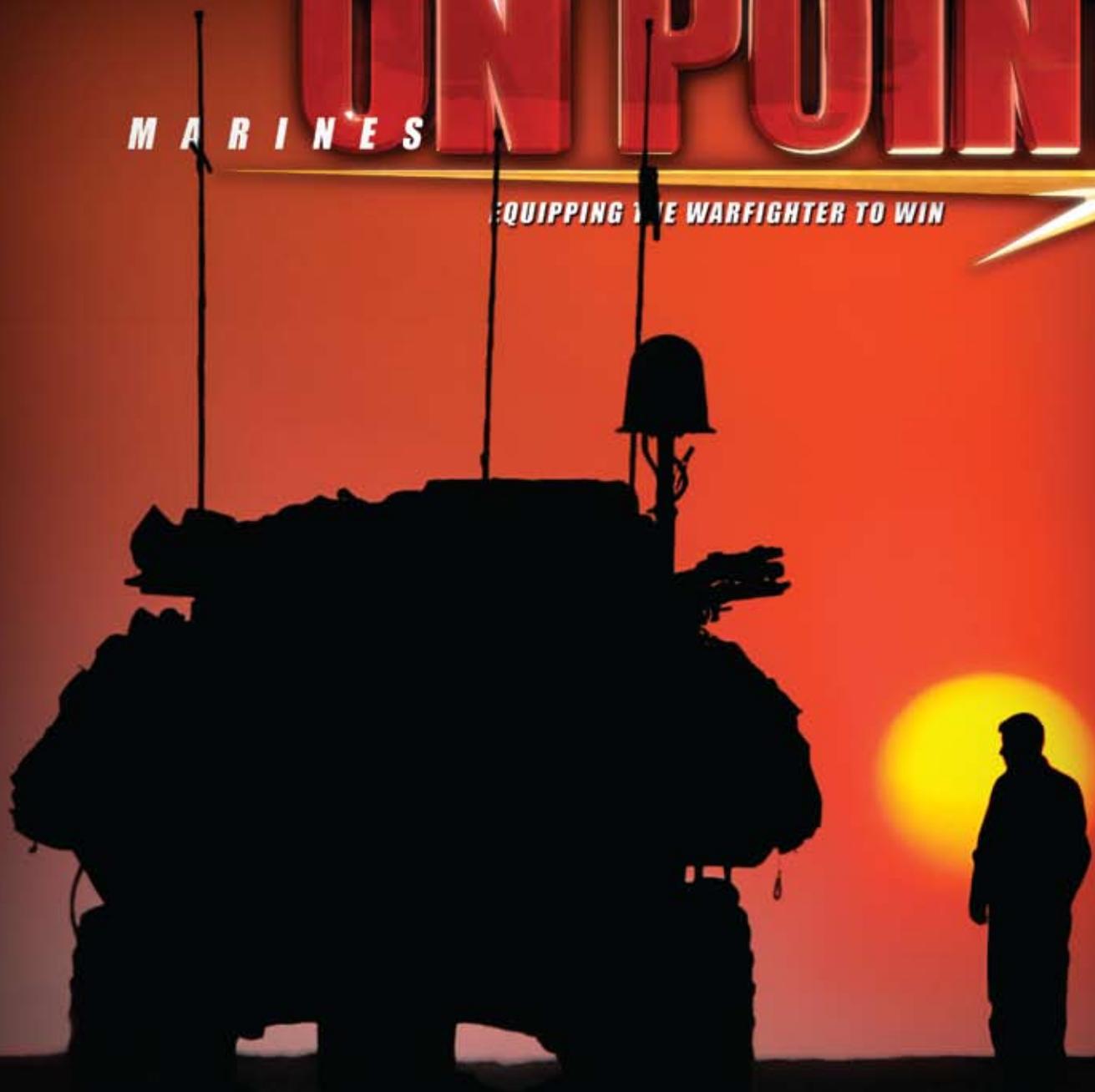


ON POINT

MARINES

EQUIPPING THE WARFIGHTER TO WIN



MARINE CORPS SYSTEMS COMMAND MAGAZINE
WINTER 2009, VOLUME 3, ISSUE 1

- ▶ Warren, Mich., leads with LAVs, Robotics
- ▶ EFSS provides fast relief
- ▶ Command earns three major awards

A message from the COMMANDER



To the Marines, Sailors and Civilian Marines of Marine Corps Systems Command,

We brought 2008 to a close following notable achievements that have made Marine Corps Systems Command (MCSC) bigger, better and busier than ever. Thanks to everyone working together as a team, the entire Command and Program Executive Office Land Systems (PEO LS) operated as well-oiled machines, geared to support our Corps. 2009 will bring new challenges in the Global War on Terrorism as we shift our primary focus to Afghanistan and Operation Enduring Freedom. This difficult theater, an austere environment, will require new strength to make our mission a success.

As you read through this issue of *Marines On Point*, you'll see many examples of how MCSC people have worked hard to stay at the forefront of acquisition and technology, and to ensure the warfighters have the most up-to-date systems and equipment in the most effective manner. "Perfect Score" on Pages 6 and 7 tells how a persistent team effort is bringing the M-41 Saber greater accuracy than ever before with optics upgrades for Tube-launched, Optically tracked, Wire command-linked missiles. A capability-based acquisition approach made it possible for our Expeditionary Fire Support Systems (EFSS) team to develop and deploy EFSS (Pages 10-11) so they can fly aboard V-22 Ospreys. "Lifesavers" (Pages 8-9) reports how high-tech tools acquired through the MCSC Family of Field Medical Equipment team saves lives from the moment warfighters are injured on the battlefield.

At the same time, we showcase on Pages 15-20 our hotbed of innovation at Warren, Mich. There, the Robotic Systems Joint Project Office is choreographing the development and deployment of hundreds and thousands of robots to support and protect Marines against a host of enemy threats. A block away, the Program Management Office for Light Armored Vehicles (LAV) is working on upgrades for the venerable machines to keep them battle ready until at least 2025. It was 25 years ago when the first LAV rolled off the assembly line, a milestone we note in "Looking Back" on Pages 12-14.

To fulfill our mission, everyone throughout the MCSC and PEO LS needs to collaborate – and we'll take a giant step in that direction this year. Planned for initial release in the spring, the Marine Corps Integrated Digital Environment (IDE, Page 30) will create a seamless, collaborative, digital-based business environment for the acquisition, lifecycle and product support community.

To no one's surprise, MCSC has also been recognized with a group of major awards (Pages 30-33): the David Packard Excellence in Acquisition Award, MIAI Tank International Award and the AT&L Workforce Development Award.

The awards are gratifying. Yet, our ultimate accolades come from the warfighters. Your dedication and expertise throughout MCSC are delivering powerful tools to the warfront and saving lives in the process. This was the basis of our success in 2008 and gives us a running start in 2009.

Semper Fidelis!

A handwritten signature in black ink that reads "M.M. Brogan".

M.M. Brogan
Brigadier General
U.S. Marine Corps

MARINES ON POINT

Winter 2009,
Volume 3, Issue 1

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Marines On Point is produced and published quarterly by Marine Corps Systems Command's Corporate Communications Directorate. It is an authorized publication for the employees and U.S. military service personnel attached to the command. Contents of the magazine are not necessarily the official views, or endorsed by, the U.S. Government, the Department of Defense, the U.S. Marine Corps or Marines Corps Systems Command.

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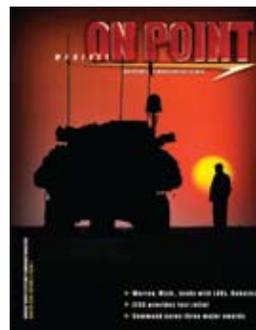
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On the Cover: Marines with the 2nd Light Armored Reconnaissance Battalion attached to Task Force Mech, Ground Combat Element, Multi National Force - West, provide security from a light armored vehicle (LAV) in Salah Ad Din Province, Iraq, in May 2008 during Operation Iraqi Freedom. See LAV stories on Pages 12 through 17. (Photo by Sergeant Jason Fudge)



Virtualization links computers and Marines on the move

Two natural disasters striking within months on opposite sides of the world posed their own challenges for Major Carl “Chip” Brodhun. Too many computer applications were running on too few platforms without backup systems. The solution, as one of the Major’s noncommissioned officers (NCO) suggested, was to create a network of computers with each workstation acting as part of virtually one big machine. This concept, known as virtualization, was already being used in the commercial sector.

However, the Dec. 26, 2004, Indian Ocean tsunami, drove the need to set up a similar system for the Marine Corps. Now, no matter where users are deployed, virtualization lets them independently access and manage data from network servers.

According to Brodhun, virtualization removes the need for local installation of software programs and applications. It allows applications to be deployed in real-time to computers anywhere as long as the computers are connected to a virtual application server. These servers are much like share drives or intranet networks. To connect to the virtual server, a computer only needs to be installed with application virtualization software. Then whatever added software is needed is streamed from the application server on demand and runs on the local computer.

“The Marine Corps has

the same challenges as any other globally distributed enterprise,” said Brodhun, Marine Corps Systems Command’s (MCSC) Enterprise Virtualization Project Officer. “If you suffer an information outage, decision-making will suffer, and people may die. In the field, Marines will do what is required to make things go.”

Things did not go well at first after the Major’s team left Okinawa, Japan, and arrived in Thailand supporting international relief operations in southern Thailand, Sri Lanka and devastated Indonesia.

“The Marine Corps intrinsically does a good job of sharing information internally,” Brodhun said. “However, when you have 10,000 Marines and add the United Nations, multinational forces and non-governmental organizations, you can get inundated.”

Brodhun and his team needed to run nine critical information exchange applications on three physical platforms. An NCO suggested de-coupling the applications from the physical platforms and running each in a virtual machine. Within 36 hours the taskforce was up and running in the Western Pacific.

From III Marine Expeditionary Force, Brodhun transferred to MCSC. Assigned to Information Systems and Infrastructure (Product Group 10), he was given the task of executing an enterprise implementation of the VMWare Enterprise Licensing Agreement purchased by the Marine Corps in 2006.

“The strategy behind implementation is straight forward,” Brodhun said. “Make infrastructure virtualization, application and enterprise desktop delivery highly available and inherently secure – provide Marines in the field with deployment engineering services, training and a global support infrastructure that enables them to focus on getting work done rather than wrestling with technology.”

The server infrastructure component is reasonably well understood, according to the Major.

Then came application delivery – how to get information from the host and deliver and reproduce it so anyone at any data center can

al Gains

work on an application at the same time.

“The third piece of the puzzle is client-side delivery,” he said. “This is aimed at people who might or might not be connected to the global network. We’re just getting to this stage now, but this is something we have to do. We’re truly globally distributed – from Iraq and Afghanistan to the United States. The challenge is how to connect all that stuff.”

Seeming to make his point, Hurricane Katrina devastated the Gulf Coast in August 2005. At the Marine Forces Reserve (MFR) Headquarters in New Orleans, people filled their pockets with CDs, boarded trucks and rode on flooded roads to the center’s back-up site in Kansas City, Mo., which had been prepared to respond to such a disaster.

“The center spun down, migrated and spun back up over a period of days,” Brodhun said. “Since then, both the MFR and the fail-over site have been virtualized. Now, as demonstrated during the recent Hurricane Gustav evacuation, MFR can make the change (migrating 30 mission-critical applications) in only three hours instead of the transit time of driving from New Orleans to Kansas City.”

