

# In the News

## ARMY NEWS SERVICE (MAY 1, 2008) RAVEN LAUNCHES NEW BATTLEFIELD PERSPECTIVE

*Sgt. Amanda Jackson, USA*

FORT BRAGG, N.C.—Soldiers assigned to the 3<sup>rd</sup> Brigade Combat Team, 82<sup>nd</sup> Airborne, got a hands-on perspective on the Raven, an unmanned aerial vehicle, during a 10-day Raven training course held from April 22 to May 2 at the 3<sup>rd</sup> Brigade Combat Team headquarters.

Once limited to brigade and higher level commanders, the hand-launched aircraft is one of the latest technologies to enhance warfighting capabilities, putting aerial reconnaissance tools in the hands of paratroopers on the ground.

Soldiers learned to assemble and inspect the aircraft, launch the aircraft, and operate the remote control to manage the plane's movements and cameras. The crash course is designed to give a soldier of any job or skill a basic idea of how to operate the Raven instead of relying on a UAV specialist. The course is usually a mixture of combat and non-combat paratroopers who have never touched a UAV.

At just over 4 pounds and having a span of 5 feet, this small aircraft gives its operator a full-range battlefield perspective. The Raven is equipped with three cameras: an electrical optical camera and two infrared cameras, which provide an aerial observation of 10 to 15 kilometers at altitudes up to 1,000 feet.

“When we first went over to support Operation Iraqi Freedom, we had Raven capabilities,” said Spc. Gregory J. Chandler, 3<sup>rd</sup> Brigade Combat Team, 82<sup>nd</sup> Airborne Division. “What we [infantry units] didn’t have was anybody to train us on it.”

Although this tool of war is not meant to be treated like a video game, instructors of the course explained that gamers quickly get the concept of the Raven and its capabilities.

“It’s the game people—the guys who love PlayStation® 3 and computer games—who really have a good understanding of the Raven,” said chief UAV flight instructor Mike Plonski.

“It’s like a gigantic video game for adults, but with real consequences in the bigger picture,” he said.

By the fifth day, most of the trainees will have a pretty solid concept of the complicated aircraft, said Plonski, who has seen the progression of UAVs in the last 20 years. The hardest part of the training is launching the aircraft.

Before launching the aircraft, soldiers have to practice with baseball bats. This exercise gives each person a feel of how the Raven should be launched in order to be mission-capable.

“If you can’t launch it, there’s no mission,” said Plonski. “So the Paratroopers launch baseball bats, which have the bottom-heavy feel of the Raven, until they are able to throw straight and far. After a sturdy launch, the aircraft takes over and pulls itself up to altitude.”



Army infantryman Pfc. Kyle J. Matlack, 3<sup>rd</sup> Brigade Combat Team, 82<sup>nd</sup> Airborne Division, holds the Raven Unmanned Aerial Vehicle before launching it in the air. Paratroopers got a first-hand look at the Raven aircraft and its capabilities during Raven UAV training at Fort Bragg, N.C.  
Photo by Sgt. Amanda Jackson, USA

With the Raven, soldiers are able to respond to accurate intelligence rather than an attack, said Plonski. It provides a multi-dimensional eye of the enemy, much further than what paratroopers view directly in front of them, ultimately sparing lives, he said.

*Jackson serves with the 3<sup>rd</sup> Brigade Combat Team, 82<sup>nd</sup> Airborne Division Public Affairs Office.*

### AMERICAN FORCES PRESS SERVICE (MAY 2, 2008) **MARINES REPORT OSPREY HAS PROVEN ITSELF IN IRAQ**

*Jim Garamone*

WASHINGTON—The MV-22 Osprey has proven itself in Iraq, and Marine officials are applying the lessons learned in the first operational deployment of the tilt-rotor aircraft to current operations.

“We’re immensely proud of the Marines of Tilt-Rotor Squadron 263, who took on the challenging task of the first combat deployment of the Osprey,” Lt. Gen. George J. Trautman, deputy commandant for Marine Corps aviation, said.

The MV-22 takes off and lands as a helicopter, but flies like an airplane.

Trautman, squadron commander Lt. Col. Paul Rock, MV-22 pilot Capt. Sara Faibisoff, and crew chief Sgt. Danny Herrman briefed Pentagon reporters on the squadron’s deployment to Iraq. The unit deployed from Marine Corps Air Station New River, N.C., in September 2007 and returned last week.

Trautman said the decision to send the MV-22 to Iraq was the right one. It gave the Marines and soldiers in Anbar province “the best assault support aircraft” ever made, he said.

The MV-22 handled every mission it was assigned, Rock said. The unit flew more than 2,500 sorties during its seven-month deployment, with each of its aircraft flying an average of 62 hours per month. Rock said before the deployment, officials forecast each MV-22 would fly around 50 hours per month.

The aircraft was easier to maintain than the CH-46 helicopters it replaced. The 46 is 1950s-based technology, and mechanics put in 24 hours of maintenance on those aircraft for every hour in the air. The MV-22 took about 9.5 hours of maintenance for every hour of flight.

The squadron deployed with 10 aircraft. “On any given day, about seven aircraft were mission-ready,” Rock said. “That was more than sufficient to meet our daily taskings.”

The biggest surprise for the Marines was the vastly increased payload and greatly increased range the Osprey brings to the mission. Herrman said that in loading the aircraft, he would often run out of cubic space before exceeding the weight the aircraft could handle.

The range and speed of the aircraft were also pleasant surprises. Faibisoff told of flying a medical evacuation mission on Christmas Day. She picked up a Marine with a ruptured appendix in a remote base well south of Al Asad Air Base. The aircraft was able to launch and get the Marine to medical help in 56 minutes—well within the “golden hour,” a rule of thumb that gives an ill or injured person the best chance for survival if treated within the first hour of being stricken.

