Radio Program Enables Speedy Personnel Recovery

Chuck Paone
AIR FORCE MATERIEL COMMAND NEWS RELEASE (JAN. 6, 2009)

HANSCOM AIR FORCE BASE, Mass.—Officials of the Electronic Systems Center delivered the 20,000th Combat Survivor Evader Locator radio to operators in the fall of 2008, and now are on track to deliver an additional 20,000 to warfighters. Credited with saving many lives, CSELs have been in use in Iraq and in Afghanistan for several years.

In 2007 and 2008, the joint program office staff managing the effort received a significant amount of war on terrorism supplemental funding to procure radios for U.S. Central Command theater operators. However, the program's history runs deep. Shortly after Air Force Capt. Scott O'Grady and his F-16 Fighting Falcon were shot down over Serbia in June 1995, Department of Defense officials accelerated the CSEL program. O'Grady survived for six days on the ground in hostile territory, eating leaves, grass, and ants until he was finally rescued.

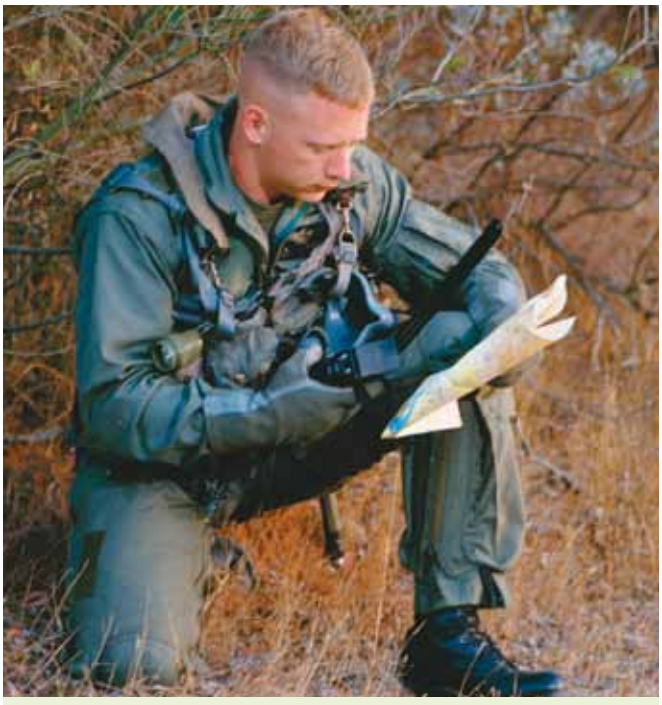
Because the likelihood of rescue decreases exponentially with time, this incident could have ended in disaster, so U.S. officials set a course for reducing such possibilities in the future.

"This program came about because of the lack of capability to quickly locate and positively identify a survivor," said Air Force Maj. Charles Leonard of the CSEL Joint Program Office at Hanscom Air Force Base. "The early capabilities in survival radios were almost exclusively dependent on line of sight, so unless the rescue forces were overhead and the rescuer was in direct communication with the downed personnel, it was often difficult to locate them."

Improvement efforts centered on fully exploiting over-the-horizon communications and Global Positioning System technology, and "precision-code" GPS in particular," Leonard said. CSEL, in fact, was the first survival radio to use the precision code, which offers far greater security and accuracy than commercial GPS.

CSEL also capitalizes on satellite communications capabilities while combining four disparate search and rescue functional components: satellite radio, line-of-sight radio, a GPS system, and a search and rescue personnel locator beacon.

"CSEL combined all of these into one handheld capability," Leonard said.



An airman tests an early iteration of the Combat Survivor Evader Locator Radio in California. Officials from the Boeing Corp., and the Electronic Systems Center delivered the 20,000th CSEL radio to operators this fall and are on track to deliver 20,000 more. Air Force photo

This is critical because, for downed pilots or other combat force members who become isolated from their units, everything they need to survive has to be with them, so less is definitely better.

But it's CSEL's purpose that matters most.

"The mission that CSEL is designed to accomplish is too important for us to deliver anything less than the best possible system to the field," said Air Force Lt. Col. Heather Gallup, the program manager, noting that CSEL is far more than just a radio.

The radio itself is connected via satellite ground stations and rescue coordination centers where rescues are managed and executed.

"It's like when you push the little green button on your cell phone and start to talk," Leonard said. "There's a lot going on that the caller never sees. It's the same thing with CSEL. There's a total system behind the radio, and it delivers true, 24/7 global capability. It's basically DoD's global 911."

Since the first radios were fielded in 2003, CSEL has been cited for the precision and speed of recoveries.

"We've taken the process of locating and positively identifying individuals from hours down to minutes," Leonard said.

"CSEL is the DoD program of record for personnel recovery survival radios, which means that all the Services use it," he said. In fact, the Navy and the Army have purchased most of the early CSEL variants. The Air Force is currently fielding radios to active duty, Guard, and Reserve organizations.

"We're proud of our contributions to the joint fight," Gallup said. "We all know that what we're doing is incredibly important, and no matter how busy we are, we're honored to contribute to the effort."

Paone writes for 66th Air Base Wing Public Affairs.

Researchers Study Bats to Enhance Micro Air Vehicles

Molly Lachance
AIR FORCE NEWS SERVICE (JAN. 7, 2009)

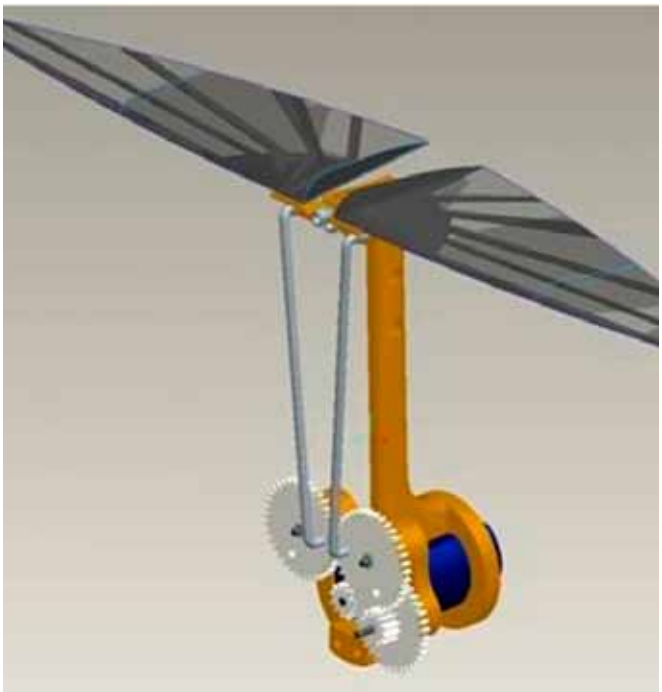
ARLINGTON, Va.—Air Force-funded researchers from several universities are studying the flexible, flapping wings routinely used by bats and insects and mimicking their biological attributes to improve agility, speed, and adaptability in micro air vehicle systems.

