 budget request, the unfunded priorities list totals \$6 billion, which includes \$2.4 billion for modularity requirements and \$1.2 billion for fiscal year 2004 reset shortfalls, Lieberman said.

Additionally, Lieberman said he has heard estimates of nearly \$50 billion for the Army's expected supplemental request for fiscal year 2005.

"The resultant shortfall could have a serious impact again on Army transformation funding in the future," Lieberman said, "and potentially force the Army to delay, or at worst, terminate the future combat systems in order to meet current force requirements."

Bolton said the Army is responding quickly to meet current needs, namely making sure soldiers have the best protection, equipment, and technology available to fight the enemy.

As an example, soldiers in Afghanistan and Iraq now have special inserts called SAPI (Small Arms Protective Inserts) plates that go into their flak vests for added protection. Just over a year ago, the Army was getting about 8,700 sets a month. By April 2003, monthly production more than doubled to 19,000. Current production is at 25,000 sets per month, with a total of more than 163,000 in theater. The goal is 840,000 sets, Bolton said.

Along with that, production of new up-armored Humvees stood at 20 to 30 vehicles a year ago. That number currently stands at 185 per month, with production expected to rise to 220 by May. Officials expect to have 4,149 of the vehicles, with the intention of continuing production to reach 5,000 in theater, Bolton said.

The rapid fielding initiative equipped 27,000 soldiers last year with arm and kneepads, and different sights for night vision and weapons. This year, 120,000 soldiers will get them, Bolton said.

Resource shortfalls are not putting the Army behind in moving forward with future force plans, Bolton stressed, describing the Future Combat System as the most complex undertaking the Defense Department has ever done. In breadth of scope, he compared it to the Manhattan Project in the 1940s and the space program of the 1960s.

The Future Combat System will include unmanned vehicles on the ground and in the air; mobile robots with arms that can fire mortars; a non-line-of-sight cannon; lighter vehicles that can fit into a C-130 cargo plane; and blue force tracking—the ability to network sensors from all of those items to give soldiers the ability to know where the enemy is and what it's doing.

Some of that is already being used to some degree, the leaders said. The Stryker infantry carriers, on the ground now in Iraq, can be transported in the C-130. One of the first things done in Afghanistan to reduce risk to soldiers, Bolton said, was to put robots with Web cams in caves to show whether there were weapons inside. Another advancement was finding a way to open locks without breaking them while searching Afghan homes for weapons, reducing burdens on citizens who could not afford to replace locks in the event no weapons were found.

The subcommittee, to include Sens. Elizabeth Dole (R-N.C.) and Hillary Clinton (D-N.Y.), also heard from Maj. Gen. John Curran. He directs the Futures Center, the lead agent on developing the Army's future force. Work there enables soldiers to fight better by identifying gaps in ca-

pabilities and when possible, infusing—or “spiraling”—future abilities into the current force.

While much of the scope of the center's work involves reorganization, equipment, weapon systems, technology, and a joint mindset, Curran stressed that the soldier is at the forefront of planning and research.

“The human dimension is and will remain the most critical dimension of war,” Curran said. “The soldier is indispensable to the joint team. When we enhance the soldier's lethality, protection, and situational awareness, we enable individual initiative and competence to win battles, wars, and peace.”

In the interest of beefing up protection for soldiers, Bolton said the Army has engaged industry and academic types to develop a body suit made of material stronger than Kevlar and about as thick as a shirt. Researchers recently tested one of the prototypes—with the thickness of about two shirts—by stabbing it as hard as possible with an ice pick. With normal Kevlar, the ice pick goes through it, Bolton said—but it did not penetrate the tested material.

“It won't give 100 percent against all threats, but I think it will greatly reduce some of the problems and injuries we've had,” Bolton said.

AMERICAN FORCES PRESS SERVICE (MARCH 25, 2004) LAND WARRIOR SYSTEM TO IMPROVE SOLDIER'S ABILITY ON BATTLEFIELD

K.L. Vantran

WASHINGTON—Although the complete Land Warrior System—a modular, integrated fighting system that includes everything an infantry soldier wears or carries on the battlefield—is not due to be fielded until 2007, troops in the field already benefit from several of its components.