“We were off deck within 15 minutes of receiving the call and headed for a zone about 90 miles south of Al Asad,” she said.

Computer software makes the aircraft easy to fly, and it was able to handle the desert environment, Faibisoff said.

The aircraft flew raid operations and scout missions, and conducted tactical recovery of aircraft and personnel. The squadron also flew alert missions and casualty evacuations.

“The overwhelming majority of what we did was general support—taking people, gear, combat equipment all over the very large battlespace,” Rock said.

The combat conditions in Anbar province had improved to such a degree that the aircraft never had to fly into a landing zone while hostilities were under way. Still, Rock said, squadron aircraft came under small-arms fire once and rocket fire once. “Taking advantage of the aircraft’s performance [means that] somebody’s opportunity to engage us is very short,” he said.

The Marine Corps is looking at adding an all-aspect, all-quadrant weapon on the MV-22.

“The system we’re looking at now with the [U.S.] Special Operations Command is an all-aspect weapon that would be mounted in the belly of the aircraft,” Trautman said.

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The weapon will fire in any direction and be controlled by a gunner inside the airplane.

Another MV-22 squadron is operating at Al Asad Air Base today. The Service will create two more squadrons each year.



U.S. Marine Corps Marine Medium Tiltrotor Squadron 162 MV-22 Osprey tiltrotor aircraft prepares to land at Haditha Dam in northern Anbar province, Iraq.

U.S. Marine Corps photo by Lance Cpl. Grant T. Walker

“We’re on a journey to exploit a new and revolutionary technology,” Trautman said. “We’re going to continue to learn lessons and we’re going to continue to improve and we’re going to work hard to exploit the [capabilities of] this aircraft.”

### AIR FORCE PRINT NEWS (MAY 6, 2008) HANSCOM UNIT APPLIES ‘GOLD STANDARD’ TO CONTRACT

*Chuck Paone*

HANSCOM AIR FORCE BASE, Mass.—When a joint team led by the Electronic Systems Center awarded the system development and demonstration contract for the Airborne and Maritime/Fixed Station Joint Tactical Radio System this spring, the move triggered not a single protest.

“It’s one way we can tell we listened, learned, understood, and applied the gold standards to make for a successful source selection,” said outgoing program manager Col. Joe Wercinski of ESC’s 653<sup>rd</sup> Electronic Systems Wing.

“We put together a very thorough, solid, clean acquisition process and team that produced the right result for the warfighter,” he said. “The evidence of that was pretty clear to everyone who reviewed it.”

The five-year contract is worth \$766 million with options that could increase the total value to \$1.3 billion.

The JTRS program began about a decade ago when Defense Department officials decided to unify its communications infrastructure by creating what are known as software-defined radios, which would allow troops, vehicles, ships, and aircraft to easily receive and pass the same information, eliminating disconnects that have often hampered warfighting operations in the past, the colonel said.

“JTRS puts broadband-like wireless capability right into the cockpit, and into submarines and surface ships,” Wercinski said. And while it falls beyond the immediate scope of the airborne and maritime/fixed, or AMF, portion of the massive program, JTRS will also tie in combat vehicles and individual soldiers and Marines on the ground.

Even airborne munitions and small mines can be equipped with JTRS, allowing the weapons to pass information to warfighters, he said.

But bringing such an ambitious joint program together proved very challenging. About five years ago, DoD officials decided to break it into more manageable chunks, or

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as they were called, clusters. The AMF cluster, jointly managed out of Hanscom Air Force Base and led primarily by an ESC team, set an acquisition strategy that carefully reduced risk by using pre-SDD awards that helped design the overall effort and examine the challenges to come.

While this effort resulted in two awards, the larger SDD competition was full and open to any company or industry team wishing to participate, Wercinski said.

“We took a very deliberate, thoughtful approach to the acquisition,” he said. “We paused when we needed to in order to make sure things were OK—that we were on the right track. We wanted to be sure that, in the end, we could feel really good and really confident in the decisions we made and about the program’s likelihood of success—and we definitely do.”

The team had to consider a bevy of technical challenges and proposed solutions, he said. “Over the years, DoD and its various contractors have built so many stovepiped radios, each designed to do its specific thing with unique waveforms, that getting down to a reasonable number of waveforms was very important.”

JTRS program managers had to reduce an initial 32 waveforms down to about six, he said, picking those considered “transformational.”

“Those with the widest spectrum and throughput capability are the ones we want,” he said. “The data rates are incredible.”

They also had to carefully consider the big three concerns of most engineering designs: size, weight, and power, especially for smaller applications like unmanned aerial vehicles. Because of this, the AMF team is working toward two separate designs—a larger fixed and maritime unit and a small unit for UAVs and rotary wing aircraft that’s about the size of a shoebox and will weigh no more than 15 pounds.

“Every ounce is critical where size constraints are in place,” the colonel said. On board aircraft, there are also power limitations, and heat is a real concern, too.

“Power when burned turns to heat, so you have to think about cooling and venting,” he said. The team took all this and far more into consideration during a rigorous source selection process that involved a large, multi-faceted, and “truly joint” team that included participation from the National Security Agency.

“Now we’re on contract, we’re fully funded, and we have commitments from each of the Services for our products. That means we’re well positioned for success. And that success can be directly attributed to the incredible ESC support this program received,” Wercinski said.

*Paone writes for 66<sup>th</sup> Air Base Wing Public Affairs.*

### NAVY ENTERPRISE RESOURCE PLANNING PROGRAM NEWS RELEASE (MAY 15, 2008) **NAVY ERP ACHIEVES INITIAL OPERATION CAPABILITY**

Vice Chief of Naval Operations Admiral P. M. Walsh released a memorandum May 15, 2008, announcing that initial operating capability (IOC) for the Navy Enterprise Resource Planning (ERP) program was achieved, effective May 12. This major milestone in the program’s acquisition life cycle is a significant step in bringing Navy ERP, the Navy’s integrated business management system, to 88,000 users across the Service when fully implemented.