Air Force Office of Scientific Research officials manage two projects on biologically inspired flight. Both are part of the 2007 Multidisciplinary University Research Initiative, which provides funding for topics that rely on expertise in multiple disciplines.

Dr. Kenny Breuer, a fluid mechanics professor from Brown University, and Dr. Wei Shyy, an aerospace engineering professor from the University of Michigan, each lead a Multidisciplinary University Research Initiative project. Though their respective teams focus on different biological and engineering aspects of this problem, they share the same overall goal of understanding bat flight and its potential applications to micro air vehicles.

"Future micro air vehicles will need to be agile, robust, and maneuverable, and our research will provide some guidance as to how we might incorporate these features using inspiration from biology," Breuer said.

If successfully transitioned, this research could lead to small, remote-controlled aircraft that can move in complex environments such as forests, interiors of buildings, caves, or tunnels.



Researchers from several universities are studying how the biological attributes of flapping and flexible flight demonstrated by birds, bats, and insects can improve future micro air vehicle systems. This research has led to the creation of engineering models, such as the one illustrated in this graphic.
Courtesy graphic

Birds, bats, and insects have some highly varied mechanical properties that researchers have not incorporated in engineering, Shyy said.

"They're not only lighter, but they also have more adaptive structures," he said. "These natural flyers have outstanding capabilities to remain airborne through wind gusts, rain, and snow."

Facing many of the same challenges posed by this complex biological system, Breuer is working on a variety of efforts to unlock the mystery. One such effort involves capturing video footage of bats flying in a wind tunnel and measuring the fluid velocities in their wakes. Another involves studying flight properties in different environments and among different species of bats.

The results of these experiments and others have allowed Breuer to construct engineering models that mimic specific features found in bat flight.

His Multidisciplinary University Research Initiative partners from Oregon State University, Massachusetts Institute of Technology, and the University of Maryland are also doing innovative research. They are developing computational methods for simulating complex, moving, flexible structures; mapping the neurophysiology of bat sensor and motor systems; and creating control systems that might be of use in micro air vehicle technologies.

Shyy's team, comprised of faculty and students from the University of Michigan as well as colleagues from the Universities of Florida and Maryland, is focusing on hovering and forward flight modes of micro air vehicles.

"Birds, bats, and insects can fly in turbulent environments with fast, unpredictable wind gusts," Shyy said. "Yet, they can react almost instantaneously and adapt with their flexible wings."

Knowing this, his team has placed particular emphasis on learning how and why flexible wing structures affect lift and thrust generation, especially in unsteady environments.

"If handled appropriately, flexible wing structures can delay stall, enhance stability, and increase thrust," Shyy said.

Lachance writes for Air Force Office of Scientific Research.

Marine Infantrymen Bring Combat Knowledge to Logisticians

Marine Cpl. Aaron Rooks
MARINE CORPS NEWS (JAN. 7, 2009)

MARINE CORPS BASE CAMP LEJEUNE, N.C.—The second Battle of Fallujah, known both as Operation Phantom Fury and Operation Al-Fajr, served as a major turning point in the Marine Corps' mission to crush the insurgency and bring stability to the Al Anbar Province of Iraq.

The battle that began Nov. 8, 2004, lasted for one month and is known throughout the Corps as some of the heaviest urban combat since the 1968 Battle of Hue City in Vietnam. The fight for Fallujah became one of the bloodiest battles to occur in the Iraq War to date, with a recorded 38 U.S. troops, six Iraqi soldiers, and 1,200 insurgents killed.

Logistics was a common denominator that carried the success of Marines during that storied battle. Without the continuous support in the form of ammunition, food, and equipment, many Marines feel the battle would not have turned out as successful.

"We wouldn't have been able to do our job as infantrymen without combat logistics units supporting us," said Marine Sgt. Johnathan D. Nash, an instructor and assistant operations chief at the 2nd Marine Logistics Group's Battle Skills Training School, who fought with 1st Battalion, 8th Marines during the fight for Fallujah. "We wouldn't have lasted long at all in the fight without them."

Nash, an infantry mortarman (fire direction) by trade, served in Iraq from June 2004 to February 2005. The Minden, La., native gained a plethora of experience and knowledge from combat engagements in Haditha, Iraq, and Fallujah during that time.

But he said in order for those logistics Marines to support him and his fellow Marines in the fight, they had to go through the frontlines and through the fighting. He said because of this, those Marines needed quality training in basic combat skills.

Today, he and 24 fellow infantrymen train primarily logistics Marines from 2nd MLG in preparation for combat. As the logistics group prepares to embark on its next combat deployment to Iraq later this year, the knowledge of warfare is as important now as in years past.

"Every Marine is a rifleman," said Nash, who joined the Marine Corps in 2003 after seeing the actions of Marines in the initial invasion of Iraq. "We fight on the frontlines of war, so everyone has to be prepared for the worst. We are here to show logistics Marines what they can expect in combat while they're trying to support us."

Marine Staff Sgt. Stephen A. Farage, an infantry unit leader and course head for the Machine Gun Assistant Instructor Course at Battle Skills Training School, said it takes an average of seven logisticians to support one infantryman, defining the importance of a non-combat arms Marine's ability to fight and stay alive.

"If one of those seven falls, the infantrymen have to stop and get into a defensive position because they will no longer be getting the support they need to continue," said Farage, a native of St. Louis.

The instructors at BSTS come from a wide variety of backgrounds, all with different experiences to add to the training. The instructor staff is made up of mortarmen, machine gunners, assaultmen, and infantry unit leaders, with the addition of motor transport experts and corpsmen.

MARINE CORPS BASE CAMP LEJEUNE, N.C. (Jan. 7, 2009). Marine Sgt. Johnathan D. Nash, an infantry mortarman and assistant operations chief with the 2nd Marine Logistics Group's Battle Skills Training School, talks about the SVD Dragunov sniper rifle with a class on Jan. 5. The instructors at BSTS come from a wide variety of infantry backgrounds, all with different experiences to add to the training regimen. Photo by Marine Cpl. Aaron Rooks

All of the instructors have a minimum of two combat deployments under their belt to hot spots like Afghanistan and Iraq, but also to other places like Kosovo, Turkey, and Lebanon.