Today, the Marine Corps through MCSC has 2,300 application licenses deployed to the field, supporting about 1,250 virtual hosts and 4,000 virtual machines – more than 1,000 in what the Major calls “warm, dry, dusty places.”

A small integrated government/vendor team of five is in place as part of the enterprise licensing plan, supported by the global Help Desk at MCSC’s Marine Corps Tactical Systems Support Activity,

located at Camp Pendleton, Calif.

“Virtualization is a lifestyle,” Brodhun added. “Business process owners must buy into it. ‘Server huggers’ are still out there, which is why enterprise virtualization is built core-out. Its success is cultural as much as technical. We focus on people and processes first, then technology. If you have good processes in place, you can think big, start small, and scale fast. In our first five months we grew from 10 or 12 licenses on 10 hosts to more than 2,300 licenses and hundreds of hosts.”

According to the Enterprise Virtualization Project Officer, the benefits of virtualization as an engineering approach and design choice are many – virtualization enables highly available, inherently secure and rapidly recoverable systems with much smaller footprints than that found in classic “redundant” infrastructure models.

“Mission-critical applications remain accessible to users regardless of equipment maintenance cycles or user location. This leverages the range of network delivered to locally deployed, partially connected client-side solutions,” the Major stated.

Programs and projects can leverage the existing Marine Corps enterprise licensing agreement at no cost through the Marine Corps Software Enterprise Licensing Management Service in MCSC’s Product Group 10 or by contacting Brodhun directly at (703) 432-5153.

– *By Taylor Burrow and Jim Katzaman, MCSC Corporate Communications*



A team of Marines, aid workers and local people unload needed supplies from a CH-46E Sea Knight helicopter at an airfield in Meulaboh, Indonesia, after a tsunami hit in December 2004. Lessons learned from this event regarding computers pushed the Marine Corps into the direction of virtualization.

(Photo by Gunnery Sergeant Robert Knoll)

Saber M-41 hits slam dunk in target accuracy

Gunners firing the M-41 Saber are amazed. “We hit nine out of nine targets today with the Saber system,” said Sergeant Dan Colt, a Tube-launched, Optically tracked, Wire command-linked (TOW) missile gunner for Weapons Company, 1st Battalion, 8th Marine Regiment, 2nd Marine Division, Marine Corps Base Camp Lejeune, N.C.

“The Saber is a huge improvement from the old system,” he said in September 2008. “I’ve been a TOW gunner for about six years, and this is the first time I have seen us hit nine out of nine.”

Reliably hitting a target is a revelation for gunners raised on the M-220 E4 TOW system. According to Colt, the M-41 Saber provides long-range heavy anti-tank capabilities, better optics and has an improved target acquisition

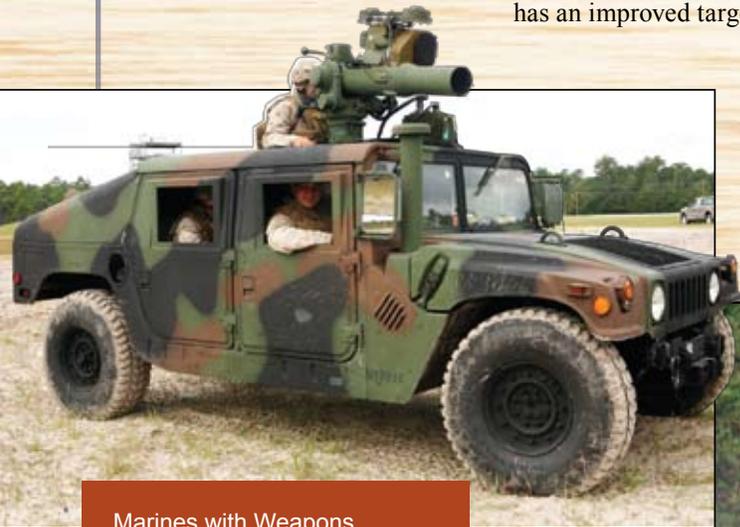
system and target tracker. Overall, he said, the Saber has a 90 percent chance of hitting the target compared to 63 percent with the old system.

The Sergeant would be correct, according to Axel Fait, Program Manager, Anti-Armor Weapons Systems for Marine Corps Systems Command.

“The M-41 has better day-night optics, doubling the capability over the old M-220, has an aided-target tracker to provide better accuracy down range to target, has a laser range-finder and a far-target location capability to provide target coordinates for combined arms missions,” Fait said. “It also has the capability to shoot all current and future TOW missiles, to include the new TOW-BB anti-structure missile.”

He and his team speak glowingly about the M-41 because they worked for several years to get it out to the field. A joint effort with the Army, the team started to buy the systems in 2006 with the four-year fielding process underway in 2008.

The Program Manager said the TOW 2 missile is still the same as that used in the M-220 E4. The difference, he explained, is the accuracy of the M-41’s



Marines with Weapons Company, 1st Battalion, 8th Marine Regiment, 2nd Marine Division, train with the new Saber M-41 missile launcher at Camp Lejeune’s G-3 Range in September 2008. (Photo by Lance Corporal Jo Jones)



Marines attached to The Basic School fire a Tube-launched, Optically-tracked, Wire command-linked missile with the new Saber M-41 on Quantico, Va. (MCSC photo)

PERFECT SCORE

sight. “The picture clarity of the sight and the ability of the aided-target tracker to reduce gunner jitter and keep the crosshairs on target provides for the high target hit probabilities,” he said.

The boost in capability, Fait said, “provides the best optics available to the infantry. With the laser range finder and far-target locator you can accurately determine target position out to 6,000 meters. A gunner can then determine whether to engage or call in cooperative fire engagements based on



A Marine uses the Saber M-41's improved target acquisition system while standing watch in Iraq. (MCSC photo)



these sightings. Previously, he didn't have the ability to see that far and didn't have a grid to call in for support.”

The results have been immediate and, for the gunners, gratifying.

Private First Class Travis Welker, an assaultman with Weapons Company, fired the M-41 for the first time, and he and his team hit all nine targets. “It's like throwing a touchdown in football or getting a clutch shot in basketball,” he said. “You want to make your shots count.”

Added 1st Lieutenant Neal Herman, Mobile Assault Platoon Commander, “The Saber system exceeded our expectations.”

— By Jim Katzaman, MCSC Corporate Communications. Lance Corporal Jo Jones, 1st Battalion, 8th Marine Regiment, 2nd Marine Division, contributed to this story.

LIFESAVERS

Marines rely on quick, high-tech first aid at front lines

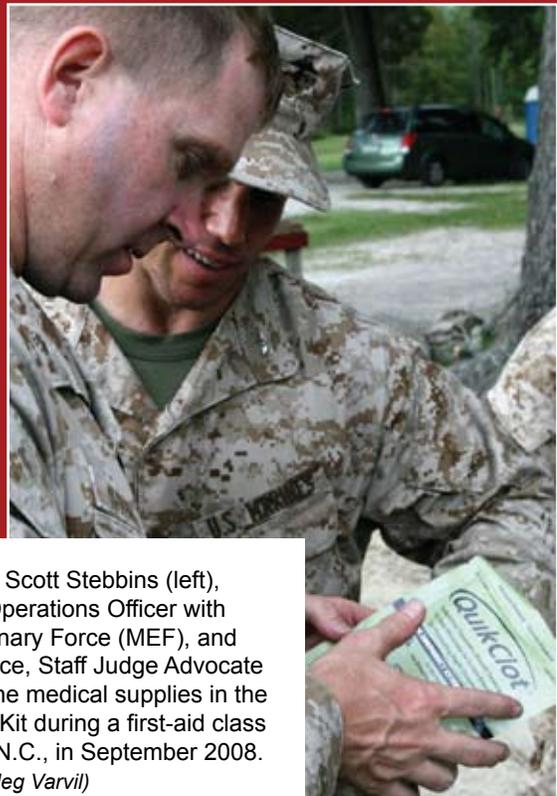
Gary Berkheimer and the rest of the Marine Corps Systems Command's (MCSC) Family of Field Medical Equipment (FFME) team are keeping their eyes on the next war. Berkheimer, FFME's subject matter expert, said the group has already taken great strides to improve medical support to the field, but the quest to stay abreast of technology never stops.

The pursuit continues at the team's headquarters in Stafford, Va., part of MCSC's Chemical, Biological, Radiological and Nuclear (CBRN) Systems programs under the Combat Equipment and Support Systems product group. There, the FFME team develops and fields systems to address the urgent medical needs of the warfighter in the field.

"We're always looking to improve for the next war," Berkheimer said. "We spend all year working on new developments and technology improvements so we can sustain our warfighters for the long haul."

Today's medical equipment has come a long way from the sets, kits and outfits used during the first Gulf War.

"We want to take care of Marines as soon as possible to save their lives," Berkheimer said. "Now they can use the First Aid Kit for major injuries and trauma. The gear is simple to use so Marines can apply it



Lieutenant Colonel Scott Stebbins (left), Communications Operations Officer with II Marine Expeditionary Force (MEF), and Colonel Daniel Lecce, Staff Judge Advocate with II MEF, examine medical supplies in the Individual First Aid Kit during a first-aid class at Camp Lejeune, N.C., in September 2008. (Photo by Corporal Meg Varvil)

in any battle condition or state of mind."

Some of the gear now available or near full development that the FFME team has implemented in the medical system includes Combat Gauze; the Combat Lifesaver Kit; Corpsman Assault Pack; En Route Care System; Monitoring, Oxygen, Ventilation and External Suction device; and the Vaccine and Reagent Refrigeration System.

Scott Adams, Deputy Program Manager, CBRN, is confident the high-tech medical equipment serves the Marines and Sailors well because Navy medical personnel who have used this gear in the field helped to improve it. He pointed specifi-

Members of the Family of Field Medical Equipment team demonstrate the application of H-bandage. (Photo by Jim Katzaman)



cally to the Corpsman Assault Pack.

“Corpsmen participated in its design in 2005,” he said. “As a result, the pack gives corpsmen speed and flexibility to tailor the equipment to the environment they’re operating in. Corpsmen will breach the same doors and tunnels as their fellow Marines. The new design includes breakout patrol packs that increase mobility while decreasing the weight they carry.”

Advances in modern combat medicine contrast markedly from Mobile Army Surgical Hospitals popularized two decades ago on the television series *M*A*S*H*. The fictional Hawkeye and Trapper John performed surgery away from the front lines. Today’s Navy surgeons operate in Forward Resuscitative Surgery Systems (FRSS), which are designed to treat 18 trauma cases through surgery. The FRSS is mobile and able to relocate with resupply based on the mission needs of the battle space.

Once surgery is complete and the patient is stabilized at the FRSS the En Route Care System, as Adams explained, is now used to medevac the patients to a higher level of care.

“Reports from Afghanistan said it was hard to keep patients warm,” Berkheimer said. “Now we have an absorbent patient litter system (APLS) with thermal guard. This APLS system can absorb five liters of fluid. The insulating material helps keep

patients warm and decreases the negative effects of hypothermia, one of the leading causes of death subsequent to trauma on the battlefield.