The goal of Land Warrior, said Army Col. Ted Johnson, project manager for Soldier Warrior, Program Executive Office Soldier at Fort Belvoir, Va., is to improve a soldier's ability on the battlefield. This, he added, includes enhancing a soldier's mobility, situational awareness (command and control and communications), lethality, sustainability, and survivability.

The original intent, said the colonel, was for Land Warrior to be fielded as a head-to-toe system, but that process has changed.

“A lot of it has to do with 9/11 and the advent of combat operations (in Iraq and Afghanistan),” said Johnson. “What we’re doing now is spiraling out individual things if we can. If something is ready now, we’ll get it to the force.”

Examples include personal protection body armor, lighter-weight helmets, and the commander’s digital assistant, which provides situational awareness and mission planning capabilities.

“The close fight can now be prosecuted without worrying about having all small-unit members within sight or shouting distance,” said Johnson. “(With the CDA) they know where they’re going, they know where you are, and you know where they are.”

One of the system’s achievements, said Army Lt. Col. Dave Gallop, product manager for Land Warrior, is how it has been leveraged to Stryker Force capabilities. The Stryker, the combat vehicle for the Army’s interim brigade combat teams, is a highly deployable, wheeled armored vehicle that combines firepower, battlefield mobility, survivability and versatility, with reduced logistics requirements.

“We’ve optimized Land Warrior for Stryker operations,” Gallop said. “It can do operations away from the Stryker, but it’s at its peak performance when it is working based out of a Stryker.”

While the Land Warrior System has proven its functionality, the challenge is making the system rugged enough to sustain the rigors of battlefield operations, Johnson said

“(You) have to make sure the cables and connectors you design are able to handle the stresses and strains of the 180-pound, 19-year-old private who is busting down doors, taking prisoners, getting in and out of combat vehicles, rolling in the dirt, falling into the dyke, and scrambling up the other side soaking wet,” said Johnson.

“The challenge is making the system rugged enough, reliable enough, durable enough to be out there in the streets of Baghdad, or in the hills of Afghanistan in January with two feet of snow, or in Haiti with the humidity and mugginess.”

A prototype for the Land Warrior System is scheduled for testing in October.



Land Warrior with XM8 Carbine Compact Configuration. On the ground, the Land Warrior system improves individual soldier battle command and tactical awareness, reduces fratricide incidents among individual soldiers, and integrates the soldier into the digital battlefield.

Photo courtesy PEO Soldier

Editor’s note: For more information on PEO Soldier, see the May-June 2004 issue of *Defense AT&L*, “The Soldier—America’s Most Deployed Combat System,” p. 2.

AIR FORCE PRINT NEWS (MARCH 26, 2004) JOINT STRIKE FIGHTER UNDER ATTACK ON CAPITOL HILL

Master Sgt. Scott Elliott, USAF

WASHINGTON—A senior Air Force official told lawmakers March 25 that the Service would not be interested in the F-35 Joint Strike Fighter if a technical glitch could not be overcome or if program funds were cut off.

Lt. Gen. Ronald E. Keys, deputy chief of staff for air and space operations, bluntly told members of the House Armed Services Committee subcommittee on tactical air and land forces, “If we can’t build it, we’re not going to buy it.”

The general's comment came in response to subcommittee chairman Rep. Curt Weldon's question about Secretary of the Air Force Dr. James G. Roche's testimony March 24 before the Senate Committee on Appropriations subcommittee on defense.

In referring to chronic weight problems with the short takeoff and vertical landing (STOVL) version of the JSF, the secretary said, "... (R)isk reduction on the STOVL becomes one of the paramount things to do... because if we cannot build the STOVL aircraft, then we really cannot proceed with the F-35 program."

Being overweight is especially troublesome for the close-air support variant of the F-35, because its primary feature is the short takeoff and vertical landing capability. The STOVL JSF uses a shaft-driven lift fan propulsion system that allows the aircraft to hover and land like a helicopter.