Marine Staff Sgt. Charles Calfee—an infantry unit leader, primary Marine Corps martial arts program instructor, and chief instructor at the school—said the reviewing process to admit instructors is extremely difficult. He said Marines can request to become an instructor at the school, but only the most qualified and experienced will make it.

"The success of the school relies on the instructors," Calfee said. "In order to keep the highest quality of training, we have to maintain a high quality of instructors."

Throughout the year, the combat arms Marines conduct many Combined Pre-Deployment Training Packages, Machine Gun Assistant Instructors Courses, and Convoy Leadership Courses, amounting to more than 100 hours of combat training per class.

Students learn everything about combat from how to search people, clear rooms and check vehicles, to running convoys, guarding bases, and protecting convoys with the use of machine guns, said Marine Sgt. Shane R. Burge, a mortarman (forward observer) and instructor at the school. The Lyons, Kan., native said the school's impact can be the difference as to whether or not Marines come home.

"It's knowledge that could one day save their lives," Burge said. "If they don't know how to operate a machine gun, they won't be able to protect the convoy they're on. If they don't understand the convoy order process, they won't understand the mission they're on."

Instructors use their combat experiences to train Marines in martial arts as well. Calfee said a Marine's weapon could one day jam in close quarters combat, and then all that Marine has left is his body. He said that is only the physical aspect, stating that the martial arts training gives Marines the mental confidence to overcome situations that they face no matter how difficult.

Calfee said a tour for instructors at BSTS lasts three years. He said when the instructors eventually return to their combat arms roots, they will bring along with them a wealth of knowledge that can only improve their unit's combat effectiveness.

Nash plans to return to the infantry around September in hopes of joining Marines in the current fights going on in Afghanistan. He said he will leave the logistics group happy with what he's been able to accomplish as an instructor.

"We've never had negative feedback from our training courses, so we feel we have had a positive effect on their deployments in years past," Nash said.

Calfee said leaders will always look to Marines like Nash for knowledge of combat when they return to the fleet. And as one prepares to move on, another will come to continue the rotation of knowledge from combat arms to logistics.

Rooks writes for 2nd Marine Logistics Group.

Soldiers Field-Test MRAPs, X-Bots, Boomerangs in Iraq

Army Staff Sgt. Michel Sauret • Army Staff Sgt. Amber Emery
ARMY NEWS SERVICE (JAN. 7, 2009)

BAGHDAD—Operation Iraqi Freedom is helping create a whole new way of fielding force protection products beginning with the mine-resistant ambush protected vehicle, which has saved lives and greatly reduced combat injuries to soldiers on patrol.

"We're getting the fielded pieces out to the soldiers immediately. When roadside bomb attacks were on the rise in Iraq, soldiers found themselves in need of vehicles that could resist the threat," said Lt. Col. Steven Brewer, force integration officer for Multi-National Division Center.

"We are doing stuff going immediately from concept to implementation in less than a year out here, so we are taking a lot of short cuts and doing a lot of pieces after the fact. Then, we just keep improving it and testing it."

Because of the rushed need for the MRAP, four companies were manufacturing them. Additionally, six of 12 models passed the initial testing, with the Army eventually choosing four. Since the first four models, there have been three generations of improvements, essentially creating 12 versions of the vehicle. A simulated MRAP roll-over trainer, similar to the Humvee egress assistance trainer currently being used by servicemembers, is also in development.

"The MRAP fielding will probably go down as the granddaddy of all fieldings," said Brewer. "We are completing the final MRAP fieldings in January, which consist of the explosively formed projectile [EFP] protected version of the vehicle."

A process that can take at best five years or longer to fulfill, took roughly eight months to reach more than 50 percent of the units in need.

"We don't have time to wait for that five-year process. We need the stuff while we are still here, so we've come up with this abbreviated process," said Brewer.

Army Pfc. Joshua Hunter from the 10th Mtn. Div. who serves as a quick reaction force gunner, communicates with the MRAP driver during training conducted at Camp Victory Jan. 1.
Photo by Staff Sgt. Amber Emery

A wide variety of new equipment is making its way to units in the field. One much-awaited piece of technology is the X-Bot, which is a self contained robotic system capable of investigating suspected improvised explosive devices in various locations.

"The X-Bot fits between the seats in a Humvee so if you come across something that looks suspicious, you can throw it out there, and it moves pretty fast—so it is definitely a good piece of equipment to have," said Brewer.

Fielding is the process of identifying a mission requirement and fulfilling it with some form of technology—whether new or already existing.

"That's kind of how you end up with a Humvee over a jeep," Brewer said.

Portable walk-through metal detectors for entry control points; the Boomerang system, which can detect the direction of sniper fire and shoot back; and Wolfclaw, with new types of sensors that can improve finding IEDs along the road are just a few other pieces of equipment currently undergoing the fielding process.

There are three different ways equipment is introduced into the fielding process. One way is for a unit commander to submit an operational needs statement, which identifies a capability gap for which there is a material solution. Another way is for soldiers in the field to identify something and submit a rapid equipping force report. Lastly, companies may visit soldiers in the field to help in developing ideas for equipment.

"What comes out of the fielding is a capabilities and limitations sheet, which tells you what the machine can and can't do and then a safety release, which states whether it is safe to use this product in these circumstances," said Brewer.

To start, fieldings cover only what is necessary to complete missions, while the extra bells and whistles can be added later. As soon as the equipment is available, it is shipped to Iraq. The technology is then integrated to see how well it incorporates with the overall mission. A sustainment system is developed, such as the technical manual and maintenance training. Supply issues are also considered. Finally, soldiers learn how to use the new equipment at a centralized location before taking it back to their units.

AMC Moving Toward Better Future

Kari Hawkins
ARMY NEWS SERVICE (JAN. 7, 2009)

As 2009 begins, the Army Materiel Command is coming closer to realizing a synergy through its move to Redstone Arsenal that will "re-energize and transform" its workforce, said one of its leading generals.

Lt. Gen. Jim Pillsbury, who is the former commander of Redstone Arsenal and the Aviation and Missile Command, and who is now the Army Materiel Command's deputy commander, has an insider's perspective on the Army organizations that will be co-located at the arsenal when the base realignment and closure recommendations are completed by 2011.

AMCOM, along with Program Executive Office-Aviation and PEO-Missiles and Space, is a subordinate command to AMC, now headquartered at Fort Belvoir, Va. AMC is the Army's premier provider of materiel readiness, including technology, acquisition support, materiel development, logistics power projection and sustainment, ranging from weapon systems to maintenance and distribution of spare parts.