The Navy ERP program brings total asset visibility and financial transparency to Navy business operations as part of the Navy’s transformation of its business affairs. The system, now in operation at the Naval Air Systems Command (NAVAIR), integrates management functions in program management, finance, workforce management, supply, and maintenance into one system that standardizes and modernizes Navy business practices.

The program constitutes the Navy’s adoption of best commercial business practices as it employs a commercial off-the-shelf system in use in hundreds of private, commercial concerns. The Navy conducted four pilot programs to assure that the unique requirements of the Department of Defense and the Navy could be successfully supported by a commercially based system. Lessons learned from the pilots allowed the Navy ERP program office to develop the system that will meet the Navy’s requirements while increasing the effectiveness and efficiency of its business operations.

“Achieving IOC is a significant and well-deserved accomplishment for the Navy ERP program, and a transformational step forward for the Navy Enterprise,” said Rear Admiral Tim Flynn, program executive officer for Enterprise Information Systems. “The IOC milestone recognizes the dedication and tireless energy of the Navy ERP team in bringing this essential capability to the warfighter.”

Release 1.0, now operating at NAVAIR, serves as the foundation of the Navy ERP system and is scheduled for implementation at the Naval Supply Systems Command in February 2010. The Navy ERP program uses a product produced by SAP Corporation and is the largest ERP implementation in the Department of Defense and among the largest implementations ever accomplished.

*Media contact is Bob Coble, Navy ERP public affairs officer, 410-919-1725.*

### AMERICAN FORCES PRESS SERVICE (MAY 16, 2008) **GATES CALLS FOR FASTER APPLICATION OF WARFIGHTING ASSETS**

*Jim Garamone*

WASHINGTON—The Defense Department needs to worry more about what warfighters need right now than what they may need down the road, Defense Secretary Robert M. Gates said. In a speech to the Business Executives for National Security group, Gates said he will work for the remainder of his time in office to ensure the department fulfills its “sacred obligation” to support U.S. servicemembers now fighting on the front lines. This means doing all that is needed to “see that they are successful on the battlefield and properly cared for at home,” Gates said.

The secretary received the group’s Dwight D. Eisenhower Award during a dinner and spoke of the challenges he has faced since assuming the Pentagon’s top position in December 2006.

Troops fighting in Iraq and Afghanistan need more intelligence, surveillance, and reconnaissance assets; the best possible vehicles; and proper outpatient care and support when they’re wounded, Gates told the group. “These are issues I take seriously—and very personally,” he said.

“These needs require the department to focus on the reality that we are in the midst of two wars and that what we can provide our soldiers and commanders three or four years hence isn’t nearly as important as what we can provide them today or next month,” he said.

The secretary said providing what the nation’s warfighters need requires leadership, vision, and a sense of urgency. He stressed the importance of overcoming obstacles within the Services such as “an unwillingness or hesitancy to upend assumptions and practices that have accumulated in a largely peacetime military establishment and an assumption that the war would soon be over, and therefore, we shouldn’t impinge on programs that produce the

kinds of equipment and capabilities that probably would not be needed in today’s combat.”

Intelligence, surveillance, and reconnaissance assets—particularly unmanned aerial vehicles—illustrate part of the problem, the secretary said. Though UAV technology has been around for some time, he noted, the U.S. military was loathe to invest in the technology.

“The defense establishment didn’t see the potential value or anticipate the need for this capability,” he said. “Put bluntly, we suffered from a lack of vision and have struggled to catch up.”

Commanders throughout the world—but especially in Iraq and Afghanistan—need more of these assets, the secretary said.

Unmanned aerial vehicles, he said, can give ground commanders instantaneous information about what they’re facing—such as a live look at someone planting an improvised explosive device miles down the road a convoy is using—without putting pilots or ground-based scouts at risk.

“I’ve taken a special interest in UAVs, because they are ideal for many of today’s tasks in today’s wars,” Gates said. “They give troops the tremendous advantage of seeing full-motion, real-time, streaming video over a target, such as an insurgent planting an IED on a street corner.”

Since 2001, the total number of UAVs has increased 25-fold to more than 5,000; and over the past few months, the Air Force has doubled the number of Predator UAVs supporting combat operations.

“But that’s still not enough to meet the demand from commanders in the field,” Gates said.

The capability requires innovative thinking and tearing down a bureaucratic culture within all the Services and within the Pentagon that does not encourage innovation. The idea should be that every employee comes to work asking how he or she can help those in combat, the secretary said.

Gates cited the fielding of mine-resistant, ambush-protected vehicles as another example of something that should have happened faster. The vast majority of U.S. combat deaths and wounds are the result of roadside bombs, and enemy fighters increasingly turned to armor-piercing devices as troops’ Humvees were fortified.

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“As with UAVs, the department didn’t recognize or act on the need for large numbers of these systems early enough,” Gates said.

The MRAPs have a distinctive, V-shaped hull that deflects the blast from buried explosives and has proven invaluable in a conflict where these types of attacks have been the No. 1 killer. This capability, too, has been around for years, but the vehicles were not sent to Iraq in large quantities until last year.

“I believe that one factor that delayed fielding was the pervasive assumption . . . that the wars in Afghanistan and Iraq would not last long—that regimes could be toppled, major combat completed, the insurgency crushed, and most U.S. troops withdrawn fairly soon,” Gates said. “The fact that these vehicles, which cost over a million dollars each, could potentially compete with other longer-term procurement priorities geared toward future wars was probably also a factor.”

A year ago, the secretary made MRAPs the department’s top procurement priority.

“In under a year, production has soared from 10 vehicles per month to over 1,200,” he said. “I was particularly impressed by how quickly industry responded once the Pentagon made MRAPs a priority.”