Lockheed Martin originally contracted with the U.S. Marine Corps to build the STOVL variant of the F-35 to replace the AV-8B Harrier. The Air Force will take over the program in June, as part of the Service's commitment to improving close-air support, officials said.

"If it doesn't meet specifications, I don't think my Marine colleagues would be interested in an airplane that wouldn't meet their qualifications," General Keys said.

While Secretary Roche did acknowledge concern over the JSF's weight problem, he also said the problem was to be expected—it is in only the second year of an 11-year development program.

"Is the weight a terminal problem? We don't think so, but because it most severely affects the short takeoff and landing, we believe it's prudent and right, and our responsibility, to work the problem," Secretary Roche said in his previous testimony.

John J. Young Jr., assistant secretary of the Navy for research, development and acquisition, agreed.

"There is nothing we see that says the JSF will not work," he said. "The JSF enables concepts of operations that none of today's legacy aircraft can accomplish."

The JSF is expected to fly and fight into the 2040 to 2050 timeframe. Mr. Young said that without the JSF, the Services would be forced to fly 1980s-era technology for another 50 years.



Air Force Lt. Gen. Ronald E. Keys answers questions about the state of the F/A-22 and Joint Strike Fighter programs during a hearing of the House Armed Services Committee subcommittee on tactical air and land forces March 25. He is the deputy chief of staff for air and space operations.

Photo by Master Sgt. Jim Varhegyi, USAF

Even if the JSF can beat the weight problem, Representative Weldon said the plane might not be out of danger. Extreme competition for defense budget dollars may force Congress to ask the Service to choose between the JSF and the F/A-22 Raptor.

Several Raptors have already been delivered to the Air Force and are undergoing rigorous flight and system tests. In one recent test, four Raptors engaged eight F-15 Eagles in simulated combat. General Keys said the Raptors cleared the sky of F-15s before many of the Eagles could even get off a shot.

"The F/A-22 is a reality... it is not, to use an expression, a viewgraph presentation," said Dr. Marvin R. Sambur, assistant secretary of the Air Force for acquisition. "The F/A-22 is here, but we're not pulling away from our commitment to the JSF."

Representative Weldon said the Service might not have a choice.

"If financial pressure in tactical aviation continues to grow the way it has, something's got to give," he said. "The most likely candidate, if you look at political pressure, will be something that doesn't exist yet."

Dr. Sambur told the lawmakers that despite the growing cost and lengthy research and development time, it would be impossible to choose one system over the other because both aircraft are essential to America's future military operations.

"You've given us the choice of cutting off our right arm or cutting off our left arm," he said. "I want to make sure you understand that the F/A-22 and the JSF are complementary...and they are both needed. We are committed in the Air Force to both planes."

AMERICAN FORCES PRESS SERVICE (MARCH 29, 2004) SCIENTIFIC INNOVATIONS SERVE TROOPS TODAY, TOMORROW

Gerry J. Gilmore

WASHINGTON—Scientific innovations developed by the Defense Department and in the private sector are helping to prosecute the war on terrorism in Afghanistan and Iraq while helping DoD to realize its transformation goals for tomorrow.

DoD research conducted over the past 30 years has produced innovations such as the global positioning system and stealth and night-vision devices, Ronald Sega, director of defense research and engineering, told a House subcommittee here March 25.

The department's science and technology programs, Sega said in a prepared statement to the House Terrorism, Unconventional Threats and Capabilities Subcommittee, continues to be "vital to the support of our troops and is simultaneously developing the capabilities of our future forces."

For example, the thermobaric bomb that was used in Afghanistan to destroy al Qaeda and Taliban members in their mountain hideouts, Sega said, "is directly linked to the basic research in DoD."

Ceramic armor, said Tony Tether, director of the Defense Advanced Research Projects Agency, is another S&T innovation that's being employed to protect U.S. troops in Afghanistan and Iraq. Tether, who accompanied Sega at the House hearing, noted that boron carbide—ceramic material used in today's upgraded body armor—was once expensive to make.