“Part of our goal is to standardize

equipment across the Services,” he added. “Through the Defense Medical Standardization Board and Committee for Combat Casualty Care, the FFME team shares technology and lessons learned with the other Services. The

team also reaches out to the medical industry to stay in step with the latest developments.”

“Technology in the medical industry is ever-changing,” said Lieutenant Commander Jennifer Smith, FFME Team Leader. “Our mission is to treat, stabilize and transport. We need to ensure our equipment is rugged enough to meet our mission. We are constantly reviewing new products and treatment protocols to keep up with technology and advancements.

“Done right,” Adams added, “our equipment in the field will be similar to that used in a hospital. Our system is invaluable to support that same standard of care in the field. Our modernization effort will make sure we’re ready for the expeditionary environment. All of these efforts from the FFME team have greatly increased our battlefield survival rate during the ‘golden hour.’”

— By Jim Katzaman,
MCSC Corporate
Communications

Gary Berkheimer (left) and Senior Chief Hospital Corpsman Mike Langley of the Family of Field Medical Equipment team discuss new medical gear with a visitor at the Modern Day Marine Expo in October 2008. (Photo by Bill Johnson-Miles)



Marines take fight to the enemy with EFSS

Marines know walking speed will not suffice when engaging a highly mobile, lethal enemy. To the swift and decisive goes the victory in the Global War on Terrorism.

Enter the Expeditionary Fire Support System (EFSS) and Internally Transportable Vehicle (ITV). From firing system to ammunition plus ground transport, the EFSS and ITV – when combined with the V-22 – revolutionize warfare. Rather than be restricted

by foot speed while carrying all their equipment on their backs, Marines can now swoop into enemy territory under the rotors of V-22 aircraft. There, they roll off 120mm mortars and vehicles carrying heavy machine guns and

other heavy armament – allowing them far greater speed, mobility, firepower and survivability.

“It’s a complete system,” said John Garner, Evolutionary Firing Systems Program Manager at Marine Corps Systems Command (MCSC). He and his staff managed the acquisition of the EFSS and ITV, coordinating with MCSC directorates and outside agencies to vastly improve Marines’ combat power.

“With EFSS and ITV,” Garner said, “Marines can get in behind enemy lines with lethal force. Instead of flying guys in and being limited to speeds they can walk, they can move at vehicle speeds. That has huge implications for the counterinsurgency environment.”

To get EFSS up and running, Garner’s team used a capability-based acquisition approach. “We did the whole system,” he said. “We simultaneously contracted, developed, tested and fielded the mortars, ammunition, trailers, along with the vehicles that pull them.”

The challenge was to certify a complete combat system that would fit into the belly of a V-22 Osprey or CH-53 Sea Stallion helicopter, the fastest and easiest way to transport equipment into a combat zone. To make that happen, Garner said,



Marines fire the 120mm mortar of the Expeditionary Fire Support System in Alaska. (EFSS photo)

The 120mm mortar and prime mover of the Expeditionary Fire Support System travel through Camp Lejeune, N.C. (EFSS photo)



“We had a lot of support from outside agencies.” The process began on Nov. 10, 2004, when the contract to acquire the systems was signed.

Naval Air Systems Command (NAVAIR) at Patuxent River, Md., was a prime player in the EFSS acquisition. Experts there conducted flight certification and testing for the V-22 and CH-53 to make sure the aircraft could accommodate the equipment loads. “Everything had to fit in a V-22,” Garner said. “These are the only systems of this type qualified to be carried on that aircraft.”

With the Naval Surface Warfare Center, Dahlgren, Va., the MCSC team worked on ammunition safety and mortar issues. Coordinating with experts there helped MCSC develop insensitive munitions that are safe for transport on sea and air. “The rifled 120mm mortar is the first large-caliber ammunition family to be certified this way,” Garner said. “The mortar round will explode when we want it to but not when it’s aboard an airplane or on a ship.”

Within MCSC, the EFSS team also worked with the Ground Transportation and Engineer Systems Product Group, the Program Manager for Ammunition, Contracting, Assistant Director for Program Management, Safety and other directorates.

“They helped us with safety and logistics as well as contracts,” Garner said. “Corporate Communica-

tions also helped us brief the program to congressional staffs and other interested parties.”

The EFSS and ITV acquisition progressed through the years. Operational testing was completed in March 2008, and systems were approved for production and fielding. Fielding to operational forces begins in January 2009. “All safety and performance issues have been addressed,” Garner said. “Now we’ve transitioned into fielding and sustainment.”

In the end, Garner added, “We’ve given the warfighter systems that are fast and reliable and can fit into a V-22. Marines can now go to war with a much larger range of equipment. They’ll be a much more survivable and potent force. Plus, we have the potential to expand the package to carry radars, more communications gear and targeting equipment. In doing so, EFSS and ITV directly support the Commandant of the Marine Corps’ Vision and Strategy 2025 and the Marines’ return to their expeditionary roots. We’ll give Marines a capability they’ve never had to take the fight to the enemy.”

— By Jim Katzaman, MCSC
Corporate Communications

Marines emplace the 120mm mortar of the Expeditionary Fire Support System in the desert. (EFSS photo)



Marines load the 120mm mortar and prime mover of the Expeditionary Fire Support System aboard a V-22 Osprey. (EFSS photo)



From conception through fielding, LAV fought for success



On Oct. 26, 1983, one of the first 8x8 Piranha Light Armored Vehicles rolls down a London, Ontario, road in Canada with passengers Lieutenant General Harold Hatch, Deputy Commandant for Installations and Logistics, and Canadian Minister of Defense Jean-Jacques Bley. The General accepted the vehicle on behalf of the Marine Corps. (PM LAV photo)

Its emergence foreshadowed the future. On a brisk morning, Oct. 26, 1983, one of the first 8x8 Piranha Light Armored Vehicles (LAVs) rolled off the assembly line in London, Ontario, driven by one of the contractor's employees. His passengers were Canadian Minister of Defense Jean-Jacques Bley and U.S. Marine Lieutenant General Harold Hatch, Deputy Commandant for Installations and Logistics. The General would accept the vehicle on behalf of the Marine Corps.

The Commandant of the Marine Corps, General Paul Kelley, had planned to be the one accepting the LAV, but duty called. The American and French barracks had been bombed three days earlier in Beirut, Lebanon, killing 220 Marines, 18 Sailors, three Soldiers and 58 French Paratroopers.

The Commandant was half a

BATTLE HARD EARNED

world away amid the ruins as the LAV began its worldwide travels on a test track behind a production facility in Canada. The vehicle would eventually make its mark during several conflicts, including those in Southwest Asia not far from the smoldering barracks.

The LAV had an uphill climb from its conception until its birth, according to Colonel Mike Micucci, Program Manager for LAV. In the late 1970s, both the Army and Marine Corps had separate programs that sought to develop families of light combat vehicles. The Army and many Marine generals preferred tracked vehicles rather than those with wheels. However, in 1980 when the concept of the LAV was briefed to Headquarters Marine Corps, then-Commandant General Robert Barrow overruled the majority and told then-Major General Alfred Gray to move ahead with the LAV program.

“General Gray was the father of the LAV,” Micucci said. “It was General Gray’s forward thinking that resulted in the fielding of the LAV only three years later.” The three-years it took from program inception (1980 to 1983) to initial fielding was unheard of back then. A typical acquisition cycle was 12 to 15 years.

“The Marine Corps’ LAV program”, Micucci said, “kept the lights on for the assembly

line from 1983 to 1988. Since that time, other LAV-related activities have provided significant work for the facility.”

The LAV saw its initial military action during Operation Just Cause, the invasion of Panama in December 1989 where the benefits of wheels vs. tracks were exhibited. The LAVs could redeploy much more quickly than the Army’s M113s due to the M113s’ prohibition from using the highway infrastructure because of the damage its tracks would cause.

“The first time all types of the LAVs were deployed together was in the liberation of Baghdad during Operation Iraqi Freedom (OIF),” Micucci said. While successful in battle, the vehicle had to change to meet deadlier threats. “After OIF,” Micucci said, “they decided the LAV was too lightly armored. That led to the A2 upgrade.”

Its previous Service Life Extension Program upgrades had already extended the LAV’s life expectancy from 2008 to 2015. The A2 upgrade, complete with a more robust suspension, appliqué armor, im-



Marines from the 3rd Light Armored Reconnaissance Battalion arrive on the island of Tinian in a light armored vehicle for Exercise TANDEM THRUST 1999.
(Photo by Lance Corporal Penny Surdukan)

Colonel Mike Micucci, Program Manager for Light Armored Vehicles (LAV), shakes hands with National Museum of the Marine Corps Deputy Director Charles Grow at the LAV ceremony. Looking on are former LAV Program Managers (from left) J.J. O'Brien, Tom Lytle and Keith Stivers. (Photo by Lance Corporal David Howard)



proved turret drive, enhanced engine cooling system and a boost in engine horsepower has given the LAV life until at least 2025 – and likely beyond. There are other upgrades on the drawing board that include blast-resistant seats, enhanced fuel cell protection, underbody protection, weight reduction and a further improved suspension system.

Not all LAVs will be combat ready that far into the future. One such vehicle ready for retirement found itself on the grounds of the National Museum of the Marine Corps on another bright October day in 2008, just weeks shy of the 25th anniversary of the first production LAV. The donated LAV might be used in a future exhibit to be created by the museum.

The donation of the LAV to the National Museum of the Marine Corps was one of two activities held Oct. 3 in honor of the silver anniversary. This was followed by a dinner and award ceremony. The audience of about 250 people included current and former LAV operators and maintainers, six former program managers, current and former program office employees as well as a contingent of current and former industrial partners.

Also on hand for the occasion was General Gray. Now 80 and retired, the former Commandant and

father of the LAV, enthralled the audience with a behind-the-scenes look at the early days of the LAV program. The evening's activities concluded with the inaugural awarding of the LAV Enlisted Marine of the Year, LAV Company Grade Officer of the Year and LAV Instructor of the Year, which were presented by General Gray.

– By Jim Katzaman, MCSC Corporate Communications



Marine Corps riflemen deploy from a light armored vehicle during a live-fire training exercise at the Udairi Training Range in northern Kuwait on April 8, 2000. (Photo by R.D. Ward)



Fountain of Youth

What was old is new again with upgraded light armored vehicles

His was the ultimate product endorsement. “We took 901 Marines and Sailors to Iraq and came back with 901 Marines and Sailors,” said Colonel R.E. Smith, Commander, 2nd Light Armored Reconnaissance Battalion. The audience broke into applause because, as members of the Program Management Office for Light Armored Vehicles (PM LAV), everyone had a stake in the outcome.

“We had no combat-related injuries while taking out some of the bad guys,” Smith said. His battalion operated for seven months in what had once been the perilous Sunni Triangle in the desert of western Iraq. Between rough terrain and enemy attacks the LAVs had blown 14 tires. Vehicles were damaged but their human cargo emerged intact. By Sept. 1, 2008, the battalion had helped stem the flow of foreign fighters into the country and made the area safe to hand control back to Iraqi forces. For that, Smith gave the upgraded LAV-A2 a lot of the credit.

The battalion’s successful mission and return gave the LAV program a welcome present as

the wheeled vehicles neared their 25th anniversary in service. Veterans of several conflicts, LAVs have found the “Fountain of Youth” with a service life extension and A2 upgrade. They have made what was old new again, keeping the vehicles battle ready until at least 2025.