Today, more than 4,500 MRAPs are in Iraq and Afghanistan, and thousands more are on the way. “There have been 151 attacks so far on MRAPs, and all but seven soldiers have survived,” Gates said. “These vehicles are saving lives and limbs.”

Finally, Gates discussed the obligation the country has to ensure that those wounded receive the best possible care and get the help they need to set them up for their changed lives.

“The wounded warrior program—our highest priority apart from winning the wars in Afghanistan and Iraq—involved two different kinds of leadership challenges: accountability and reforming a lumbering outpatient health care system,” Gates said.

The initiative grew out of a Washington Post series on inadequate outpatient care at Walter Reed Army Medical Center here.

“I was disappointed by the initially dismissive response of some in the Army’s leadership, who went into damage-

control mode against the press and, in one case, blamed a couple of sergeants,” Gates said. “Wrong move.”

The secretary said he concluded responsibility lay much higher, and acted accordingly. Gates asked for and received the resignations of the Army secretary, the Army surgeon general, and the Walter Reed commander. Since then, the Veterans Affairs Department and DoD have made significant progress on providing the type of care veterans deserve, Gates said.

“We are on track to complete more than 400 recommendations resulting from the new National Defense Authorization Act and five major studies and commissions,” Gates said.

But the most important change has been one of attitude and the establishment of a new way for injured personnel to receive medical treatment: warrior transition units.

“These units are responsible for shepherding injured servicemembers back to their units or helping them transition to veteran status,” he said. “Thus far, the Army has created 35 new warrior transition units, caring for over 10,000 soldiers.”

Each wounded soldier is assigned a case manager, squad leader, and primary care provider. The units also offer a full range of support for military families, including personnel benefits, financial counseling, employment support, education counseling, childcare, and other needs.

Another change has been to streamline the disability evaluation system, Gates told the business leaders. Servicemembers have complained bitterly about the time and hassles of the old system, rooted as it was in the peacetime military, he said. For example, servicemembers received two separate disability ratings from DoD and VA.

“We are now converting the disability evaluation system into a single and transparent process in which one disability rating would be legally binding by both organizations,” Gates said. “One servicemember; one exam; one rating.”

A pilot program for the new system began at Washington-area hospitals in November, and the results have been encouraging, Gates said.

“Thus far, over 300 wounded, ill, or injured troops have been treated and evaluated,” he said. “Early findings sug-

gest that a better handshake between the VA and DoD could cut in half the time required to transition a veteran to full VA compensation.”

DoD is also increasing the resources it applies toward one of the signature injuries of the wars in Iraq and Afghanistan: post-traumatic stress disorder.

“We are actively working to eliminate any stigma associated with PTSD,” Gates said. “Over 900,000 soldiers have been trained in recent months about symptoms of PTSD and the need to seek assistance.”

Gates cited the recent change to a question on mental health on the security clearance application as part of that effort.

“Too often, troops have avoided seeking help because they were worried it would affect their security clearance and perhaps their career,” he said. “I announced at Fort Bliss two weeks ago that the question about mental health, as a general matter, will now exclude counseling related to service in combat, post-traumatic stress in particular. We hope this will encourage more men and women in uniform to seek help.”

Gates said the men and women of the department want to do right by the men and women on the front lines.

“It’s up to their leaders to clearly articulate the department’s priorities and spell out, as they say in the military, ‘commander’s intent,’” he said. “When we do so, the bureaucracy responds, industry responds, and the nation responds.”

Gates noted he is responsible for the war strategy and for signing the deployment orders to carry it out.

“Every day, my signature on a piece of paper sends our brave men and women in harm’s way,” the secretary said. “At the end of the day, I must be able to look them in the eye—be they in Kandahar or Ramadi or Walter Reed—and tell them, truthfully, that this wealthy and generous country has done everything possible for them.”

### **AIR FORCE PRINT NEWS (MAY 21, 2008) WING MAINTENANCE, LOGISTICS TO MERGE WITH OPERATIONS**

WASHINGTON—On May 12, Air Force Chief of Staff Gen. T. Michael Moseley signed the Global Wing Structure Program Action Directive 08-01. PAD 08-01 directs the

realignment of fighter, rescue, and bomber aircraft maintenance units under flying squadrons.

The Air Force will implement these changes between July 1 and Nov. 30. Major command officials will determine on what specific dates each participating wing will implement these changes.

“I believe the most effective formula is to structure Air Force units by mission and not by function, and aligning maintenance units responsible for sortie generation together with the flying squadrons they support is best for our Air Force,” Moseley said when he made the announcement for such changes Dec. 7. “Aircraft maintenance is a vital element of a flying squadron’s mission, and the maintainers who directly support sortie generation belong in that chain of command.”

Maj. Gen. Robert H. McMahon, director of maintenance, deputy chief of staff for logistics, installations and mission support, believes these changes will strengthen the relationship between operators and maintainers.

“The difference is comparable to the relationship between neighbors and family,” he said. “You know your neighbors but not as well as you know your family. You have a general idea of what your neighbors are doing, but it’s not the same as what you know about your family. By marrying up these units, we will be better connected with each other and better able to understand each other’s challenges and strengths.”

Aligning aircraft maintenance units responsible for sortie generation with the flying squadrons they support provides combatant commanders with the most complete and capable fighting squadrons possible, officials said. It also allows the operations group commander to focus on the generation and employment of airpower. In short, it generates the mission generation command chain.

A new materiel group at wing-level will create a new structure that is aligned to better support the logistics enterprise, flying wings, and combatant commanders. The logistics readiness squadron, aerial support squadron, and the remaining maintenance squadrons form the materiel group and will consolidate traditional logistics functions under a single logistics leader in the wing. The global wing structure also positions the logistics community for future transformation initiatives.