"DARPA's investments eventually led to inexpensive plates of boron carbide," Tether explained, which helped "to clear the way for the improved interceptor body armor."

Other DARPA items developed for troops' use in Iraq and elsewhere, Tether noted, include the Phraselator—a hand-held device that translates spoken English phrases into foreign speech—and a compact water-sterilizing device.

Tether said DARPA also is working on miniaturized unmanned aerial vehicles, improved digital communications systems, and more precise sensor systems that could be used to detect and destroy hidden surface targets.

The U.S. military, Tether said, also looks to develop remote-controlled vehicles for the transport of supplies and other uses. He noted that DARPA sponsored a March 13 competition called "Grand Challenge," run on desert roads between Barstow, Calif., and Primm, Nev., that featured 21 civilian-developed, robot-controlled concept vehicles.

"Our goal was to reach out and involve people who would never ordinarily be found working on a problem for the DoD," Tether explained.

Other DARPA research conducted under the Human Assisted Neural Devices program, Tether said, seeks to use the human mind to run machinery.

"This program is finding ways to detect and directly decode signals in the brain so that thoughts can be turned into acts performed by a machine," he explained. The concept, he noted, "has actually been demonstrated, to a limited degree, with a monkey that was taught to move a telerobotic arm simply by thinking about it."

The ability to transmit thoughts into mechanical actions would have an "enormous" impact on military art, Tether acknowledged. Near-term benefits of such technology, he noted, could be applied "to our injured veterans, who would be able to control prosthetics in a natural way never before imagined."

Unmanned aerial and terrain vehicles and increased use of robotics will be a part of tomorrow's military, Tether noted. However, he maintained, "the idea is not simply to replace people with machines, but to team people with autonomous platforms."

This, Tether explained, will "create a more capable, agile, and cost-effective force, and one that also lowers the risk of U.S. casualties. "The use of unmanned aerial vehicles in Afghanistan and Iraq," he pointed out, "clearly demonstrates the value of this idea."



The Defense Advanced Research Projects Agency (DARPA) sponsored a March 13 competition called "Grand Challenge," run on desert roads between Barstow, Calif., and Primm, Nev., that featured 21 civilian-developed, robot-controlled concept vehicles. Pictured is the "Terrahawk" as it executes a turning maneuver in preparation for the March 13 DARPA Grand Challenge. This autonomous ground vehicle uses a leaning motion to steer.

Photo courtesy DARPA

**AMERICAN FORCES PRESS SERVICE
(APRIL 1, 2004)
NAVY MAY PLAY LEAD TRANSFORMATION
ROLE, DOD OFFICIAL SAYS**

K.L. Vantran

ANNAPOLIS, Md.—Naval services have the opportunity to play leading roles in the transformation of the U.S. military, the Defense Department's director of force transformation said here March 31.

"Transformation," retired Vice Adm. Arthur K. Cebrowski said at the Annapolis Naval History Symposium, is "new values, new attitudes, and new beliefs" and how those are expressed in human behavior and institutional behavior.

"While we have made very significant progress, there are clear indications that these are only the first steps," he added. "Much more must be done, and the pace is not ours to set."

The war in Iraq, the war on terrorism, and globalization are compelling not only the pace and the intensity of transformation, but also its character, said Cebrowski.

He spoke of the president's vision for America's national security that "embraces the solemn duty that confronts us today—to not only lift the dark threat of terrorism, but to build a safer, better world that favors human freedom, democracy, and free enterprise."

America's view of strategic response has been changed, said Cebrowski. Instead of being prepared to act in the wake of an attack—being reactive—the United States must be preventive, he said, a stance that indicates the need for a change in intelligence capabilities.

"Clearly, we have to know more sooner," he said. "We must acquire the capability to better identify and understand potential adversaries. This calls for different organizations, different systems, and different ways of sharing intelligence. We need the ability to look, to understand, and to operate deeply within the fault lines of societies where, increasingly, we find the frontiers of national security."

The most significant shift in force planning, he continued, is the rise of deductive thinking and capabilities-based planning, which "provides a framework for understanding some of the persistent and emerging challenges before us."