"While I was at AMCOM, I got to see firsthand and for a relatively long period the power of the life cycle management command concept," Pillsbury said. "As I make decisions up here in my current job, I think of the impact they have at AMCOM and PEO-Aviation, and PEO-Missiles and Space."

One recent Army decision that will have a lasting beneficial impact on AMC and its subordinate commands is the BRAC-recommended relocation of AMC headquarters.

"The location of a headquarters has its strengths and weaknesses," Pillsbury said. "The ability to reshape AMC staff into a transformed command is enhanced by the BRAC move. The move to Redstone Arsenal will give AMC access to the highly skilled workforce within the Tennessee Valley. It will be easier to re-energize and transform our workforce."

Pillsbury said AMC and its employees will benefit from the Tennessee Valley's highly educated and motivated workforce along with its quality of life, good educational systems, wonderful people, unique culture, and plenty of recreational, social, and performing arts activities.

"There are some challenges in terms of roads and schools," he said. "But the state and local leadership are working on those. And [local volunteer] Joe Ritch and the Tennessee Valley BRAC Committee have done a great job providing information about the Tennessee Valley and continuing to push hard for improving roads and schools."

In return, the profile of Redstone Arsenal and Huntsville as a leading military center will be heightened with the addition of the prestigious AMC to the arsenal neighborhood.

"Redstone Arsenal will get a great new tenant with AMC," Pillsbury said. "I don't see any changes in the arsenal footprint except in the physical addition of 1,200 folks. But I do see us being a good tenant as we partner with NASA, the Missile Defense Agency, AMCOM, and the 40 to 50 other organizations at Redstone Arsenal."

Currently, close to 200 AMC employees have been moved to Redstone Arsenal. Those moves will continue through the summer of 2011, when construction of the AMC headquarters is completed just off Martin Road.

Although AMCOM and its employees work in support of AMC, Pillsbury said AMCOM as well as the program executive offices will remain separate entities from AMC.

"These are subordinate commands that are of benefit to AMC because of their expertise in aviation, missiles, and space," Pillsbury said. "Generals [Jim] Myles, [Genaro] Dellarocco, and [Tim] Crosby and their staffs are essential elements to our nation's missile defense. They provide excellent management of commodities needed by the warfighter."

Those organizations work together to fulfill the Armywide mission to support the soldiers and civilians who are on the front lines in the Global War on Terror.

"We are in an era of persistent conflict," Pillsbury said. "In everything we do, we will continue to do what needs to be done to support soldiers and civilians in harm's way."

AMC is also focused on realizing its transformation within the Army as it continues to implement the materiel life cycle management initiative. This initiative provides cradle-to-grave management of critical weapon systems and conventional ammunition. It integrates strategic and operational processes between AMC subordinate commands and program executive offices through product and process teams that enhance the input of logisticians into acquisition processes, improve sustainment and readiness, reduce costs, improve quality, get products to the soldier faster, and implement a more holistic approach to product development and system support.

"Through the life cycle management enterprise, we are bringing together all the commands that have a stake in life cycle management to create one community of excellence," Pillsbury said.

Supporting soldiers with the best weapon systems will always be the focus of AMC and its subordinate commands, said Pillsbury, who was promoted to lieutenant general and assumed the duties as AMC deputy commander in early December 2008. The promotion was yet another highlight in a 35-year military career.

As one of the Army's generals, Pillsbury knows he represents an organization that can have a lasting positive impact on the lives of its soldiers and their families

"The lifestyle of the Army is unique in that it's an ethics-based organization," he said. "Our values, ethics, and morals are world-class. We demand that our soldiers live by our values, and because of that we are a very close-knit family.

"Soldiers are individuals who understand what selfless service means. They are disciplined, physically fit, and they know there is a greater service than to themselves."

The Army's target population is adults age 18 to 24, and yet of those adults in that age range, seven out of 10 don't qualify either physically or morally to meet the Army's high standards, he said.

"The strength of the Army is in its ability to grab the interest of 30 percent of the youngsters in that age group," Pillsbury said. "And not only grab their interest but to also keep that interest so that they re-enlist in record numbers at a time of war.

"Even for myself, every time I re-enlist it is a time of discovery. Every time I get a promotion, it humbles me. It's a great life."

Hawkins writes for the Redstone Rocket.

Nuclear Weapons Management Panel Recommends Changes at Pentagon

Gerry J. Gilmore
American Forces Press Service (JAN. 8, 2009)

WASHINGTON—Pentagon officials need to bolster internal management systems that address nuclear weapons issues, the leader of a special task force appointed by Defense Secretary Robert M. Gates said.

Since the Cold War ended, the nuclear deterrence force "has sometimes been neglected within the Department of Defense, as a whole," James R. Schlesinger, chairman of the Task Force on Nuclear Weapons Management, told reporters at a Pentagon news conference.

To better assist Gates with oversight of nuclear weapons issues, the department should have an assistant secretary of defense for deterrence to work in the Pentagon's policy shop, Schlesinger said.

That new assistant secretary, according to the report, would "provide a single [Office of the Secretary of Defense] voice and a single point of engagement for Joint Staff, U.S. Strategic Command, the military services, and other combatant commands on nuclear and weapons of mass destruction matters."

The assistant secretary, the report continued, would be assigned a deputy from the military acquisition realm.

The report also recommends that the purview of the Nuclear Weapons Council be expanded to include nuclear weapons, weapons systems, delivery systems, infrastructure, policy implementation, and resources.

The NWC was established by Congress in 1986 to facilitate and coordinate activities between the Defense Department and the Energy Department as part of their dual responsibilities in maintaining the U.S. nuclear weapons stockpile.

The Defense Department also should expand the staff that oversees nuclear deterrence issues within the Office of the Joint Chiefs of Staff and place a general officer in charge of that effort, Schlesinger said.

The Pentagon and the armed services visibly reduced resources for nuclear deterrence missions following the end of the Cold War in 1991, Schlesinger told reporters. The resultant effect, he said, caused a perception among some leaders and rank-and-file servicemembers that the nuclear deterrence mission wasn't so important any more.

"We emphasize that deterrence must start from the top—that the Services, indeed, have picked up clues over the years since the end of the Cold War, that the interest in deterrence at the highest levels of DoD has diminished," said Schlesinger, in explaining why the U.S. military's interest in nuclear weapons matters had waned.

However, the U.S. nuclear deterrence mission remains a paramount endeavor that's of vital importance to the nation's national security and the welfare of America's allies, Schlesinger said.

"And if deterrence is in the eye of the beholder," Schlesinger said, "it is a political statement that must come from the very highest offices of the government, not only here in the DoD, but from the White House, from the Department of State, and the like."