“The squadron is the building block of Air Force organizational structure and must be organized for success,”

Moseley said. "These initiatives allow us to take advantage of process improvements, pool our resources, and reorient our squadrons around our mission."

In the past, the Air Force used an "objective wing" structure that merged maintainers and operators. However, there are differences between the objective wing structure and the new one. Major transformation initiatives are recasting how the Air Force is organized. Manpower reductions and budget challenges have led to many centralization and consolidation or regionalization initiatives.

### DEPARTMENT OF DEFENSE NEWS RELEASE (MAY 27, 2008) **FIVE MILLION BATTLEFIELD ELECTRONIC HEALTH RECORDS NOW AVAILABLE WORLDWIDE**

WASHINGTON—U.S. Army Surgeon General Lt. Gen. Eric B. Schoomaker today announced continued expansion of medical information technology to support a comprehensive electronic health record led by the Army. Medical Communications for Combat Casualty Care, or MC4, provides digital recording capabilities and access to battlefield medical information via ruggedized laptops and handhelds intended to be used in combat zones to document patient care.

MC4 is now used at all Army and Air Force medical facilities on the battlefield; in the Multinational Forces and Observers Effort in Sinai, Egypt; and by Army Special Forces, Navy, and Marine providers throughout Southwest Asia. The system ensures that servicemembers have a lifelong electronic medical record. More than 5 million electronic medical records have been captured since MC4's deployment in 2003.

"Everyone wants MC4 because of its universal benefits," said Lt. Col. Edward T. Clayson, commander of the Army's MC4 program. "Soldiers receive improved continuity of care, providers have up-to-date information to avoid repeat procedures, and commanders have improved medical situational awareness to better place their medical resources and personnel on the battlefield."

When seconds count, a wounded or ill servicemember's medical information can be beamed around the world to hospitals and doctor's offices straight from the battlefield in advance of the patient's arrival.

Wounded soldier Staff Sgt. Matthew Sims experienced the benefits of MC4 firsthand. "Having my medical records available electronically has helped doctors track and fol-

low the treatment I have received at all of the different facilities," Sims said.

To date, the Army's MC4 program has deployed more than 24,000 systems to medical units in Iraq and 13 other countries, and trained more than 26,000 field medics, doctors, nurses, and commanders on how to use the system in combat-support hospitals and battalion aid stations.

Air Force Lt. Col. John Mansfield, M.D., is a strong proponent of a joint medical record initiative, saying most military bases already have joint operability so a single platform just makes sense.

"At Balad Air Force Base, 95 percent of the hospital staff are Air Force personnel, but most of the U.S. patients treated here are Army or Marine Corps," Mansfield said. "We don't care what uniform our patients wear, but it would drive us crazy if there were different systems to document care based on their Service."

After the Gulf War, thousands of deployed servicemembers returned from duty without proof of combat-related illnesses and injuries, resulting in loss of benefits. In 1997, presidential and congressional mandates called for a medical tracking system and lifelong electronic medical record for all servicemembers. MC4 is that solution.

"MC4 is the most comprehensive, proven information medical system on the battlefield," Clayson said.

Clayson adds that MC4 provides servicemembers with peace of mind that their deployed medical data are truly complete and available to them when they return home, aids in the receipt of healthcare benefits from the Veterans Administration, and establishes a lifetime continuity of care.

Learn more about the Army Surgeon General's announcement at <[www.armymedicaltechnology.com](http://www.armymedicaltechnology.com)>. For more information about MC4, visit <[www.mc4.army.mil](http://www.mc4.army.mil)>.

### ARMY NEWS SERVICE (JUNE 3, 2008) **HELMET SENSORS, IMPROVED ARMOR HELPING SOLDIER SURVIVABILITY**

*J.D. Leipold*

WASHINGTON—About 7,000 soldiers from the 101<sup>st</sup> Airborne and 4<sup>th</sup> Infantry Divisions deployed to Iraq and Afghanistan are wearing helmet sensors to help Program Executive Office-Soldier improve upon the safety features of the advanced combat helmet.

The external sensor model mounted on the back of the ACH and the internal sensor mounted inside at the crown each have USB ports that allow PEO-Soldier to later download information for safety improvements.

“The sensors measure, store, and record acceleration as well as over-pressure that a soldier experiences in a blast event,” said Lt. Col. Robert Myles, product manager for Soldier Survivability. “During phase one, the most important thing the sensors do is provide us with data that will help us improve our soldier protection equipment, such as the chin strap and pad and suspension system.”

Myles said both type sensors have been working well and as expected. Data are presently being analyzed. At this point, the data study will not determine if a soldier has experienced traumatic brain injury. “That is something that will be [addressed in] phase two as we continue to work with the medical community to determine exactly what data we need to collect specifically to reduce risk of TBI to our soldiers,” he said.

### Improved Outer Tactical Vest

The latest in interceptor body armor, the improved outer tactical vest or IOTV, is also being fielded rapidly to soldiers in Afghanistan and Iraq on a one-for-one exchange. All soldiers in theater will have the new version by the end of June, officials said.

“Soldiers who already have it love the new vest for the comfort, feel, and mobility of the system,” according to Maj. Hurley Shield, assistant product manager for body armor. “Soldiers love this vest compared to the old system. They like ... being able to move around in the system.”

One of the major improvements is the quick-release system that allows soldiers in an emergency situation, such as an overturned vehicle, to free themselves from the body armor and get away.

Side protection plates now wrap around and are integral to the system instead of being attached, as on the older version; yet the vest’s weight has been reduced from 34 to 30 pounds. It also features a new yoke and collar design and accepts the current deltoid and groin protectors.

“There are 11 sizes in this system versus the old, which had only eight sizes,” said Shield. “So now we have a more customized vest for a soldier with a longer torso and additional sizes in medium long, large long, and extra large long.”