Naval force planning, said Cebrowski, always has been difficult because of two driving beliefs: Navies take a long time to build, and navies last a very long time. "Now, we realize that neither of these need be true," he added. "Rather, they are choices we can make or discard. We must challenge old assumptions and old metrics."

Organizations that can readily adapt and retain flexibility within their operating domains—whether in business or war—likely will survive in rapidly changing times, he said.

Cebrowski outlined four new metrics that will drive future force planning: the ability to create and preserve options, to develop high transaction rates, to develop high learning rates, and to achieve overmatching complexity at scale.

Also, said the transformation director, the United States must accelerate and expand its work in nonlethal weapons, directed and redirected energy, and biomedical response.

“Lastly, we need a new business model for space,” said Cebrowski. “With the sharp increase in the capability per pound on orbit, now is the opportunity for the Navy to re-enter the space market.”

**DEPARTMENT OF DEFENSE NEWS
RELEASE (APRIL 5, 2004)
DOD RELEASES SELECTED ACQUISITION
REPORTS**

The Department of Defense has released details on major defense acquisition program cost and schedule changes since the September 2003 reporting period. This information is based on the Selected Acquisition Reports (SARs) submitted to the Congress for the Dec. 31, 2003, reporting period.

SARs summarize the latest estimates of cost, schedule, and technical status. These reports are prepared annually in conjunction with the President’s budget. Subsequent quarterly exception reports are required only for those programs experiencing unit cost increases of at least 15 percent or schedule delays of at least six months. Quarterly SARs are also submitted for initial reports, final reports, and for programs that are rebaselined at major milestone decisions.

The total program cost estimates provided in the SARs include research and development, procurement, military construction, and acquisition-related operation and maintenance (except for pre-Milestone B programs, which are limited to development costs pursuant to 10 USC §2432). Total program costs reflect actual costs to date as well as future anticipated costs. All estimates include anticipated inflation allowances.

The current estimate of program acquisition costs for programs covered by SARs for the prior reporting period (September 2003) was \$1,246,878.1 million. After adding the costs for a new program, Warfighter Information Network-Tactical (WIN-T), and subtracting the costs for a final report on Global Combat Support System Army (GCSS Army) in September 2003, the ad-

	Current Estimate (\$ in Millions)
September 2003 (77 programs)	\$1,246,878.1
Plus one new program (WIN-T)	+12,040.5
Less final report on GCSS Army program	-1,689.4
September 2003 Adjusted (77 programs)	+1,257,229.2
Changes Since Last Report:	
Economic	\$ +7,398.0
Quantity	+8,435.8
Schedule	+14,030.1
Engineering	+4,610.2
Estimating	+31,327.2
Other	
0.0	
Support	<u>+7,289.1</u>
 Net Cost Change	 \$+73,090.4
Plus EA-18G development costs not previously reported	+1,707.6
<i>(EA-18G is submitting a separate initial SAR. Procurement costs were previously reported in the F/A-18E/F SAR, but development costs for the EA-18G are being reported for the first time.)</i>	
December 2003 (78 programs)	\$1,332,027.2

justed current estimate of program acquisition costs was \$1,257,229.2 million.

For the December 2003 reporting period, there was a net cost increase of \$73,090.4 million or + 5.8 percent for those programs that have reported previously, excluding costs for the programs submitting initial SARs. For this submission, the initial SAR programs are Cobra Judy Replacement, Multi-Platform Radar Technology Insertion Program (MP-RTIP), and Small Diameter Bomb (SDB).

For the December 2003 reporting period, there was a net cost increase of \$73 billion or + 5.8 percent for programs that have reported previously, excluding costs for the aforementioned programs submitting initial SARs. The net cost increase was due to higher program estimates (+ \$31.3 billion), a net stretch-out of development and procurement schedules (+ \$14.0 billion), a net increase of planned quantities to be purchased (+ \$8.4 billion), the application of higher escalation indices (+ \$7.4 billion), higher support costs related to increased quantities (+ \$7.3 billion), and additional engineering changes (hardware/software) (+ \$4.6 billion).