“Through the years, LAVs have performed as advertised and will continue to do so for a long time,”



Private First Class Ibrahim Garcia, light armored vehicle driver, 2nd Platoon, Company A, 3rd Light Armored Reconnaissance Battalion, and Lance Corporal Jessie Cortez, gunner, prepare their 12-ton light armored vehicle for a trek across the Mojave Desert in California during a training exercise. (Photo by Private First Class Michael Cifuentes)

said Bill Ross of PM LAV. He joined the LAV program in July 1980, several years before the first vehicle rolled off the assembly line in October 1983.

PM LAV was formed in the early 1980s as a joint program office. However, the Army withdrew after the 8x8 Mowag Piranha was selected as the first armored fighting vehicle, the Army preferring to use tracked vehicles. The Marines went it alone and continue to maintain an LAV Program Office within the U.S. Army Tank-Automotive and Armaments Command in Warren, Mich. It is led by a Marine Colonel and filled with Marines, Department of Defense civilians and contractors.

Program operations has become a full-service office complete with logisticians, maintenance technicians, quality assurance specialists, mechanical and industrial engineers and Marines.

“This office is the systems integrator for the Marine Corps’ fleet of vehicles,” said Bob Lusardi, Deputy Program Manager, PM LAV.

The LAV first proved its worth in the 1980s during operations in Panama, according to Lusardi. However,

Operation Iraqi Freedom (OIF) posed new challenges to protect against improvised explosive devices (IEDs), which sent PM LAV into action. The A2 improvement added armor and the Automatic Fire Suppression System, upgraded suspensions, increased engine power and new electric turret drives.

PM LAV recently procured 120 of these new upgraded vehicles for five different Marine Corps companies.

“Our maintenance issues were consolidated with capability issues,” said Chief Warrant Officer Four Ron Parks, PM LAV Maintenance Officer. “We’re still using the original turrets and looking for upgrade solutions that would still fit into the same hull. I’m very impressed with this vehicle. We can still move forward with it, and it’s very capable. It’s 25 years old and still holding its own very well.”

To emphasize the LAV’s durability, Parks added, “The first vehicle that came off the assembly line can still easily be found in the fleet. Veterans can go back and find vehicles they drove as lance corporals.”

LAVs are just as popular among foreign military forces as they are with Marines.

“We’ve sold more vehicles to foreign customers than we’ve bought for ourselves,” said Joseph Wagner, Foreign Military Sales Product Manager.

Whereas the Marine Corps owns about 850 LAVs, PM LAV has acquired more than 1,200 LAVs for other governments with sales pending for almost 1,250 more. PM LAV manages the acquisition of the vehicles, initial training packages and technical data. The U.S. government provides parts and lifecycle support as the foreign governments request them.

If the LAVs could talk, they might tell quite a story. In fact, Robert Persely, Product Data Management Lead, hopes to get the vehicles to

A Marine with the 2nd Light Armored Reconnaissance Battalion, attached to Task Force Mech, Ground Combat Element, Multi National Force - West, conducts maintenance on his loaded-down light armored vehicle after a July 2008 operation in Iraq’s Jazeerah Desert. (Photo by Lance Corporal Albert Hunt)



do just that, at least where maintenance is concerned. His office is responsible for accumulation and management of all technical data, and their new Interactive Electronic Technical Manuals (IETM) are just reaching the field.

“The technical manual can display the configuration status of a part based on the configuration of a vehicle,” he said. “For example, we might get an alert that says, ‘Replace starter.’ The IETM knows which starter to replace because the maintenance of a new starter is different from an old one.”

The IETM, Persely added, also uses “prognostic analysis that looks at the past, today and tomorrow. The analysis tool tells not only what hurts us today but what can come up tomorrow.”

Reports from simulation models, he said, will look at processes and wait times to see their effects. The goal is to enhance performance and reliability and reduce down time. All users will soon have IETMs at their fingertips – small convenient laptops that replaced walls of publications.

“Rather than five mechanics fighting for one technical manual,” Persely said, “they now have access to a technical manual on one laptop with memory sticks. This leads to better efficiency to show what tasks they need to do or that are done.”

The interaction between PM LAV, vehicle users and the depots at Barstow, Calif., and Albany, Ga., pays off in the battlefield.

Jim Streberger, Product Manager for LAV-A2, recalls an incident that shows the sturdiness of the upgraded vehicle while echoing Bill Ross’ assessment.

“A recent IED incident during OIF took off three



Lance Corporal Andrew Babbitt and other members of his unit sit on top of their light armored vehicle while on duty at the Port-au-Prince Airport in Port-au-Prince, Haiti in 2004. (Photo by Technical Sergeant Andy Dunaway, USAF)

wheels from an LAV,” he said. “The armor protected the occupants who walked away. The members of the 2nd Light Armored Reconnaissance Battalion replaced the three wheels and drove it back 50 miles.” As they had so many times in the past, he added, “The LAV performed as advertised.”

– By Jim Katzaman, MCSC Corporate Communications



Marines with 2nd Light Armored Reconnaissance Battalion, Task Force Mech, Multi-National Force - West, Ground Combat Element, conduct disruption operations in July 2008 in Iraq's Jazeerah Desert. (Photo by Lance Corporal Albert Hunt)



HANDS
OFF

Admiral Mike Mullen, Chairman of the Joint Chiefs of Staff, drives a robot used to detect and destroy improvised explosive devices during the June 2008 Mojave Viper exercise at the Marine Corps Air Ground Combat Center in Twentynine Palms, Calif. (Photo by Petty Officer 1st Class Chad McNeeley, USN)

Robots of all sizes roll in to aid warriors

Yards away, blocks away, even miles away – unblinking, unfeeling, even mindless mechanical marvels dutifully go about their business on the perilous battlefield. If bombs blast them into a million shards of metal, other cyber warriors will roll in to scout the combat zone without any sense of their own well being.

By the hundreds, robots are going to war. For Marine infantry, a remote-controlled Humvee carries thousands of pounds of supplies, taking huge loads off a squad's back. Combat engineers stand far away as unmanned multi-ton vehicles flail away at buried charges that detonate without harm to their human masters. Smaller machines inch ahead, peer around corners and even disarm improvised explosive devices (IEDs) with a touch rivaling that of a heavily

padded ordnance specialist.

The rise of robots in the last decade conjures a host of futuristic fantasy. That, according to Colonel James Braden, Program Manager (PM), Robotic Systems Joint Project Office, would be wrong.

“The biggest misconception is that the military has The Terminator in the closet,” he said from his newly transferred office at the Army Detroit Arsenal. “We’ve got nothing close to that. We don’t look at replacing Marines with robots, but we want to give them additional mission-enhancement tools.”

Military robots have had a brief and rapidly evolving history. In 1989, Congress told the Department of Defense (DoD), in Braden’s words, to “do robotics better.” That led to a memorandum



S!!
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of agreement between the Army and Marine Corps to set up a joint program with a Marine colonel as program manager.

Demands for robots quickened after the September 11, 2001, terrorist attacks. The Defense Advanced Research Projects Agency asked for robots to search through the 9/11 rubble. DoD needed robots to go into Afghanistan caves. In 2004 an industry-wide requirement was put out for small robots to detect and disrupt IEDs.

That year, 160 robots – at first tethered, eventually radio-controlled – rolled through the battlefield. Many were small, inexpensive Bomb Bots with one-way missions to run into IEDs and blow up in the process. In 2005 and 2006, the number of robots fielded increased by orders of magnitude. Since the



Robert Rappold, Engineering Team Lead for Maneuver at Robotic Systems, operates a small fleet of machines, each from a briefcase-size set of controls. (Photo by Jim Katzaman)

first machine arrived on scene, more than 5,000 robots have gone to war.

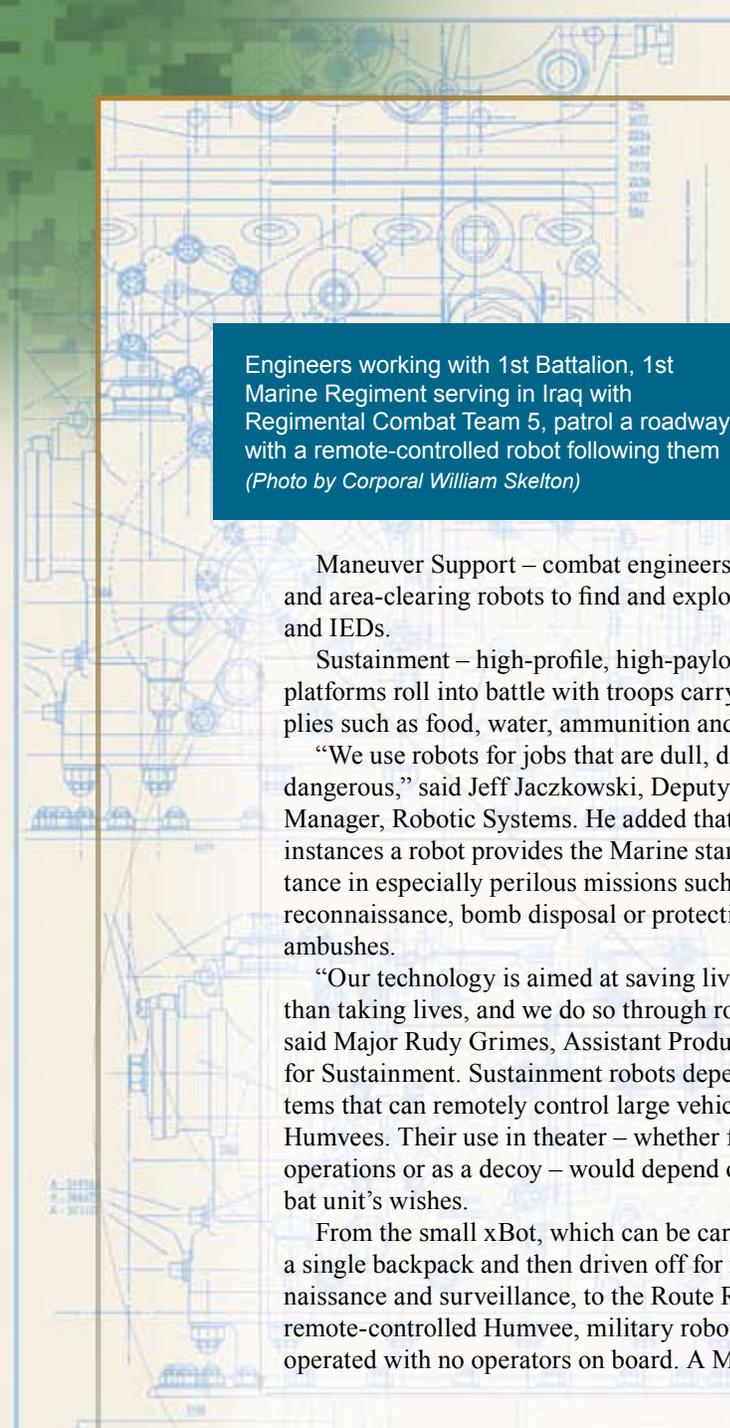
From its first home at Huntsville, Ala., Robotic Systems moved in August 2007 to Warren, Mich., as part of the 2005 Base Realignment and Closure process. The change brought the Marine Corps Systems Command independent program management to its parent Program Executive Office for Ground Combat Systems at the Detroit Arsenal in Warren. Almost all the pieces are in place with the Joint Robotics Repair and Fielding Activity (JRRF) set to open its doors in January 2009.