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### AMERICAN FORCES PRESS SERVICE (JUNE 5, 2008)

#### **NEW TASK FORCE TO EXAMINE NUCLEAR WEAPONS, PARTS CONTROL, ACCOUNTABILITY**

*Donna Miles*

WASHINGTON—Defense Secretary Robert M. Gates today announced a new task force to recommend improvements needed to ensure top-level accountability and control of U.S. nuclear weapons, delivery vehicles, and sensitive components.

Gates announced the task force after removing Air Force Secretary Michael W. Wynne and Chief of Staff Gen. T. Michael Moseley over the accidental shipment of four non-nuclear ballistic missile nose-cone assembly components to Taiwan in August 2006.

While citing efforts under way in the Air Force, Navy, and Defense Logistics Agency, Gates said he believes “an outside perspective is required to ensure sufficiently far-reaching and comprehensive measures are taken.”

James Schlesinger, former Defense Department and Energy Department secretary and CIA director, will head up the task force. The task force itself will be made up of experts from the Defense Policy Board and Defense Science Board.

The task force will operate under tight deadlines. Within the first 60 days, it will recommend organizational, procedural, and policy improvements involving the Defense Department and Air Force, Gates said. For its second phase, it will report within 120 days on management and oversight of nuclear weapons and related materials and systems across the entire department.

Citing a report on the nose-cone mishandling incident, Gates said no one was put in danger and the integrity of the nation’s nuclear deterrent force was not risked. The investigation showed no evidence that the parts were compromised while out of U.S. custody, and no nuclear materials were ever compromised.

“Having said that, this incident represents a significant failure to ensure the security of sensitive military components and, more troubling, it depicts a pattern of poor performance,” he said.

While holding the Air Force leadership accountable, Gates called on the task force to support other initiatives under way to identify and fix the structural, procedural, and

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cultural problems that led to the incident. In a memo to Schlesinger, Gates said he urges the entire department to cooperate with and provide any relevant documents and information the task force needs to do its job.

“Your advice should focus on enhancing the department’s ability to sustain public confidence in the safe handling of Department of Defense nuclear assets and bolster a clear international understanding of the continuing role and credibility of the U.S. nuclear deterrent,” he wrote.

### ARMY NEWS SERVICE (JUNE 12, 2008) **ARMY’S GREATEST INVENTIONS OF 2007 RECOGNIZED**

*Jacqueline M. Hames*

WASHINGTON—The Army’s Top 10 Greatest Inventions for 2007 were recognized in a luncheon ceremony June 12 in Arlington, Va.

Gen. Benjamin S. Griffin, commanding general, U.S. Army Materiel Command, praised various research institutions for their inventions and outstanding achievements in providing the best technological solutions for soldiers.

“It’s a tremendous accomplishment,” Griffin said, “I’m very proud to be a part of this. I want to congratulate you all.”

Currently in its sixth year, the program chooses winners based on their impact on Army capabilities, inventiveness, and potential benefits outside the Army. Three of the top inventions focused on increased soldier survivability, providing both physical and mental protection.

Griffin thanked the awardees for their critical contributions to modern warfare.

“When you talk to units in the field, they know about them,” he said of the inventions. “They use them.”

Secretary of the Army Pete Geren made a surprise visit to the ceremony, assisting Griffin in handing out the awards and shaking hands with the winners.

Nominations for the program were submitted across the Army laboratory community, and nine of the 10 recipients are elements of the U.S. Army Research, Development and Engineering Command.

All 10 of the inventions have been deployed in theater.

The Army Greatest Inventions of 2007 are:

#### **Improvised Explosive Device Interrogation Arm** U.S. Army Communications-Electronics Research, Development and Engineering Center

The Interrogation Arm is totally operational from inside mine-protected vehicles and provides stand-off detection capability, can detect metal, free- and pry-lift objects, and carry out shallow digging. A camera allows the operator to view objects at the end of the arm.

“The arm was created to help detect improvised explosive devices from greater stand-off distances,” Larry Jackson, team leader, said. When using the arm, the soldier is at a distance of about 20-30 feet [from the IED], Jackson explained.

Interrogation of suspect threats using the arm provides an increased level of survivability for vehicle crews because of the larger distance between the soldier and the threat.

#### **Damage Control Resuscitation of Severely Injured Soldiers** U.S. Army Institute of Surgical Research

Fielded in January of 2007, Damage Control Resuscitation limits fluid resuscitation, stabilizing the patient’s blood pressure to minimize renewed bleeding from recently formed blood clots. Blood volume is restored using plasma as the primary resuscitation fluid, with packed red blood cells.

#### **Unmanned Aircraft System Shadow 200 Communications Relay System** U.S. Army Aviation and Missile Research, Development and Engineering Center

The CRS improves two-way communications when operating beyond the limits of single-channel ground and system radios. It provides improved situational awareness, call-for-fire capability, and “imminent danger” communication to soldiers.

#### **HMMWV Egress Assistance Trainer** U.S. Army Tank Automotive Research, Development and Engineering Center

HEAT teaches soldiers how to react in a vehicle rollover incident through properly training them on how to open safety restraints and exit a Humvee from several rotated positions. It also helps soldiers overcome the natural panic and fear that is associated with rollover incidents.

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## In the News

The simulator is a replica Humvee cab that physically rolls soldiers over, allowing them to test their training and perform an egress.

“When you are flipped over, things become difficult to do,” Gerard Szczerbinski, member of the development team, said.

Things that were simple when right-side up, like opening doors and removing seatbelts, become complicated when disoriented, he explained.

Now required for all soldiers, HEAT has increased the survival rate in rollover incidents since the training was instituted.

**Reconnaissance Vehicle System**  
U.S. Army Aviation and Missile Research,  
Development and Engineering Center

This vehicle system combines explosive device detection, defeat, and interrogation capabilities onto an integrated platform. It allows soldiers to observe and engage threats from a greater distance during route clearance.