New SARs (As of December 31, 2003)

The Department of Defense has submitted initial SARs for Cobra Judy Replacement, Multi-Platform Radar Technology Insertion Program, and Small Diameter Bomb. These reports do not represent cost growth. Baselines established on these programs will be the point from which future changes will be measured. The current cost estimates are provided below:

	Current Estimate (\$ in Millions)
Program	
Cobra Judy Replacement	\$1,474.5
Multi-Platform Radar Technology Insertion Program (MP-RTIP)	1,565.6
Small Diameter Bomb	1,816.5
Total	\$4,856.5

More detailed information on the most recent SARs can be found online at < <http://www.defenselink.mil/news/Apr2004/d20040405sar.pdf> > .

**AMERICAN FORCES PRESS SERVICE
(APRIL 7, 2004)
DOD DISCUSSES NEW SUPPLY TRACKING SYSTEM WITH VENDORS**

Sgt. 1st Class Doug Sample, USA

WASHINGTON—Defense Department officials met this week with hundreds of vendors to discuss plans for implementing technology common among today's retailers to revolutionize the supply chain to the battlefield.

The three-day summit at the Washington Hilton began April 6.

Military logisticians hope to take the "factory to the fox-hole" by using radio-frequency identification, or RFID tags to improve supply chains while reducing cost. The RFID technology has become part of a new DoD initiative making it mandatory for all items in the department's inventory to be distinguishable from one another.

Acting Under Secretary of Defense for Acquisition, Technology and Logistics Michael Wynne said RFID technology is a way for DoD to ensure military forces get everything they need, from "food and water to supply parts."

Many retail stores today, most notably the Wal-Mart chain, use RFID tags to track products and control inventory costs. State transportation departments use the technology to monitor tollbooth traffic, and farmers use it to keep track of cattle.

Wynne said he intends to have RFID tags "capture information about all critical assets as they move throughout DoD's supply chain" to decrease supply-chain costs and improve efficiency. Military logisticians will know exactly what is on a shipment pallet or container without having to unwrap it, he said.

The technology enables vendors to track where their supplies are located in DoD's supply chain process, he said.

The Defense Department issued a memo on its RFID policy earlier this year, requiring suppliers to put passive RFID tags on the packaging of the lowest possible piece, part, case, or pallet by January.

"RFID is a data collector," said Ed Coyle, chief of the Automatic Identification Technology Office for DoD Logistics. "RFID can feed a network (so) that you get the right information to the right place ... so we can make decisions about what we move where and who should be using what materiel—managing the inventory."

Coyle told vendors at the summit that the "timing is right" for the technology within the Defense Department, urging them to come up with a product to meet the government's needs in a way that relies heavily on what's already in use in industry.

"We don't think our requirements are significantly different or different at all from those in the commercial sector," he said, "and from that perspective, we need to play very heavily with those in the commercial sector to make sure that the product we come up with collectively meets DoD's requirements. We don't want to have to be unique," he said.

Alan F. Estevez, assistant deputy under secretary of defense for supply chain integration, said DoD needs the technology for the same reason that has driven its adoption in industry: so that when the customer needs something, it's there. "Wal-Mart is doing it so that there is no 'stock out' for customers shopping in their stores," he said. "We have the same view. We don't want to 'stock out' for soldiers, sailors, or airmen out in the field."



Marine Cpl. Juan J. Sandoval, left, and Marine Capt. Tarrell D. Giersch, right, show the Commandant of the Marine Corps, Gen. Michael W. Hagee, a radio frequency identification tag interrogator—which allows the Marine Corps to track storage containers in transit—during a visit to the 1st Force Service Support Group at Camp Taqaddum, Iraq, April 7, 2004. Sandoval, 22, is from Mattawa, Wash. and Giersch, 32, is from Milwaukee, Wisc.