Schlesinger also took time to praise the Navy's nuclear deterrence mission.

"We were quite satisfied, generally, with the Navy's performance," Schlesinger said, noting that sailors who work in the nuclear-deterrence realm—including submariners—exhibit high morale.

The enormous power and destructiveness of nuclear weapons creates "the desire to avoid the actual use of those weapons in combat, and is, therefore, a different kind of deterrent," Schlesinger said.

"Nuclear forces, we hope, would not have to be used," Schlesinger said. However, he said, many of America's allies depend on U.S. nuclear deterrence capabilities for protection.

Therefore, America's allies "must retain confidence in the U.S. nuclear 'umbrella,'" Schlesinger said. If that confidence evaporates, he said, some U.S. allies are quite capable of building their own nuclear weapons, which could ignite a nuclear arms race.

The strength and credibility of America's nuclear umbrella "is a principal barrier to proliferation," Schlesinger said.

In a statement issued Jan. 8, Gates thanked Schlesinger and the panel members "for their very thorough and detailed report.

"The U.S. nuclear deterrent remains safe, secure, and reliable; no one should doubt our capabilities or our resolve to defend U.S. and allies' interests by deterring aggression," Gates said in the statement.

"The report identified numerous trends, both recent and long-term, that may warrant corrective actions," Gates' statement continued. "The department will continue to review the panel's recommendations while ensuring the long-term credibility of the U.S. nuclear deterrent forces and sustaining allied confidence in U.S. security commitments well into the future."

Gates appointed the Task Force on Nuclear Weapons Management in June 2008, following two events involving the Air Force that indicated a deterioration of that Service's nuclear weapons management and control systems. The secretary tasked the panel to report back to him on Air Force-related

issues in 60 days and on departmentwide nuclear weapons management measures in 120 days.

Some Air Force ballistic missile parts were mistakenly shipped to Taiwan in 2006. In August 2007, an Air Force B-52 bomber armed with nuclear missiles flew from Minot Air Force Base, N.D., to Barksdale Air Force Base, La.

In September 2008, the panel released a Phase One report that criticized the Air Force's management of its nuclear weapons management programs.

Pentagon spokesman Geoff Morrell told reporters later today that Defense Department officials would thoroughly review the Schlesinger panel's latest recommendations. Officials of the incoming Obama administration, Morrell added, also would study the report.

Schlesinger served as CIA director in the Nixon administration, as well as secretary of defense in the Nixon and Ford administrations. In the Carter administration, he served as the first energy secretary.

The task force chairman was accompanied at the news conference by fellow panel members Jacques S. Gansler, retired Navy Adm. Edmund P. Giambastiani Jr., Christopher A. Williams, retired Air Force Gen. Michael P. C. Carns, and Franklin C. Miller. Other panel members not present included J.D. Crouch II and John J. Hamre.

Army Receives First Six NEVs

C. Todd Lopez
ARMY NEWS SERVICE (JAN. 13, 2009)

WASHINGTON—The Army accepted its first six "neighborhood electric vehicles" during a ceremony Jan. 12 at Fort Myer, Va.

Delivery of the six tiny battery-powered NEVs, each about the size of a golf cart, represents the beginning of a leasing action by the Army to obtain more than 4,000 of the vehicles.

Secretary of the Army Pete Geren said the Service will receive a total of 800 NEVs in 2009, and an additional 1,600 of the vehicles in both 2010 and 2011. The vehicles will help the Army save money in both vehicle purchase and in fuel savings, he said. Though there will be a cost associated with installing infrastructure to charge the vehicles—about $800,000 total—that cost will be eclipsed by the savings, he said.

"It will be offset multiple times by the reduction and consumption of 11.5 million gallons of gasoline over the six-year life of these vehicles," Geren said. "And this acquisition of 4,000 NEVs will allow the Army to meet 42 percent of the 2007 Energy Independence and Security Act requirement for a two percent annual petroleum consumption reduction through 2015."

The Army's acquisition of the NEVs constitutes not just the largest acquisition of electric vehicles for the military, but also the largest acquisition of electric vehicles in the United States, Geren said.

"The Army is committed to substantially reducing the greenhouse gas emissions through our acquisition of Neighborhood Electric Vehicles," Geren said. "This historic acquisition will constitute the largest acquisition of electric vehicles not just in the military, but in the entire country."

The acquisition of the NEVs also helps the Army "go green" by preventing the release of some 218.5 million pounds of carbon dioxide into the environment, the secretary said.

The initial contract for 4,000 leased NEVs will cost less than the gasoline-powered vehicles they replace—$3,300 less than a gasoline powered sedan, for instance, and $13,000 less than a hybrid vehicle, Geren said.

For now, the Army plans to lease as many as 4,000 of the NEVs through the General Services Administration. The GSA has placed an announcement on its Web site <www.FedBizOps.Gov> to solicit additional manufacturers for the vehicles.

The NEVs will be used to replace non-tactical vehicles only, Geren said.

"The Army operates almost 68,000 non-tactical vehicles," he said. "Approximately 28,000 of those are sedans or light trucks—these vehicles are good candidates for replacement by additional or other varieties of electric vehicles."

The first of the NEVs have been manufactured by the Global Electric Motorcars division of the Chrysler Corporation. The vehicles come in several variants, including passenger vehicles and cargo-carrying vehicles—the largest of which carries a payload up to 1,450 pounds.

The NEVs are street-legal in nearly all 50 states on roads with speed limits of 35 mph or less. The cars can travel approximately 30 miles on one eight-hour charge, and accord-

The first six "neighborhood electric vehicles" were delivered to the Army Jan. 12 during a ceremony at Fort Myer, Va. The ceremonial delivery of the NEVs, which are entirely electric powered, represents the beginning of a leasing action by the Army to obtain more than 4,000 of the vehicles. The use of NEVs by the Army is part of its comprehensive and far-reaching energy security initiative to ease its dependence on fossil fuels. As part of that initiative, the Service will be leveraging electric vehicles and other technologies that exist today, as well as exploring emerging technologies.
Photo by C. Todd Lopez

ing to a GEM press release, the comparative per mile fuel cost is about two cents.

"We're going to save a lot of energy with these," said Army Lt. Col. Cameron A. Leiker, garrison headquarters command, battalion commander at Fort Myer. "I can imagine seeing these with boxes on the back for guys that do repair work on post. You know there's a lot of places you can go with 30 miles on a post like this."