Fully manned, the Warren office will have more than 60 managers and technicians with a similar number at nearby Selfridge Air National Guard Base. From those sites PM Robotics will sprint to keep up with ever increasing demands from warfighters for mechanical devices to improve their effectiveness and keep them safer in the process.

Military robots now come in all shapes and sizes to match a variety of uses in three general categories:

Maneuver Systems – “pointy end of the spear” machines are small in size and weight. They can be carried to the battlefield on Humvees, even on an infantryman’s back.





Engineers working with 1st Battalion, 1st Marine Regiment serving in Iraq with Regimental Combat Team 5, patrol a roadway with a remote-controlled robot following them
(Photo by Corporal William Skelton)



Maneuver Support – combat engineers use route- and area-clearing robots to find and explode mines and IEDs.

Sustainment – high-profile, high-payload-capacity platforms roll into battle with troops carrying supplies such as food, water, ammunition and batteries.

“We use robots for jobs that are dull, dirty and dangerous,” said Jeff Jaczkowski, Deputy Project Manager, Robotic Systems. He added that in most instances a robot provides the Marine stand-off distance in especially perilous missions such as urban reconnaissance, bomb disposal or protection from ambushes.

“Our technology is aimed at saving lives rather than taking lives, and we do so through robotics,” said Major Rudy Grimes, Assistant Product Manager for Sustainment. Sustainment robots depend on systems that can remotely control large vehicles such as Humvees. Their use in theater – whether for convoy operations or as a decoy – would depend on the combat unit’s wishes.

From the small xBot, which can be carried in a single backpack and then driven off for reconnaissance and surveillance, to the Route Runner, a remote-controlled Humvee, military robots are tele-operated with no operators on board. A Marine or

Soldier uses an operator control unit with controls and a video screen to see what is going on.

Jaczowski said increasingly advanced robots can touch, smell, taste, see and hear – almost human but not quite.

“None of them have human experience, that ‘Spidey’ sense,” he said. “We don’t have that on robots today.”

They do need care, however, especially when they break. For that, they go to the JRRF. This is the single source of support for all joint, theater-provided robots. With detachments in Iraq, Afghanistan and elsewhere around the world, the JRRF objective is to maintain, sustain and train.

Logistics Division Chief Karen Arnold pointed to what amounts to a quick-turn, money-back guarantee. “If a robot is not fixed in four hours or less,” she said, “we give a new robot to the warfighter.”

The concept resembles waiting for a repair at a service station while the mechanic pulls parts off the shelf. Fast fixes can present a challenge when transporting damaged machines from remote areas, Arnold explained, “but we’re trying to get the capacity to repair robots as far forward to the warfighter as possible.”

Keeping mechanical assets handy and reliable is Robotic Systems’ goal, according to Braden.

“Robots go directly into harm’s way and do the mission,” he said. “They give distance between a Marine and a bomb or ambush. They give squad leaders or platoon commanders more information about their situation to protect their most valuable assets, their Marines.”

– *By Jim Katzaman, MCSC Corporate Communications*



A Marine conducts maintenance on a Talon 3B robotically controlled system. *(PM Robotics photo)*

LUNCHTIME HERO

Gunny rushes to save woman in distress

Gunnery Sergeant Jason Whisenhunt said he “did what any other Marine would have done,” although he would be the first to admit saving a woman’s life during lunch was a bit extraordinary.

Yet, that is what the Gunny did, with a dash of international flair Sept. 15, 2008, in the restaurant of Finland’s luxurious Naantali Spa Hotel.

Whisenhunt had traveled with a group of Marine Corps Systems Command officials to talk with the Finish military about their acceptance of F-18 Hornet fighter jets. At lunchtime the Gunnery Sergeant and Kevin Holt, Marine Air-Ground Task Force Command and Control Program Manager, went to the dining room with their military hosts.

“I saw a lady who looked like she was in distress,” Whisenhunt said. “She was bent over and looked like she was choking. Another lady was beating on her back.”

The quick-thinking Marine jumped from the table and ran around to give her the Heimlich maneuver, which dislodged the object and saved her life.

“I did the Heimlich. I saw she was OK and left,” Whisenhunt said almost too matter-of-factly. After all, he had never had the opportunity to use his Heimlich skills since first learning the maneuver as a Lance Corporal during a first-aid and cardiopulmonary resuscitation class.

“It was a little scary,” he admitted. “It was overwhelming. I sat down and said, ‘Holy smoke! I just gave a woman the Heimlich maneuver.’ That was a rush of emotion.”

Hotel staff wrote up an incident report about the heroics of the Operations Chief who has been a Marine for 14 years.

“We were grateful for the Gunny’s quick reaction,” Holt said. “When we returned from lunch, the Brigadier General who headed the Finland delegation acknowledged Gunny’s action and thanked him for saving a life.”

The next day the Americans heard “she was doing fine,” Whisenhunt said. “She said a gentleman had helped her.”

— *By Jim Katzaman, MCSC Corporate Communications*





Happy Birthday

Deputy Secretary of Defense speaks at annual celebration

Deputy Secretary of Defense Gordon England delivered the keynote speech at Marine Corps Systems Command's (MCSC) Birthday Ball in November after being introduced by Brigadier General Michael Brogan, MCSC Commander. The following is that speech in its entirety:

Thank you, General Brogan for the nice introduction... Welcome to the spouses, friends and loved ones here tonight! And, Happy Birthday, Marines!

It's great to be back where I belong... with the greatest fighting force in the history of the world – the United States Marine Corps! When the President and our nation's leaders need the very best... they call for the Marines! When security and freedom are threatened around the world... we rely on the Marine Corps! When it absolutely, positively must be destroyed overnight... we send the Marine Corps!

That's because, while the Marine Corps is the smallest of America's military forces, they are the mightiest in spirit.

The Marine Corps has the leanest footprint, but the widest presence around our world... The Marine Corps is equipped with the lightest load of firepower, but it delivers the heaviest blow... The Marine Corps is a highly specialized, elite fighting force, driven by the most generalized mindset: "Anytime. Anywhere."

Over the past 233 years, Marines have fought in every major and minor engagement the United States has been involved in... from Tripoli to Belleau Wood... from Iwo Jima to the Chosin Reservoir... from Inchon Harbor to Vietnam... from Somalia to Baghdad.

General Krulak, the 31st Commandant of the Marine Corps, summed it up best when he said: "No matter what the crisis or threat, the nation will have one thought: 'Send in the Marines!'"

Admiral Nimitz, after the deadliest battle in Marine Corps history... Iwo Jima, perfectly captured what it means to be a Marine:



Deputy Secretary of Defense Gordon England delivers the keynote speech at Marine Corps Systems Command's (MCSC) Birthday Ball in November after being introduced by Brigadier General Michael Brogan, MCSC Commander. (Photo by Lance Corporal Michael Walters)

MARINES

“Among the men who fought on Iwo Jima, uncommon valor was a common virtue.”

Our history is filled with profound stories of heroism and bravery by United States Marines. And, the next chapter is still being written by Marines serving in the desert terrain and mountainous regions of Iraq and Afghanistan. Many of you have been there... In the opening days of the war in Iraq... the Marines fought so rapidly and so effectively that the Iraqi soldiers never knew what hit them... In fact, one Marine is alleged to have muttered in disdain: “I hope they’re better lovers, ‘cause they sure can’t fight.”

It has been the greatest privilege of my life to serve alongside the men and women who wear the cloth of our nation. And, in particular, I have been awed repeatedly by the unbelievable acts of courage and the selfless sacrifice made by Marines around the globe.

President Ronald Reagan said, “Some people spend an entire lifetime wondering if they made a difference in the world. But, the Marines don’t have that problem.”

When I think about all of the Marines who have served and are serving in Iraq and Afghanistan... and at other locations around the world... When I look out at all of you... I know that same sentiment still applies. As Marines, you should know you’re making a difference... every day... all over the world.

And, you – the Marines and civilians of Systems Command – play a particularly important role... developing, testing, and fielding literally everything our Marines drive, shoot and wear. You’re doing a great job, and by making sure our warfighters on the ground have the very best equipment available, you’re helping to save lives and win the war. Your hard work is well-recognized and appreciated...

It was not long ago... I was in a meeting with the President and the Commandant of the Marine Corps, General Conway at the White House... President Bush was asking the Commandant – ‘what do you need?’

“Mr. President,” the Commandant replied, “The Marine Corps has never been so well prepared and supported in war... our needs are rapidly being met



Gunnery Sergeant Wade Clark pauses at the Fallen Marine Table during a ceremony at the Command’s Birthday Ball.

(Photo by Lance Corporal Michael Walters)

and we’ve been given every possible capability available.”

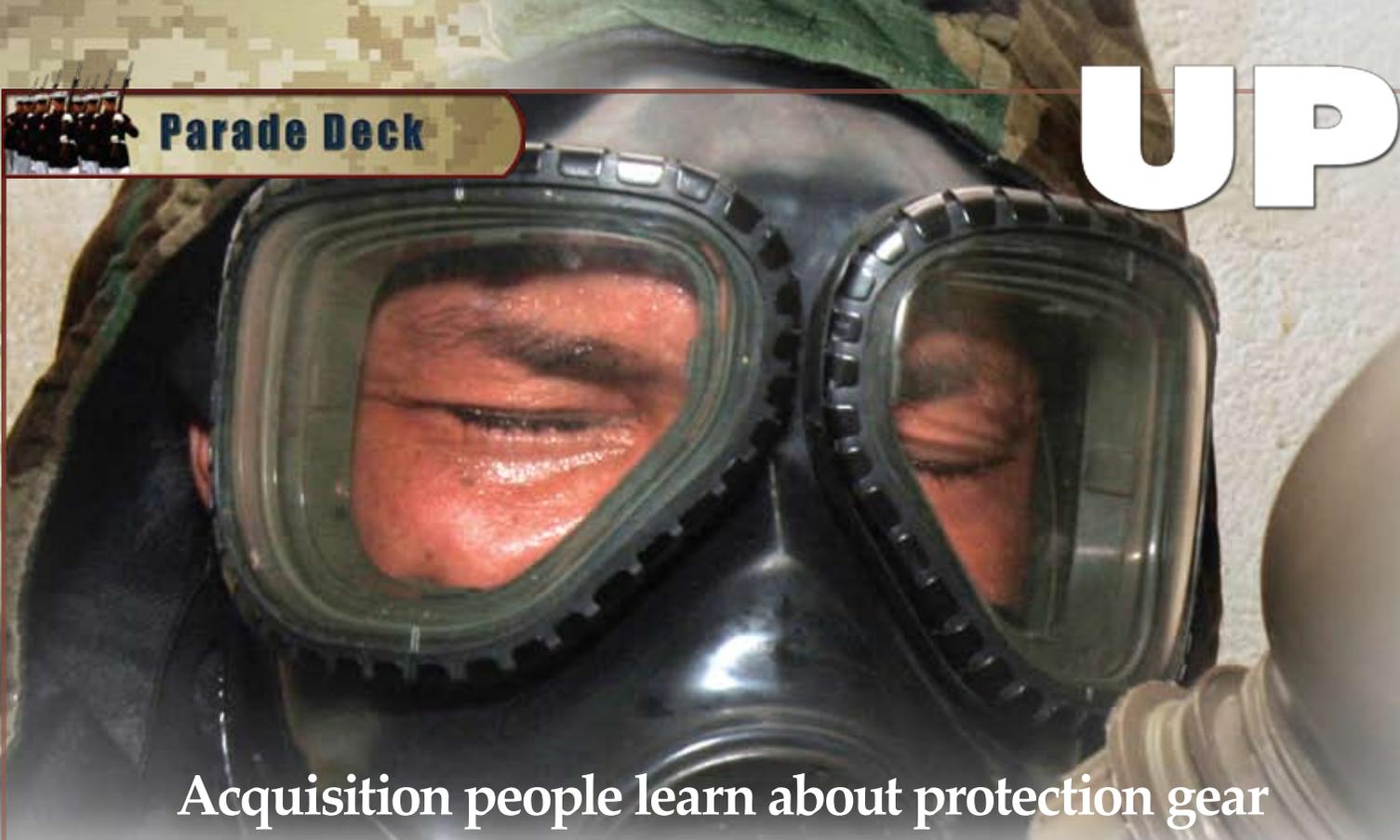
This was a candid comment made spontaneously by the Commandant to the President of the United States – about this Command and the great support you’re providing to your fellow Marines in the field! I could see the Commandant’s pride as he spoke about the important work that you do... and, I share his admiration.