Photo by Marine Sgt. Matt Epright

AIR FORCE PRINT NEWS
EDWARDS TEST TEAM FIRES F-16'S FIRST
AIM-9X SIDEWINDER (APRIL 16, 2004)

Leigh Anne Bierstine

EDWARDS AIR FORCE BASE, Calif. (AFPN)—A test team from the Global Power Fighters Combined Test Force fired the newest variant of the AIM-9 Sidewinder, the X variant, for the first time from an F-16 Fighting Falcon here April 9.

The Sidewinder is a supersonic, heat-seeking, air-to-air missile carried by fighter aircraft. Before this, the AIM-

9X had been fired only from F-15 Eagles and U.S. Navy F-18 Hornets.

The test mission is part of the F-16 M4-plus test project currently going on here. The project tests an improved avionics system that will be used to upgrade about 600 active-duty F-16 aircraft.

This was the first firing in a series of tests designed to clear the new variant for use on the F-16, said Capt. Chad Hale, 416th Flight Test Squadron (FLTS) operations engineer for the project. The initial flights are designed to validate the effects predicted by its contracted developer.

The team's first two firings are unguided, and the flight profiles will build up to three guided firings against sub-scale drones, Captain Hale said.

In its first test, after clearing the aircraft the missile was programmed to perform a high-G dive into the ground. Air Force Maj. Ray Toth, 416th FLTS test pilot, fired the new Sidewinder. "The test went as planned, and there were no surprises," said Toth, who fired the missile over a test range at nearby China Lake Naval Air Weapons Center.

The team also evaluated how the new Sidewinder variant works with the Joint Helmet Mounted Cueing System. It is compatible with the system, which is designed to acquire targets more easily and decrease aircrew workload.

Results of the tests will have big payoffs for combat pilots, said Air Force Maj. Monte Cannon, a project pilot and 416th FLTS F-16 chase pilot for the mission.

"The AIM-9X test marks a tremendous increase in combat capability for the F-16," Cannon said. "Together, the Joint Helmet Mounted Cueing System and the missile will provide a lethal combination for pilots who find themselves in visual engagements."

The latest variant has the same rocket motor and warhead as the AIM-9M, which is the most current operational variant of the missile. However, the AIM-9X has major changes from previous versions including increased flight performance.

The Sidewinder was originally developed by the Navy for fleet air defense and was later adapted by the Air Force for use on fighter aircraft. Early versions of the missile were used in the Vietnam War.



EDWARDS AIR FORCE BASE, Calif.— A pilot from the 416th Flight Test Squadron successfully fires the newest variant of the AIM-9 Sidewinder for the first time from an F-16 Fighting Falcon on April 9.

U.S. Air Force photo by Tom Reynolds



The Joint Air-to-Surface Standoff Missile (JASSM) is an autonomous, long-range, conventional, air-to-ground precision cruise missile.

Image courtesy Lockheed Martin

JASSM GETS GO-AHEAD FOR FULL-RATE PRODUCTION (APRIL 23, 2004)

The Joint Air-to-Surface Standoff Missile (JASSM) was approved for full-rate production on April 16. Under the Milestone III decision, the Air Force will buy 4,900 missiles, while the Navy is expected to buy 450 JASSMs. Included in the 4,900 missile buy for the Air Force is a yet undetermined number of extended range JASSMs, or JASSM-ER. Lockheed Martin is developing this variant to fly 500 nautical miles, two-and-a-half times the range of the baseline missile. DoD's fiscal year 2005 budget request includes \$145 million to purchase 360 JASSMs, and \$191 million for research, development, test and evaluation activity, in part for JASSM-ER. The B-52, F-16, B-1, -2, and Navy F/A-18 will launch the baseline model. JASSM-ER is being eyed for the B-1 bomber.

AMERICAN FORCES PRESS SERVICE (MAY 6, 2004)

NEW SMALL BUSINESS RULES TO BENEFIT SERVICE-DISABLED VETS

WASHINGTON—A new procurement program boosts federal contract opportunities for Service-disabled veteran-owned small businesses, Small Business Administration officials here announced May 4.

The interim rule was published May 5 and is effective immediately. The Federal Acquisition Regulatory Coun-

cil concurrently released regulations implementing the program, officials said.