Decisions Loom for Joint Strike Fighter Program, Support Remains High

Donna Miles
American Forces Press Service (JAN. 16, 2009)

WASHINGTON—Decisions about the F-35 Joint Strike Fighter and F-22 Raptor aircraft programs are expected early in President-elect Barack Obama's administration.

The F-35 program manager said yesterday he sees strong support for the F-35 from the Services, allied partners, and so far, on Capitol Hill.

Based on initial indications and inquiries from Obama's transition team, Air Force Maj. Gen. Charles R. Davis said he's confident the F-35 program begun during the Clinton administration will continue, even if budget restraints force scale-backs. Davis made the comments as keynote speaker at a Brookings Institution forum, "The Joint Strike Fighter and Beyond."

"Support throughout what appears to be three administrations has been relatively consistent," he said. "As of yet, we see no reason that that support is going to change. There is nobody on Capitol Hill who has said they want to cancel the Joint Strike Fighter."

That doesn't mean, he acknowledged, that the program to develop the next-generation strike aircraft weapon system for the Navy, Air Force, Marine Corps, and allied countries might not get scaled back.

Davis conceded he gets many questions about the F-35's cost—expected to be $80 million to $90 million, depending on the variant and delivery schedule. And if fewer aircraft are built, each will cost even more.

"We lose two airplanes in our [fiscal 2009] appropriation, and every other one of the airplanes being bought in that year goes up $3 million," he said.

Another consideration, he said, is the cost of maintaining the aging legacy fleets the F-35 would replace if production is cut.

Earlier, William Lynn, Obama's deputy defense secretary nominee, told the Senate Armed Services Committee it would be "very difficult" for the Defense Department to keep all its weapons systems development programs on track in tight budget times.

Lynn said at his confirmation hearing he'll push for a speedy Quadrennial Defense Review to set priorities through fiscal 2015, and expects the tactical aviation force modernization issue to play heavily in those considerations.

In written responses submitted to the committee, Lynn recognized the capabilities of both the F-22 and F-35 aircraft—particularly when considered together.

"The F-22 is the most advanced tactical fighter in the world and, when combined with the F-35 Joint Strike Fighter, will provide the nation with the most capable mix of fifth-generation aircraft available for the foreseeable future," he said.

The F-22, to replace the legacy F-15 fleet, brings "tremendous capability" and is a critical element of the department's overall tactical aircraft force structure, Lynn said. The F-35, on the other hand, "will provide the foundation for the department's tactical air force structure."

The F-35 is the first aircraft to be developed within the Defense Department to meet the needs of three Services, with three variants being developed simultaneously.

It will replace the legacy F-16 aircraft for the Air Force and the F/A-18 and AV-8 aircraft for the Navy and Marine Corps, as well as numerous legacy aircraft for the international partners participating in the F-35 program, Lynn told the Senate committee.

So the big question, he said, is determining the appropriate mix between the two aircraft. "If confirmed, I would expect this to be a key issue for the early strategy and program-budget reviews that the department will conduct over the next few months," he said.

Defense Secretary Robert M. Gates has made no secret of his interest in reaching a decision and moving forward. During a June visit to Langley Air Force Base, Va., he told airmen at Air Combat Command the new administration will have to determine the proper balance between the two aircraft.

"End the debate, make a decision, and move on," Gates said. "'Start getting stuff built' is just so important."

An F-35 Lightning II Joint Strike Fighter takes off from a Lockheed Martin facility in Fort Worth, Texas, for an initial flight as part of system development testing. Courtesy photo

Gates told the airmen he had allocated enough money to keep the F-22 production lines open so the next administration could make its decision. He did not know at the time that he would be part of that decision-making process.

Davis told the Brooking Institution audience yesterday, "support from all three Services has never been stronger" for the F-35 program.

The Marine Corps, slated to receive the "B" variant that has a vertical-lift capability, has been "the most vocal, avid, and fervent customer," Davis said. The Marine Corps leadership expects the F-35 to become "the most effective air platform they have ever had," he said. "Looking at their history of how they have used airplanes, that is quite a bold statement."

Similarly, the Navy, to receive the aircraft's "C" variant designed for carrier launches, "has never been more supportive of the program," Davis said. He noted that the Navy has been "fighting aggressively" to keep its aircraft carriers fully outfitted.

In addition, the Air Force recognizes the need for a complementary mix of aircraft to meet its mission requirements, he said. Its "A" variant of the F-35 will provide conventional take-off and landing capabilities.

Meanwhile, nine partner nations continue to support the program, with other countries considering signing on, too, Davis said. The F-35 program represents the first time in military procurement history that the United States has partnered with another nation to build an aircraft from the ground up.

"We believe that the coalition that was put in place when they signed up for this program is probably stronger than ever now," Davis said.

This partnership, he said, brings the concept of coalition integration to a whole new level. In addition to funding and developing the F-35 together, the partners plan to use a single system to sustain it—sharing spares and repair capabilities to reduce costs.

"There is something very unique that Joint Strike Fighter offers that other programs I have seen do not," he said.

The big challenge for now, Davis said, is to take advantage of the latest manufacturing processes to get the production line moving ahead.

"Even the manufacturing lines for some of our newest fighters, the F-22, started in the late '80s and early '90s," he said. "We have progressed almost two decades in manufacturing technology, but we have never really tried it out on a full-scale program."

Procurement Reform Must be Government Priority, Gates Tells Senate

Jim Garamone
American Forces Press Service (Jan. 27, 2009)

WASHINGTON—One of the main challenges facing the Defense Department is how the department acquires goods and services and manages the taxpayers' money, Secretary Robert M. Gates told the Senate Armed Services Committee today.

"A risk-averse culture, a litigious process, parochial interests, excessive and changing requirements, budget churn and instability, and sometimes adversarial relationships" within the Defense Department and with other parts of government have now made acquisition reform a priority, Gates told the senators.

The secretary said defense officials must make the difficult procurement choices beginning with President Barack Obama's fiscal 2010 defense budget request.

"President Obama will present his budget later this spring," Gates told the committee. "One thing we have known for many months is that the spigot of defense spending that opened on 9/11 is closing. Two major campaigns ongoing, the economic crisis, and resulting budget pressures will force hard choices on this department."

He noted that any necessary changes "should avoid across-the-board adjustments, which inefficiently extend all programs."

Now is the time to move forward, Gates said. The current situation is "one of those rare chances ... to critically and ruthlessly separate appetites from real requirements, those things that are desirable in a perfect world from those things that are truly needed in light of the threats America faces, and the missions we are likely to undertake in the years ahead," he said.

Gates said resolving the department's acquisition problems will take time.