I’ll close with two final thoughts... The first from a true Navy legend – Admiral “Bull” Halsey who once said: “The Marine Corps has just been called by the New York Times, ‘The elite of this country.’ I think it is the elite of the world.” That is high praise from a proud Navy man...

My second thought – on the heels of this week’s election... as the Department begins to transition to a new Administration... we all question and wonder what the future will hold... But, I don’t believe the Marine Corps has anything to worry about... After all, as one of my predecessors, former Deputy Secretary of Defense David Packard, once said: “I can see the possibility we might be able to live without the Army, without a Navy – we might be able to live without the Air Force – but, this country can never live without a corps of lean, mean Marines.”

Again, I thank you for the invitation to join you on this great occasion. Happy 233rd Birthday to the United States Marine Corps. God Bless each of you and your families and especially all those who stand the watch for freedom. Semper Fidelis!





Acquisition people learn about protection gear

In their cubicles across Virginia, Maryland and Washington, D.C., government employees and support contractors toil day after day acquiring the latest chemical, biological, radiological and nuclear (CBRN) protection equipment for the warfighter. Rarely do they get the chance to try on the equipment, and certainly not in a gas chamber.

But in October 2008, 75 CBRN acquisition workforce members finally experienced first hand the fruit of their labor. These men and women voluntarily attended the annual Joint CBRN Day at Quantico's Camp Barrett, and it was nothing like a typical day in the office. Instructors from The Basic School's CBRN division, Marine Security Guard Battalion's CBRN office, as well as the Chemical

Biological Incident Response Force (CBIRF) based out of Indian Head, Md., helped acquisition professionals suit up from head to toe.

CBRN Day is an annual event orchestrated by Marine Corps Systems Command as well as the Joint Program Manager Chemical, Biological, Radiological and Nuclear (JPM-CBRN) branch, according to Master Sergeant Trenton Widdis, a Project Officer within the JPM-CBRN branch. "This gives the personnel the chance to see the equipment they've been working on in acquisition," he said.

Direction came right from the top. Army Major General Stephen Reeves, Joint Program Executive Officer for the JPM-CBRN office, kicked off the morning by covering the purpose of the day, asking that the attendees get an appreciation of how their hard work has provided equipment to the warfighter. He then thanked everyone for attending and hoped they would learn something from their day at Camp Barrett.

From their indoor introduction, the group moved outside and started with equipment familiarization. For some, this was their first time to see, feel



An attendee of the Joint Chemical, Biological, Radiological and Nuclear (CBRN) Day receives boots and additional individual protective equipment in the CBRN warehouse. (Photo by Jim Katzaman)

CLOSE

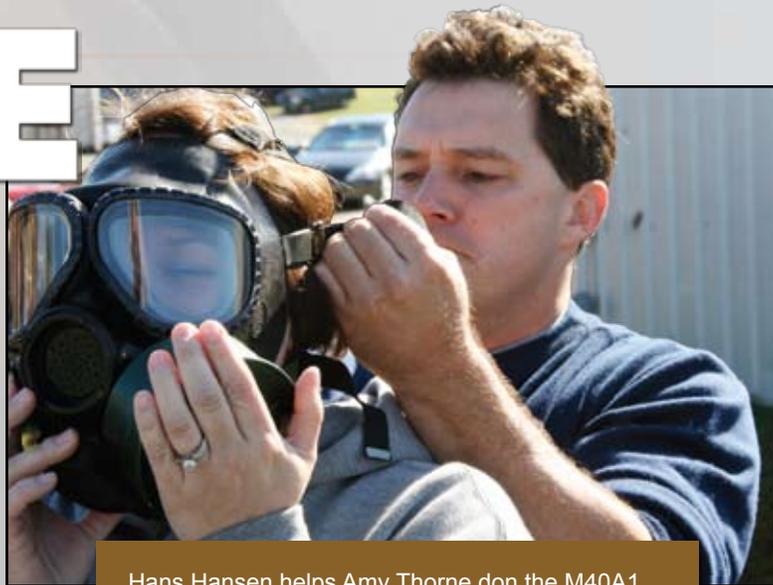
and wear the final version of the products they helped procure.

A mix of instructors from CBIRF and The Basic School presented assorted individual protection equipment that was put on display. These included the M40A1 mask, suit, boots and gloves as well as the next-generation Joint Service Ensemble. According to Widdis, every instructor at the event is an expert in how the equipment is worn and used, having done so in real-world conditions.

After getting a feel for the equipment – trying on sample masks to see how they fit and seal – it was the group’s turn to try the real thing. Following in the footsteps of innumerable service members before them, the attendee’s filed into the CBRN warehouse. One after the other they were handed masks, suits, boots and gloves.

They spent the rest of the day putting on the individual protective equipment and going through the gas chamber. At the end, if they were not ready for combat, they could at least say they no longer were novices with the equipment they helped to procure.

“It was a success,” Widdis said. “Everyone en-



Hans Hansen helps Amy Thorne don the M40A1 Mask during the Joint Chemical, Biological, Radiological and Nuclear Day at Quantico, Va. Both of them work at the Joint Expeditionary Collective Protection Program Management Office at Dahlgren, Va. (Photo by Jim Katzaman)

joyed the day. They saw the final products and heard from the active-duty components that use them. We look forward to doing this again.”

– By Jim Katzaman, MCSC Corporate Communications



The Joint Chemical, Biological, Radiological and Nuclear Day at Quantico, Va., gave many acquisition experts their first chance to see and hold the final version of the equipment they help purchase. (Photo by Jim Katzaman)

Additional MCSC Events



Brigadier General Michael Brogan, Commander, Marine Corps Systems Command, receives a plaque from welder-fitter Charles Pressley on behalf of all Force Protection employees during the ceremony commemorating the company's final production of a Mine Resistant Ambush Protected vehicle in October 2008. *(Photo by Damon Smith)*



Major General Shih-Cai Jheng (center), Assistant Commandant of the Taiwan Marine Corps, gives Barry Dillon, then-Executive Director of Marine Corps Systems Command, a gift at the Modern Day Marine Expo in October 2008. *(MCSC Photo)*



William Randolph, Assistant Commander for Contracts, speaks with Lynn Frazier, Lead Contracting Officer for the Mine Resistant Ambush Protected Vehicle Joint Program Office, at the Contracts Offsite conference in October 2008. *(Photo by Bill Johnson-Miles)*



Shay Assad, Director, Defense Procurement, Acquisition Policy and Strategic Sourcing, gives the keynote speech at the Contracts Offsite conference in October 2008. *(Photo by Bill Johnson-Miles)*

Joint MRAP vehicle program earns Packard Award

Marine Corps Systems Command Awardees

Meritorious Service Medal

Lieutenant Colonel Christopher Wagner
MAGTF C2, Weapons & Sensors Development & Integration

Major Jason Hamilton
MAGTF C2, Weapons & Sensors Development & Integration

Major Robert Peterman
Communications, Intelligence and Networking Systems

Major Richard Sheehan
Communications, Intelligence and Networking Systems

Chief Warrant Officer Four Michael Roberts
Advanced Amphibious Assault, Program Executive Office Land Systems

Master Gunnery Sergeant Roy Morris
Ground Transportation & Engineer Systems

Navy/Marine Corps Commendation Medal

Chief Warrant Officer Two Jeremy Parham
Ammunition

Staff Sergeant Jennifer Antoine
Combat Equipment and Support Systems

First Lieutenant George Saenz, Commander of the Route Clearance Platoon attached to regimental Combat Team 6, stands in the crater created by a massive improvised explosive device targeting his Mine Resistant Ambush Protected (MRAP) vehicle near Zaidon, Iraq, in June 2008. The blast damaged the MRAP vehicle, but the heavily armored truck protected the crew. Sending MRAP vehicles to the field fast and saving lives earned the program the Packard Award. *(Saenz photo)*



If the Mine Resistant Ambush Protected (MRAP) Vehicle Program is the “ultimate team sport,” as Joint Program Manager Paul Mann calls it, then the team has hit one “out of the park.” The MRAP Vehicle Joint Program Office (JPO) received the prestigious David Packard Excellence in Acquisition Award during a November 2008 ceremony.

Presented by Deputy Under Secretary of Defense (Acquisition, Technology and Logistics) James Finley, the Packard Award recognizes Defense Department teams that have made highly significant contributions demonstrating exemplary innovation and best acquisition practices.

An initial Joint Urgent Operational Needs Statement in October 2006 for 1,185 vehicles set the stage for a huge acquisition effort in 2007. This effort placed nearly 12,000 vehicles on order and fielded more than 1,500 lifesaving MRAP vehicles to warfighters.

“This outstanding team used competitive prototyping, astute industrial base analysis and managed to accelerate the fielding of record numbers of vehicles, saving many lives and making exponential contributions to combat effectiveness in the Global War on

Terrorism,” Finley said.

According to the award citation, the team simultaneously budgeted, contracted, tested, produced, integrated, fielded and sustained the highly survivable MRAP vehicle fleet, all while meeting statutory requirements. During this 12-month period, the program office also embarked on major upgrades to vehicle protection, load capacity and mobility in response to warfighter feedback and evolving threats.

“Our MRAP Vehicle JPO mission is to protect the warfighters and equip them to fight and win,” Mann said. “Our team takes enormous pride knowing our effort is making a difference. This recognition is especially gratifying because we know that warfighters and their families are kept whole on our watch. We’re just getting started.”