“President Bush has made it a priority to reach out to all of America’s entrepreneurs, and we have a special responsibility to make an effort for those who sacrificed for our safety and freedom,” said Hector V. Barreto, SBA administrator in announcing the program May 4. “We have made a strong effort to do precisely that.”

Federal contract dollars to Service-disabled veterans increased from \$298 million in fiscal 2002 to \$510 million in fiscal 2003, Barreto said. “But we want to do more,” he added. “The regulations being issued today will ensure that those great Americans who served our country proudly continue to have fair and open access to contracting opportunities.”

Officials explained the new rule adds provisions to the Code of Federal Regulations that will allow contracting officers to restrict contract awards to small businesses owned by Service-disabled veterans when there is a reasonable expectation that two or more such small businesses will submit bids at a fair market price.

Small businesses owned by Service-disabled veterans can be awarded sole-source contracts when there is not a reasonable expectation that two or more such firms will submit bids and the anticipated contract price does not exceed \$3 million, or \$5 million for manufacturing contracts, officials said.

The interim rule allows small businesses to self-certify as Service-disabled veteran-owned businesses, officials said, and any challenge to a firm’s status or standing must be referred to the SBA for resolution. The SBA will rely upon existing Department of Veteran’s Affairs or Department of Defense determinations regarding status and will help enforce penalties for false representation, officials added.

DAU WEST REGION OFFICIALLY OPENS HEADQUARTERS IN SAN DIEGO

Belinda Manley

The Defense Acquisition University (DAU) West Region campus officially opened for business at a ribbon cutting ceremony on Jan. 28, 2004. With the official opening of its West Region Headquarters in San Diego, Calif., DAU takes a major step towards achieving its goal of transforming acquisition training in support of the DoD AT&L workforce. The new San Diego facility is located on a military installation—Naval Base Point Loma—and offers many different Defense Acqui-

sition Workforce Improvement Act (DAWIA) functional courses (program management, contract management, systems engineering, logistics, financial management, etc.).

The DAU West Region, led by Dean Andrew Zaleski, is composed of 50 staff and faculty members who focus primarily on teaching DAWIA certification courses and providing performance support (consulting, targeted training, and partnering with regional organizations) throughout 13 western states, including Hawaii and Alaska plus the Pacific Rim. The region’s charter, which calls for working with major DoD agencies and remaining current on significant AT&L workforce issues, allows the region to better serve the acquisition needs of its customers across the entire spectrum of DoD’s 13 acquisition career fields.

A Major Event for the Defense Acquisition Workforce

The ceremony was hosted by DAU President Frank Anderson Jr. and Dean Zaleski. In his opening statement, Zaleski welcomed local government and industry officials from the West Region, DAU directors, faculty, contractors, as well as distinguished guests participating in the day’s events: Navy Adm. Jose Betancourt, Jr., commander, Navy Southwest Region; Navy Capt. Anthony Gonzales, commander, Naval Base Point Loma; Lou Kratz, deputy under secretary of defense (logistics plans and programs); Richard Zirk, director, Defense Contract Management Agency—West Region; Jim Churchill, Program Executive Office Command, Control, Communications, Computers and Intelligence (PEO C4I) and Space; Raymond Sayre, regional director, Western/Southwestern Region Navy College; and Rudy Fernandez, director, Economic Development and Veterans Military Liaison, representing the San Diego mayor’s office.

“Today’s ceremony is a major event in the ongoing transformation of DAU,” said Zaleski. “A significant phase of this transformation has been the reorganization of DAU to a regionalization concept, whereby DAU has reorganized into five regions within the continental United States to become more customer-centric with the AT&L workforce. Today’s event essentially completes this phase of the transformation.”

Leveraging the Dollar Invested in Learning

Anderson praised organizers of the day’s events. “This is really a fantastic day for the region and it has truly been a community effort,” said Anderson. “This is not just DAU; it is about our teammates from the Navy and the people who are located here—Navy College and NPS (Naval Postgraduate School)—and how everybody