"I have no illusions that all of this will be solved while I am at the Pentagon," Gates told the committee. "Indeed, even if I am somewhat successful on the institutional side, the

benefits of these changes may not be visible for years. My hope, however, is to draw a line, and from here forward make systemic progress to put the department on a glide path for future success."

Gates said all Services are feeling the effects of a small set of expensive weapons programs that have had repeated and unacceptable problems with requirements, schedule, cost, and performance.

This is not a revelation, he said. Since the end of World War II, almost 130 studies have addressed procurement problems. While there is no "silver bullet" solution, he said, "I do believe we can make headway. And we have already begun addressing these issues."

The department has begun to purchase systems at more efficient rates for the production lines. Gates said he believes defense officials can combine budget stability and order rates that take advantage of economies of scale to lower costs.

The old expression "close enough for government work" must take on new meaning, Gates said. "We will pursue greater quantities of systems that represent the 75 percent solution instead of smaller quantities of 99 percent exquisite systems," he explained.

Procurement needs to become as joint as the fighting force, he said.

"While the military's operations have become very joint, and impressively so, budget and procurement decisions remain overwhelmingly Service-centric," he said. "To address a given risk, we may have to invest more in the future-oriented program of one Service and less in that of another, particularly when both programs were conceived with the same threat in mind."

Part of that is the need to freeze requirements on programs at contract award and write contracts that incentivize proper behavior, Gates said.

"I feel that many programs that cost more than anticipated are built on an inadequate initial foundation," he told the Senate panel. "I believe the department should seek increased competition, use of prototypes—including competitive prototyping—and ensure technology maturity so that our programs are ready for the next phases of development."

The department also must have enough personnel with the right skills to shepherd acquisitions forward, he said.

"Over the past eight years, for example, the Department of Defense has operated with an average percentage of vacancies, in key acquisition positions, ranging from 13 percent in the Army to 43 percent in the Air Force," he said.

The wars in Afghanistan and Iraq have exposed the underlying flaws in the Pentagon bureaucracy, Gates said, noting that he has tried to correct those problems.

"I've spent the better part of the last two years focused on the wars we are fighting today, and making sure that the Pentagon is doing everything possible to ensure that America's fighting men and women are supported in battle and properly cared for when they come home," Gates said.

Gates said institutional priorities and cultural preference must be re-ordered. The bureaucracy still is "largely arranged to plan for future wars, to prepare for a short war, but not to wage a protracted war," he said.

"The challenge we face," he told the senators, "is how well we can institutionalize the irregular capabilities gained and means to support troops in the theater that have been, for the most part, developed ad hoc and funded outside the base budget."

Gates said the department must close a yawning gap between the way the defense establishment supports current operations and the way it prepares for future conventional threats.

"Our wartime needs must have a home and enthusiastic constituencies in the regular budgeting and procurement process," he said. "Our procurement and preparation for conventional scenarios must, in turn, be driven more by the actual capabilities of potential adversaries, and less by what is technologically feasible given unlimited time and resources."

Sometimes, he said, that means fielding weapons or technology quickly, even if their full potential has yet to be realized.

"The problem is there are two different mentalities involved," he explained. "The one is the typical culture in the Defense Department, which is 99 percent exquisite solutions over a five- or six- or 10-year period; and the other is a 75 percent solution in weeks or months. And people approach problem-solving in very different ways when they have that different kind of experience. We've got to figure out how to be able to walk and chew gum at the same time."

He cited the obstacles he had to overcome to get mine-resistant, ambush-protected vehicles and more intelligence, surveillance, and reconnaissance assets into the combat theater quickly.

"The question I keep coming back to is, why did I have to go outside the regular Pentagon bureaucracy in order to build MRAPs and to get additional ISR?" the secretary said. "We need to figure out a way where that happens within the institution, and where there are institutional supporters of getting that kind of thing done in a prompt and timely way."

Inspector General: Oversight, Accountability Critical to Wartime Contracting

Donna Miles
American Forces Press Service (Feb. 3, 2009)

WASHINGTON—Accountable and properly overseen contracting procedures that safeguard taxpayer dollars are critical to supporting the war efforts and warfighters in Iraq and Afghanistan, a Defense Department inspector general told a congressional panel on wartime contracting.

Thomas Gimble, the department's principal deputy inspector general, joined his counterparts from the State Department and U.S. Agency for International Development at a hearing of the Commission on Wartime Contracting in Iraq and Afghanistan. Members of the Office of the Special Inspector General for Iraq Reconstruction also testified.

The hearing was the first for the commission, established last year to improve accountability in wartime contracting. The commission was modeled after the Truman Committee that exposed $15 billion in contracting waste and fraud during World War II. Gimble specifically called during the hearing for increased oversight of property and cash accountability, the Commander's Emergency Response Program, contingency contracting support, and controls over contractor common access cards.

Contracting in a war zone, particularly in the rush to get vital equipment and supplies to warfighters, can increase the risk of fraud, waste, abuse, and mismanagement, he told the commission. One of the bigger problems, he said, is inexperienced and overloaded contracting staffs and lack of adequate oversight.

"From the inception of the ... global war on terrorism, military and civilian contract administration personnel engaged in contingency contracting designed to obtain much-needed goods and services as quickly as possible," he said. "Contract administrators focused primarily on timely mission accomplishment versus ensuring the strict adherence to the traditional contract administration procedures."

Many of these procedures, he said, are designed to reduce the risk of corruption and abuse. Effective oversight requires "a sizeable cadre of highly trained government contracting personnel with specialized knowledge and significant acquisition expertise," he said.

Gimble also called for civilian and military contract administrators and contract technical representatives to be career contracting professionals trained to recognize indicators of potential fraud, waste, and abuse. In addition, he told the committee, contract administrators must be assigned reasonable workloads so they can provide effective oversight and identify potential fraud, waste, and abuse.

"Every acquisition dollar that is not appropriately spent is a dollar that is not available to fund other top priorities of the Department of Defense and wastes taxpayer dollars," Gimble told the commission.

"We are committed to providing effective and meaningful oversight that assists [the Defense Department] to address its challenges in conducting operations; safeguarding and deterring taxpayer monies from waste, fraud and abuse; and most importantly, ensuring our brave military, civilian, coalition, contractors, and the Iraqi and Afghanistan citizens supporting a free and sovereign democratic state are as safe as possible."

Coast Guard Marks Acquisition Milestones

Coast Guard Lt. Tony Migliorini
Special to American Forces Press Service (Feb. 9, 2009)

WASHINGTON—The Coast Guard's acquisition directorate has marked a number of positive milestones in delivering new assets and capabilities to the field, the Coast Guard's senior acquisition official said Feb. 6. Coast Guard Rear Adm. Gary T. Blore, assistant commandant for acquisition, provided bloggers and online journalists with an update on several major projects and announced the delivery of the 200th vessel from the foreign military sales program.