– By Barbara Hamby, MCSC Corporate Communications

Leaders of the Joint Mine Resistant Ambush Protected Vehicle Program team display the Defense Department’s Packard Award for acquisition excellence. *(Photo by Jacob Boyer)*



Staff Sergeant Alexander Frederick
Marine Corps Tactical Systems Support Activity

Presidential Volunteer Service Award

Dave Garvin
MAGTF C2, Weapons & Sensors Development & Integration

Martin Kane
Lightweight 155MM, Program Executive Office Land Systems

Daniel Torgler
Training Systems

Certificate of Retirement

Barry Dillon
Executive Director

Mary Schuck
Contracts

Federal Length of Service

Walter Warme (40 Yrs)
Resource Management

Delzoria Hawkins (35 Yrs)
Contracts

Dedra Dickinson (30 Yrs)
Resource Management

Deborah Fischer (30 Yrs)
Command Information Office

Michael Gallagher (30 Yrs)
Ground Transportation & Engineer Systems

Nancy Gillan (30 Yrs)
Training Systems

Louis Gilliam (30 Yrs)
Information Systems and Infrastructure

DoD selects Anderson for FCT Program Award

Adding a multi-purpose blade to an M1A1 Main Battle Tank helps the tank to remove roadblocks, create hasty fighting positions and impose non-kinetic destruction of enemy obstacles without the use of the main gun's ammunition. It has also saved millions of taxpayer dollars and helped a Marine Corps Systems Command (MCSC) officer earn a huge award.

In October 2008 John Kubricky, Deputy Under Secretary of Defense for Advanced Systems and Concepts, selected MCSC's Captain Jason Anderson as the Foreign Comparative Testing (FCT) Program Project Manager of the Year for Fiscal Year 2008. The Captain is the Project Officer for the Multi-Purpose Tank Blade (MPTB),

"Anderson distinguished himself through his outstanding leadership," Kubricky said. "Anderson aggressively executed all required evaluations within two years. His proactive project management and acquisition planning resulted in a successful FCT project with a research and development cost avoidance of \$5 million."

According to program officials, difficulties during the early stages of the program resulted in a three month delay, but Anderson combined the integration testing and the limited user evaluation into one test event, enabling him to steer the program back on schedule. The Marine Corps produced 88 blade systems for a total of \$21 million and plans to procure six additional systems for \$1.7 million in Fiscal Year 2009. Some of these blade systems are in use in Iraq.



An M1A1 Main Battle Tank, with its turret facing backward, undergoes testing with its new Multi-Purpose Tank Blade. (PM Tanks photo)

According to the Command's nomination form, the benefits to the warfighter in achieving mission success with the MPTB are immeasurable. For example, during operations in Western Anbar Province of Iraq, a tank outfitted with MPTB struck an improvised explosive device. The tank blade absorbed most of the blast preventing the tank tracks from sustaining any damage. This eliminated the need for the crew to evacuate and expose themselves to enemy fire.

"Thanks to Captain Anderson's commitment for excellence, our warfighters have better systems that enable them to conduct and achieve their mission more effectively," Kubricky said.

— By Bill Johnson-Miles, MCSC Corporate Communications



Marine Corps Systems Command's Sergeant Teresia Kamau and Chief Warrant Officer Two Charles House, Marine Corps Augmentation Training and Support Unit, display the new Sergeant's promotion warrant. (Photo by Bill Johnson-Miles)



WD team earns a Bronze USD(AT&L) Award

In November 2008 Under Secretary of Defense (USD) for Acquisition, Technology and Logistics (AT&L) John Young selected Marine Corps Systems Command (MCSC) as a Bronze Winner for the USD(AT&L) Workforce Development Award. The award recognizes organizations achieving excellence in learning and development for their employees.

“Congratulations,” Young said. “Your efforts have resulted in innovative human capital initiatives that all should emulate as we work to ensure that our workforce has the right skills and expertise to ensure improved acquisition outcomes.”

According to James Irwin, MCSC’s Workforce, Management and Development Director, “the support of competency directors and participants in various workforce development initiatives made it truly a Command award, but our Workforce Development (WD) team was instrumental.”

Ann Firth is the Business Manager for WD, which includes two teams: the WD Acquisition team led by Michelle McKamy and the WD On-Site Training team led by Kelly Sims.

“We are fortunate to work for an organization investing in developmental opportunities that extend beyond the walls of your typical classroom,” Sims said. “Our competency aligned organization structure has engaged the entire command in workforce development efforts to include knowledge centers, town halls, executive coaching, distance learning and so much more. Achieving the USD(AT&L) Workforce Development Award demonstrates



James Irwin (holding award), Marine Corps Systems Command’s (MCSC) Workforce, Management and Development Director, gathers with members of the Command’s Workforce Development (WD) Team. WD was instrumental in MCSC earning the Under Secretary of Defense for Acquisition, Technology and Logistics Workforce Development Bronze Award. (Photo by Bill Johnson-Miles)

MCSC’s commitment to our Marines and civilian Marines.”

Different programs and courses helped the Command earn the award, including its Advanced Acquisition Program Course, Command Supervisory Development Program and Executive Leadership Development Program (ELDP). ELDP has doubled during the last year to its current total of 73 participants. According to WD, survey results indicate 90 percent of the participants are satisfied with the program.

USD also praised MCSC for its Lean Six Sigma (LSS) classes. In Fiscal Year 2008, more than 132 employees completed LSS training with 13 reaching the green belt level and two certified as an LSS black belt. One LSS project, led by the Program Management Office for Ammunition, reduced the initial time period to develop accurate impact statements from seven days to one day. According to WD, when combined with other improvements, this reduction could save the Marine Corps more than \$60 million a year.

– By Bill Johnson-Miles, MCSC Corporate Communications

Andrea Harlow (30 Yrs)
Ground Transportation &
Engineer Systems

Robin Roberts (30 Yrs)
Ground Transportation &
Engineer Systems

Mary Schuck (30 Yrs)
Contracts

Scott Allred (25 Yrs)
Ammunition

Weldon Bruce (25 Yrs)
Armor and Fire Support
Systems

Laura Caracciolo (25 Yrs)
Contracts

Roy Carroll (25 Yrs)
Operational Forces
Systems

Louis Gladney (25 Yrs)
Global Combat Support
Systems – Marine Corps

David Hance (25 Yrs)
Contracts

Richard Jones (25 Yrs)
MAGTF C2, Weapons &
Sensors Development &
Integration

Lisa Lawhorne (25 Yrs)
Global Combat Support
Systems – Marine Corps

Anita Norris (25 Yrs)
Contracts

Kim Yarboro (25 Yrs)
Mine Resistant Ambush
Protected Vehicles

Leigh Baysden (20 Yrs)
Ground Transportation &
Engineer Systems

Warren Glen (20 Yrs)
Training Systems

Brad Glines (20 Yrs)
Information Systems and
Infrastructure

Antoinette Lloyd (20 Yrs)
International Programs

Barry Myers (20 Yrs)
Life Cycle Logistics

Patrick Sheire (20 Yrs)
Infantry Weapons Systems

Edward Tokarz (20 Yrs)
Life Cycle Logistics

Lieutenant Colonel Tim Tinner of Reserve Affairs receives his new rank insignia from his wife Petra and his son Andrew, who is with Quantico High School’s Marine Corps Junior Reserve Officers’ Training Corps. (Photo by Jim Katzaman)



New web-based portal offers seamless collaboration

Marine Corps Systems Command (MCSC) is on the doorstep of evolving into a knowledge-based collaborative organization with the impending deployment of the Marine Corps Integrated Digital Environment (IDE).

IDE is a business environment that automates the management and exchange of information, facilitates the business activities associated with the Department of Defense (DoD) Acquisition and Marine Corps Equipping processes and provides immediate access to needed technical, engineering and program and project management information for all users.

According to Liz Hendrick, IDE Project Officer, this web-based IDE system provides users with a gateway to a centralized repository from their desktop. This enables them to collaborate, view and mark up engineering drawings and streamline reviews and communications. It is designed to provide immediate access to documents, support document sharing and collaboration, and facilitate reuse of information, workflow automation and many other capabilities.

MCSC awarded a contract to SRA International for development of IDE, with an initial release planned for spring 2009. The IDE provides the means to fully integrate the acquisition and product lifecycle management activities of the broader Marine Corps acquisition community. This includes MCSC, the Marine Corps Operational Test and Evaluation Activity (MCOTEA), Marine Corps Combat Development

Command (MCCDC) and Logistics Command.

“The IDE program will create a seamless, collaborative, digital-based business environment for the acquisition, lifecycle and product support community. It supports key enabling processes, aligned with our equipping process,” Hendrick said. “IDE provides the primary business environment the Command will use to manage our acquisition programs. It is critical to what we do here at the Command because it will provide a single place to go for acquisition, project management and lifecycle management tools and information.”

The initial release of IDE will provide the user with single sign-on access to the Project Management Toolset, according to program officials. This includes personal, organizational, team and project workspaces; project collaborative decision support; project issue tracking, document automation and equipping process workflow; requirements traceability matrix support; automated capability-based test management; and configuration management tools. Expanded capabilities during the rollout in spring 2009 include integrated master plan and schedule; work breakdown structure; reporting and management information; risk-management tool; and contract data requirements list management.



“We must evolve into a knowledge-based organization, leveraging information in the most effective, efficient and productive method possible,” said Barry Dillon, MCSC’s former Executive Director. “IDE

will help the Marine Corps along this path.”

Hendrick said IDE returns a lot of value to the information and labor intensive business practices associated with DoD acquisition processes. A few of these benefits include increased efficiency; reduced redundant applications and data; integrated business environment with MCOTEA and MCCDC; collaboration; information and data management; improved decision making; corporate memory and knowledge management; and enhanced overall quality of product design and lifecycle management activities.

For more information, contact Liz Hendrick at (703) 432-5128 or elizabeth.hendrick@usmc.mil, Sonia Kitchen at (703) 432-5178 or sonia.kitchen@usmc.mil or Karen Belmonte at (540) 657-4511, ext. 349.

Donate leave to those in need

The federal government allows civilian employees to donate unused annual leave to approved recipients in the Voluntary Leave Transfer Program (VLTP).

Those wishing to donate leave to approved employees need to fill out form OPM 630A for recipients within the same command or form OPM 630B for recipients outside your command. These forms can be found at www.opm.gov/oca/leave/HTML/formindx.asp. Completed



Donating leave can help produce light where there is darkness. (Artistic rendering by Kirk Nelson)

forms plus a copy of the donor's latest Leave and Earning Statement need to be turned into Elaine Brown of Human Resources and Organizational Management in Building 2004, Room 130, at Quantico. They can also be faxed to Brown at (703) 784-2048. Approved VLTP recipients within Marine Corps Systems Command include Cynthia Lewis, Graham Oliff, Patty Smith, Stacy Watson and Lisa Weaver. For more information, call Brown at (703) 784-1305.



Members of the Operations and Office Manager Competency Leadership Board (CLB) discuss a point at their kickoff meeting. CLB meetings are facilitated and supported by the Strategic Change Management Center. (SCMC photo)

CSDP classes required

Marine Corps Systems Command (MCSC) designed the Command Supervisory Development Program (CSDP) to provide MCSC supervisors with the basic knowledge and skills required of all federal supervisors and managers. The program also provides the Command with unique policies and procedures to lead and manage human capital resources.

CSDP, a mandatory program for all MCSC supervisors, consists of three classes: Leadership and Management Skills, Performance Management and Human Resource Elements. Supervisors are required to complete all three classes to satisfy the requirement and to receive a certificate. Team leaders are also encouraged to attend.