**Objective Gunner Protection Kit**  
U.S. Army Armament Research,  
Development and Engineering Center

The kit provides a common force protection system capable of integration onto multiple vehicle platforms. Its integrated turret is mounted on vehicles, providing all-over ballistic protection from explosive device fragmentation and small arms fire. More than 8,000 kits were fielded in 2007.

The kit is “designed primarily to protect the gunner,” Sanjay Parimi, project designer explained. It has a battery-powered motorized traversing unit that allows soldiers to rotate the kit and gun turret using a joystick. This innovation reduces distraction and enables the gunner to focus on the situation at hand, Parimi said.

Lead designer Thom Kiel agreed, emphasizing that a key component of the kit is its ability to be integrated with common Army weapons.

Parimi and Kiel added the kit could be adapted for civilian use in police forces.

**Picatinny Blast Shield for Light Armored Vehicle**  
U.S. Army Armament Research,  
Development and Engineering Center

The PBS is a modular device that protects vehicles from small arms fire and fragmentation from explosive devices. Its transparent armor mounts onto vehicles to provide front, side, and rear protection.

Similar to the Objective Gunner Protection Kit, the PBS was specifically designed with the light armored vehicles Marines use in mind, Kiel said.

**XM982 Excalibur Precision Guided  
Extended Range Artillery Projectile**  
U.S. Army Armament Research,  
Development and Engineering Center

Excalibur provides precision guidance, extended range, and greater accuracy through an automatic update of the navigation system. It gives the warfighter unmatched precision and lethality, which is critical in urban warfare, where the risk of collateral damage is high.

**M110 7.62mm Semi-Automatic Sniper System**  
U.S. Army Armament Research, Development and  
Engineering Center

The SASS high-capacity, ammo-configurable, quick-change magazines enable suppressed, increased rate of fire precision lethality against personnel and light materiel targets.

**Self Protective Adaptive Roller Kit**  
U.S. Army Tank Automotive Research,  
Development and Engineering Center

SPARK provides additional stand-off protection to vehicles and crew against pressure-activated or victim-operated explosive devices, and can be installed in various configurations for greater coverage.

### ARMY NEWS SERVICE (JUNE 12, 2008) **NLOS-C UNVEILED ON CAPITOL HILL**

*C. Todd Lopez*

WASHINGTON—The very first of many Future Combat System vehicles was unveiled June 11 on Capitol Hill for viewing by lawmakers, members of the press, and taxpayers.

Prototype 1 of the Non-Line-of-Sight Cannon, one of the eight manned ground vehicles within Future Combat Systems, was displayed on the National Mall in front of the U.S. Capitol Building.

A total of eight such prototypes will eventually be delivered to Yuma Proving Ground, Ariz., by 2010. The first five will be delivered by December 2008, and the remaining three in early 2009.

## In the News

Chief of Staff of the Army Gen. George W. Casey Jr. said the arrival of the vehicle was a significant milestone in the FCS timeline.

“We’ve been talking and briefing and telling people about the FCS for a long time,” the general said. “Right here today, it is real. After a decade of hard work, planning, and effort, the FCS is real.”

The FCS is also relevant to Army operations today, the general said. The NLOS-C is manned by only two soldiers, half the number required for the M109A6 Paladin, the system it replaces. And the cannon is capable of precision targeting, at a greater range than the Paladin, and from a more protected position.

“That gives it relevance in both irregular and regular warfare,” he said.

The drive system for the NLOS-C is hybrid-electric and contains a diesel engine that powers a generator, which charges batteries that in turn power the electric motors that drive the rubber tracks. The vehicle essentially runs on JP-8, but there is no drive shaft off the diesel engine. The entire vehicle is electrically powered by the generator and batteries.

“The first time I saw one of these in California, I was looking for the drive shaft—but instead it was a black cable,” Casey said.

The electricity generated on the NLOS-C powers not just the drive motors but also the array of electrical systems



Prototype 1 of the Non-Line-of-Sight Cannon was unveiled June 12 on Capitol Hill, in Washington, D.C. A total of eight such prototypes will be delivered to Yuma Proving Grounds, Ariz., by 2010. There, Army scientists will put the prototypes through rigorous testing to ensure they meet performance requirements. The NLOS-C is one of the eight manned ground vehicles in Future Combat Systems.

Photo by C. Todd Lopez

on board, including radio transmitters and computers for the FCS network, motors that drive the gun, and the systems that provide automatic loading for munitions on board the system—ensuring that soldiers no longer need to handle the heavy shells and charges used by the system's howitzer weapon, said Lt. Col. Steve Fusinetti, the capabilities manager for FCS with the Army Training and Doctrine Command.

"This thing is completely automated, and the automation system does not get tired," he said. "This is a two-person crew that never has to do the manual labor of touching the rounds like they do in a current force Paladin. Every single step is automated, and the personnel sit in the crew compartment in the front and everything is done for them."

One of the most important capabilities of the NLOS-C is its ability to act as both a node within the FCS network and a relay station. The network will allow commanders, detached from the NLOS-C, to know where the cannon is, how much fuel is on board, what its capabilities are, and how many rounds are still on board. Brigade commanders can view that information and the information of all other FCS systems in range and make informed decisions on how to use them, said Col. Bryan McVeigh, project manager for manned systems integration, FCS brigade combat team.

"The computer system can look through and see four mounted combat systems on the ground and three NLOS-C in range," he said. "It knows how much ammunition is on each vehicle, what its range is, and where the enemy is. It can then figure out, of all the assets in the brigade—NLOS-LS, mounted combat vehicle, the NLOS-C, for instance—which one it wants to pick to engage a target."