Blore also discussed the importance of ensuring American taxpayers know the Coast Guard is spending their money wisely.

"One of the tenets of our new acquisition processes is we try to be as transparent as possible," he said. "We want the public ... to be aware of what we are doing in the Coast Guard."

Among the 22 major acquisition projects under way, Blore highlighted the progress of the "response boat medium" project, the Rescue 21 system, the HC-144A Ocean Sentry medium-range surveillance aircraft, the national security cutter, and the Sentinel-class patrol boat.

The Coast Guard has delivered the sixth of 180 planned response boat medium vessels, and officials are conducting operational tests in a variety of geographic areas. Blore noted that one of the new vessels participated in the rescue operation when U.S. Airways Flight 1549 made an emergency landing in the Hudson River on Jan. 15.

The Rescue 21 project—the Coast Guard's advanced command, control, and communications rescue system—is now being employed on more than 60 percent of the nation's coastline, Blore said. It will be deployed at Sector North Carolina at the end of the month, and Sector Boston is scheduled to be accepted in May, he added.

The Coast Guard's sixth HC-144A "Ocean Sentry" aircraft is flying from Spain to its U.S. destination of Elizabeth City, N.C., this week, Blore said. Five additional aircraft are under contract and are scheduled for delivery before November 2010.

The Coast Guard's first Legend-class national security cutter, Bertholf, is on track to complete electronic emissions security compliance and final acceptance by May, the admiral said. Also, the U.S. Navy's Naval Surface Warfare Center's Carderock division recently delivered its report on Coast Guard fatigue design enhancements to the national security cutter.

Coast Guard officials are excited about moving forward with their Sentinel-class patrol boat project, and are planning to take delivery of a lead vessel in 2011, Blore said. "We have a lot of things going on in acquisition," he said. "We think we have reformed our processes and are doing things very well."

Migliorini writes for the Coast Guard Headquarters public affairs office.

Strykers Gear Up for New Mission in Afghanistan

Army Staff Sgt. Michael J. Carden
American Forces Press Service (FEB. 19, 2009)

WASHINGTON—The Army's Stryker armored vehicle will get its first crack at the resurgent Taliban and terrorist strongholds in Afghanistan this summer when the 2nd Infantry Division's 5th Stryker Brigade Combat Team hits the ground there.

Army Gen. David D. McKiernan, commander of NATO's International Security Assistance Force and U.S. Forces Afghanistan, said at a Pentagon news conference that he specifically requested the Stryker brigade for its versatility.

"I asked for a Stryker capability, with one of the brigade combat teams, so that it could provide the mobility, the situational awareness, the protection," McKiernan said. "And, quite frankly, it provides a lot of infantrymen. And that would give us an ability to maneuver capabilities in the southern and southwestern parts of Afghanistan."

The brigade will bring about 4,000 soldiers and nearly 300 Strykers to the fight in Afghanistan. They will be operating in the country's southern region and along the Pakistan border, areas that don't have a sufficient security presence, preventing governance and infrastructure progress, McKiernan said.

"We need persistent security presence in order to fight a counterinsurgency and to shape 'clear, hold, and build' [strategies] in support of a rapidly developing Afghan capacity," he said, referring to the strategy of clearing an area of insurgents, preventing them from returning, then taking advantage of the improved security to build governance and infrastructure. The additional troops also will have a dual responsibility in training and organizing Afghan police forces and army, he said. Military leaders there hope to double the size of the Afghan army to 134,000 troops as soon as 2011. Mentoring and training Afghan forces is necessary for success there, the general said.

"Our goal [is] to attempt to accelerate the growth of the Afghan army," McKiernan said. "But we need to do that in a smart way. We need to do it in a holistic way, so it's not just a question of numbers; it's a question of training, equipping, leader development, and their employment."

The Army brigade's deployment was officially announced this week as part an additional 17,000 soldiers and Marines President Barack Obama ordered to Afghanistan. Defense Secretary Robert M. Gates signed the deployment orders at around 7:25 a.m. on Feb. 17, and Obama's announcement was pending notification of the soldiers' and Marines' families, Pentagon officials said.

The Strykers originally were slated for an Iraq deployment this summer, but anticipated the switch "some time ago," a brigade spokesman said. Army Maj. Mike Garcia wouldn't give specifics as to when the soldiers were notified of their new Afghanistan mission, but said it was enough time to

The Stryker fulfills an immediate requirement in the Army's current transformation process to equip a strategically deployable (C-17-/C-5) and operationally deployable (C-130) brigade capable of rapid movement anywhere on the globe in a combat-ready configuration. The armored wheeled vehicle is designed to enable the Stryker Brigade Combat Team to maneuver more easily in close and urban terrain while providing protection in open terrain. U.S. Army photo

adjust their training before arriving at the National Training Center earlier this month at Fort Irwin, Calif.

"Their training scenario is focused on an Afghanistan fight," Garcia said. "We knew this some time ago and had enough time to modify the scenario."

The brigade started its training at the National Training Center on Feb. 15, learning the various cultures within Afghanistan. Persian Farsi, Pashto, and Urdu are some of the languages and customs they'll get a crash course in. They'll also learn what to expect regarding Afghanistan's mountainous terrain, weather, and type of insurgency they may face, based on military experiences there.

Their training will continue through the end of the month, Garcia said.

The Stryker brigade concept has proven successful in urban warfare since it was first introduced to live combat December 2003 in Iraq, but it has never been used in Afghanistan. The Stryker community recognizes the challenges, but is confident in their capabilities.

"Yes, it is a different theater," Garcia said. "Combat is never easy, but they're still prepared, mentally and physically, to go to combat. It's just a different place on the globe to us."

Afghanistan's mountainous and rigid terrain, freezing weather, and the freedom of movement insurgents have enjoyed there will be new challenges for the Stryker. There are distinct differences compared to Iraq regarding the terrain and culture, but Garcia said, "the basic tenets and concept of fighting a counterinsurgency remain the same."

"Stryker brigades are very versatile," he said, echoing McKiernan. Strykers can travel long distances very fast. The 10 different models of Stryker vehicles include infantry, engineer, reconnaissance, and medical evacuations variants, and can carry as many as 14 soldiers, Garcia explained.

"With the incredible capabilities they have to conduct reconnaissance and target bad guys with precision operations while mitigating collateral damage, Strykers are probably one of the best formations that the Army has put on the fields in decades," he added.