Leadership and Management Skills classes emphasize leadership and communications. It also teaches how to deal with difficult employees and covers conflict resolution. Classes are sched-

uled for April 7-8, May 6-7 and Sept. 1-3.

Performance Management classes cover a supervisor's responsibilities in a pay-for-performance system. It includes communication challenges, performance feedback and performance planning. Classes are scheduled for Feb. 24-25, April 14-15, July 21-22, Aug. 11-12 and Sept. 22-23.

Human Resource Elements classes provide supervisors with instructions and briefings from subject matter experts responsible for Command human resource processes. Topics include hiring, equal employment opportunity, employee relations and time keeping. Classes are scheduled for Jan. 27-28, April 21-22, July 7-8 and Sept. 9-10.

For more information, contact Ashley Welsh at (703) 432-4462.

SCMC advocates planning and improvement

Change is happening all around us. In the age of instant communication, the media continually provides updates on external changes that impact everyone: in the environment, in politics, in medicine, in business, on the earth and even regarding other planets.

"We also experience change in our personal lives and through our daily interactions at work," said Lynda Fullem, Strategic Change Management Center (SCMC) Change Coordinator. "Since we cannot avoid change, we all find ways to deal or adapt to it and, hopefully, learn and grow from these experiences."

Marine Corps Systems Command (MCSC) has encountered change over the last several years, specifically with the Command's organizational structure, business processes and workforce. The Command established SCMC to provide MCSC teams, as well as



Dealing with difficult people is one of the topics covered in the Leadership and Management Skills class in the Command Supervisory Development Program. (iStock photo)

individuals, with the tools and resources needed to deal with and adapt to change.

“SCMC aids in the continuous process improvement of our business operations and workforce, allowing the Command to plan strategically for future changes and optimally support the warfighter,” Fullem said.

The history of SCMC began in 2001 when the department was initially established as the “Change Management Center.” Following the completion of the Command design initiative, the Center focused on transforming MCSC to a team-based organization. According to Fullem, the transformation included significant changes to the Command’s business and human systems processes as well as establishment of the MCSC’s scorecard measures. As the transformation efforts were implemented, the Center expanded. With a strategic focus, it then formulated a long-range plan for the Command’s future.

In 2004, MCSC renamed the department as the “Strategic Change Management Center.” The newly named Center then spearheaded development of the Command’s first Strategic Plan, which was published in 2005. The MCSC Strategic Plan 2005-2009 included the Command’s mission, vision, guiding principles, goals and objectives.

SCMC has continued to evolve and significantly expand its services. For example, the department has supported more than 50 team formation training sessions and tailored team building off-sites over the last three years. The Center offers team formation and skills training (including team charter development); tailored team building off-sites; continuous process improvement efforts (including Lean Six Sigma); facilitation; Myers-Briggs, Platinum Rule and team assessments; Executive Steering Team and Competency Leadership Board meeting sup-



Jim Riordan, former Product Group Director for Communications, Intelligence and Networking Systems (CINS), speaks with Robyn Fait, CINS Operations Manager, prior to his departure in December. (Photo by Bill Johnson-Miles)

port; strategic planning; Command metrics (including Command Scorecard); brown bag lunch seminars; Change Management/Strategic Planning Knowledge Center (on MCSC’s Tiger website); and an SCMC library.

According to Fullem, the Center is exploring, among other possibilities, making available additional specialized team training, expanded benchmarking opportunities, implementation of an organizational maturity analysis and seminars on group decision making, tools and change management.

For more information, contact Fullem at (703) 432-3975.



Riordan selected for SES position

Jim Riordan, former Product Group Director for Communications, Intelligence and Networking Systems (CINS), is now a member of the Senior Executive Service. In early December he departed Marine Corps Systems Command to begin a new challenge at the Department of Homeland Security.

“It has been an honor that the Marine Corps has allowed me to be a part of the organization for the past 25 years,” Riordan said in an email to his team. “It’s been an equal honor to have worked with all of you. I offer you my heartfelt thanks for your leadership, guidance, support and friendship. It’s only been through your efforts that great successes have been achieved in providing equipment to the Marines.”

Colonel Phil Chudoba is the acting CINS Product Group Director until a permanent Director is selected and approved.

Toastmasters improve communication skills

Quantico’s 46-year-old Chopawasic Toastmasters Club meets from 11:45 a.m. to 12:45 p.m. on the second and fourth Tuesdays of the month at the base Learning Center, Building 3089, in the Florida Tech. classroom.

According to Toastmasters International, since 1924 the Club has given its members the skills and confidence to effectively express themselves in any situation. Whether you are an administrative specialist, engineer, project officer, computer specialist, lo-

gistician, program analyst or program manager, Toastmasters can help you improve presentation and communication skills, team leadership effectiveness and management ability.

For more information, contact Sandy Frazier at (703) 432-8143 or visit www.choptm.org.

Former Colonel to head PEO Land Systems

The Department of the Navy selected Bill Taylor, a retired Marine Colonel, to join the Senior Executive Service and to lead Program Executive Office Land Systems (PEO LS). Taylor retired from active duty with 29 years of service. He returned to the helm of the organization he had stood up during his last active-duty assignment from January 2007 through July 2008.

The former Marine Aviator and MV-22 Osprey Program Manager is a New Jersey native and a Rutgers University alumnus. PEO LS has oversight of eight major system-acquisition Ma-



Mr. Bill Taylor, retired Marine Colonel

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rine Corps programs consisting of the Expeditionary Fighting Vehicle, Joint Light Tactical Vehicle, Ground Air Task Oriented Radar, Lightweight 155mm, Medium Tactical Vehicle Replacement, Logistics Vehicle System Replacement and Common Aviation Command & Control System.

Thanks given to Ball sponsors

Commercial and individual sponsors provide free tickets to enlisted Marines attending the Command's Marine Corps Birthday Ball, and they also help subsidize ticket prices for everyone else. According to Kim Foster, Birthday Ball Com-

mittee Co-Chairman, thanks to these companies and individuals, ticket prices have not risen in the last six years.

Some of the donations were last minute and did not make the deadline to be included in the Ball program. They include Kforce Government Solutions, Patty Mitchell, John Bennett and Michael Lewis.

Donations are already being accepted for the 2009 Birthday Ball. Companies or individuals who would like to donate now or arrange for a sponsorship should contact Foster at (703) 432-3277.



Snapshots

Patrick Elliott of Information Systems and Infrastructure receives brochures from Fire Inspector Tom Berta at the Command's Safety Fair in October 2008. (Photo by Jim Katzaman)



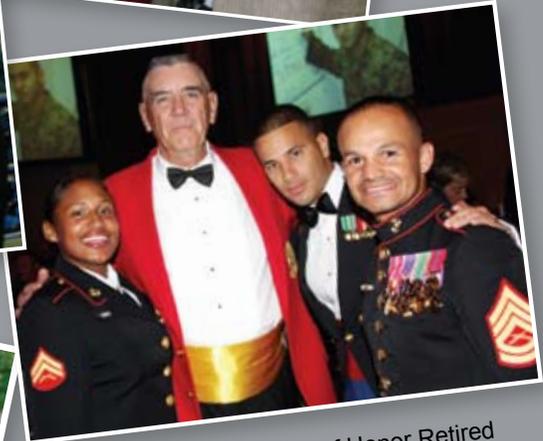
Members of Ground Transportation and Engineering Systems fill their plates during a Thanksgiving potluck meal in November 2008. (Photo by Jim Katzaman)



Members of Life Cycle Logistics enjoy a Thanksgiving potluck luncheon in November 2008. (Photo by Bill Johnson-Miles)



Barry Dillon reflects on his time as the Marine Corps Systems Command Executive Director at the Command's Christmas party in December 2008. Mr. Dillon officially retired Jan 3. (Photo by Jim Katzaman)



Marines gather with Guest of Honor Retired Gunnery Sergeant R. Lee Ermeley (second from left) at the Marine Corps Tactical System Support Activity's Marine Corps Birthday Ball in November 2008. The Marines are (from left) Corporal Nathali Gonzalez, Staff Sergeant Hover Reyes and Gunnery Sergeant John Nunez. Ermeley is a former drill instructor and Golden Globe-nominated actor, often playing the roles of authority figures such as Gunnery Sergeant Hartmann in *Full Metal Jacket* and Mayor Tilman in *Mississippi Burning*. The "Gunny" currently hosts *Mail Call*, a military history program on *The History Channel*, where Ermeley answers military-related viewer questions. (MCTSSA photo)



Brigadier General Michael Brogan, Commander, Marine Corps Systems Command, speaks at the Ammunition (Ammo) picnic in October 2008. Ammo is scheduled to move to a new Stafford, Va., location in the spring. (Photo by Bill Johnson-Miles)

Marines On Point encourages members of the Command to submit photos. Printed photos may be delivered to magazine staff members in Building 2200, Room 153, or mailed to *Marines On Point* magazine, Corporate Communications, 2200 Lester St., Quantico, VA 22134. High resolution digital photos should be emailed to MCSCPAO@usmc.mil. Please identify all people in each photo and include event details.



Santa was caught borrowing the car that belongs to Barry Dillon, the former Marine Corps Systems Command Executive Director. His reindeer must have been ill that day. (MCSC photo)



General James Amos, Assistant Commandant of the Marine Corps, visits with Linda Dillon, the wife of Barry Dillon, the former Executive Director of Marine Corps Systems Command, just prior to the start of Mr. Dillon's retirement ceremony in December 2008. (Photo by Bill Johnson-Miles)

A hungry trio of holiday well wishers enjoy Marine Corps Systems Command's Christmas party in December 2008. (Photo by Jim Katzaman)



Sergeant Teresia Kamau enjoys the baby shower friends and co-workers threw for her in Building 2200's basement cafeteria in October 2008. (Photo by Captain Geraldine Carey)



Reginald Smith (left) and Tim Williams of Facilities install a new wall in Building 2200. (Photo by Jennifer Gonzalez)



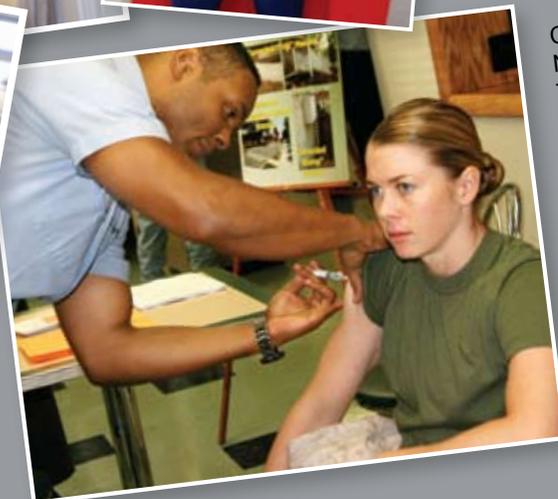
Workforce Management and Development's John Barth continues his never ending battle for truth, justice and the Marine Corps Systems Command way. (WMD photo)



Security Manager Susan Jones dresses up every Halloween and provides a treat to every member of the command who she sees wearing the proper identification. (Photo by Pam King)



Captain Quinn Nash of Ground Transportation and Engineering Systems receives a flu shot from Navy Corpsman Christian Loving in October 2008. (Photo by Jim Katzaman)



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