The projectiles for the NLOS-C each weigh 100 pounds; the system has a firing range of about 30 kilometers.

Maj. Vince Tolbert, a program manager with the Future Combat Systems Brigade Combat Team, says changes made to the projectiles and charges that are at the very heart of the NLOS-C make it safer and easier for soldiers to operate while making it more lethal for those on the wrong end of the cannon.

"The NLOS-C uses a Modular Artillery Charge System, a new propellant the Army came out with after doing away with bagged propellant," he said. "It's ignited using a laser, which ignites the propellant, which is more reliable than the primer that we used to use for the artillery."

The MACS is a completely sealed plastic canister that sits behind the 100-pound projectile the NLOS-C fires. The charge has a hole on each side that is sealed over with a plastic film. Instead of a firing pin igniting the charge, a laser now does the job.

"You can put the propellant in either way, and you no longer have to worry about the propellant getting wet," Tolbert said.

The NLOS-C is expected to be fielded to combat units by 2017.

### AMERICAN FORCES PRESS SERVICE (JUNE 24, 2008)

### MULLEN URGES JOINT STAFF TO SPEED UP WARFIGHTER SUPPORT

*Donna Miles*

WASHINGTON—The nation's top military officer called on the Joint Staff June 24 to speed up efforts to get new capabilities to warfighters and to focus on building capabilities needed to win not just the current war, but future wars as well. Navy Adm. Mike Mullen, the chairman of the Joint Chiefs of Staff, told his staff during a town hall meeting that they're "really making a difference in these challenging times" and directly affecting troops on the front lines.

"In the end, those are our customers. That's who we need to be thinking about," Mullen told the staffers who gathered for a standing-room-only session in the Pentagon auditorium. "How do we deliver more to them, more rapidly [and] more effectively, so that they can do their job? We need to keep that front and center in everything we're doing."

The admiral cited needs ranging from more intelligence, surveillance, and reconnaissance assets to better irregular warfare training, and he called on his staff to step up their support for these and other critical programs.

"We really do have to lean into this, recognizing these are very real requirements [and that] lives are on the line," he said. "What are the best ideas? How do we harvest those great ideas and then generate and get them out to the fight as rapidly as possible?"

Mullen reported on visits within the past two weeks, where he met with servicemembers and their leaders at Fort Stewart, Ga.; Nellis Air Force Base and Creech AFB, Nev.; McChord AFB and Fort Lewis, Wash.; and Marine Corps Air Ground Combat Center Twentynine Palms, Calif.

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## In the News

Throughout the visits, Mullen said he was struck to see servicemembers with recent combat experience jumping through hoops to pass on the lessons they learned. It's all tied, he said, to "a sense of life and death" and troops' recognition that they can help protect their buddies on the front lines.

"We know people are getting killed in this war. We've got friends out there," Mullen said troops told him during his visits. "We want to get there as fast as we can with the kinds of capabilities that make a difference in their lives and their ability to fight."

At Fort Lewis' Battle Command Training Center, the admiral said he saw new doctrine being incorporated into training scenarios at a fraction of the time it once took.

"They've reduced that cycle time dramatically and pushed it into the brigades going out," giving deploying troops and their leaders a leg up when they arrive in the combat theater, he said.

Mullen said he saw a similar phenomenon at Nellis AFB. There, new tactics, techniques, and procedures that once took two years to be incorporated into training now are taking about two months. Similarly, trainers at Twentynine Palms have made broad strides introducing deploying Marines to the latest enemy improvised explosive device techniques being used in both Iraq and Afghanistan. Cultural training has moved to a whole new level, too, with more than 400 Iraqi role players bringing realism to the training scenarios, he said.

"The whole idea of 'How can I move this all more quickly?' is key," he said.

As troops in the field strive to put lessons learned into place, Mullen urged the Joint Staff to evaluate how it can better support these efforts. "We've got to focus on these wars, move as fast as we can ... to generate capabilities [and] to meet requirements," he said.

### **SPECIAL TO AMERICAN FORCES PRESS SERVICE (JUNE 27, 2008)** **ARMY ACCELERATES DELIVERY OF FCS TECHNOLOGIES**

*Lindy Kyzer*

WASHINGTON—The Army is accelerating the delivery of key Future Combat Systems technologies to the field, officials announced June 26. Infantry brigade combat teams will receive the technologies, called "spinouts," sooner than previously planned, officials said.

The spinouts include tactical and urban unattended ground sensors; the non-line-of-sight launch system, the Class I, Block 0 unmanned air vehicle; the small, unmanned ground vehicle; and network kits for Humvees.

Lt. Gen. Michael A. Vane, director of the Army Capabilities Integration Center, discussed the accelerated fielding of cutting-edge equipment in a teleconference with bloggers and online journalists.

"This decision reflects the need to move more aggressively to support current operations across both our Active and Reserve Component capabilities with the Future Combat Systems capabilities," he said.

Commanders and soldiers in the field as well as members of Congress and Defense Department and Army leaders have been asking for future combat technologies to be used for the current fight in Iraq and Afghanistan, Vane said.

Operational needs statements from infantry brigade commanders in 2007 and 2008 were double the number from heavy brigades, and accelerating the fielding of FCS spinouts addresses many of those capability gaps, Army officials said.

Vane pointed out that FCS is not being developed to provide "perfect information."

"We recognize that soldiers will always fight for information," he said. "But the soldier on the battlefield and the commander [are] the best decision maker, the best sensor, the best shooter, the best communicator, the best negotiator with both allies and potential enemies.

"We want technology to enable that soldier and that commander to better understand the battlefield," he continued. "And sometimes people think we're building something that's a fantasy or that technology is the answer to everything, and we absolutely are not. What we are doing is trying to leverage that technological advantage that American industry and America's allies help us bring to the battlefield."

*Kyzer works for the office of the chief of Public Affairs, Department of the Army.*