**About the Marine Corps Center for Lessons Learned:** The Marine Corps Center for Lessons Learned (MCCLL) is part of the Training and Education Command (TECOM) of the Marine Corps Combat Development Command (MCCDC), located at MCB Quantico, VA. The MCCLL mission is to collect, analyze, manage, and disseminate knowledge gained through operational experiences, exercises, and supporting activities in order to enable Marines to achieve higher levels of performance and to provide information and analysis on emerging issues and trends in support of operational commanders and the Commandant of the Marine Corps Title 10 responsibilities. MCCLL manages the Marine Corps Lessons Management System (LMS) and Consolidated Data Records (CDR) databases, and reports findings, trends and issues through verbal, written and electronic media.

Visit the MCCLL Website at: www.mccll.usmc.mil

Customer service support for the MCCLL Website and questions concerning this newsletter should be directed to: harry.t.johnson@usmc.mil or michael.jones@usmc.mil Telephone: 703.432.1279 DSN: 378.1279

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**News**

- 3d Battalion, 25th Marines focused collection effort is underway
- Marine Corps raises combat training standards
- Marine Corps seeks combat tactical vehicle to replace HMMWV
- Marines probing new ways to fight future insurgencies
- Marine Corps Civil Affairs Groups work to win local hearts and minds

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**Featured Articles**

- Forum for JTF/MARFOR Katrina/Rita
- 3rd Battalion, 4th Marines Focused Collection Effort
- NCO Lessons Learned Conference
- CSSE Commanders Lessons Learned Conference
- Combat Stress
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**From the Director of the Marine Corps Center for Lessons Learned**

Thank you for taking time to read our newsletter. The information contained in the newsletter is a small sample of what is available within our MCCLL Lessons Management System.

The Marine Corps Center for Lessons Learned is not the old Marine Corps Lessons Learned System (MCLLS), nor is it the Expeditionary Force Combat Assessment Team (EFCAT) program. We have made significant changes to the functionality of the system in the last year and want people to start using it for their decision-making processes.

Our lessons management system is a searchable database that is easily accessed for relevant information. It has been located on the unclassified network in order to increase accessibility for every Marine whether deployed or in garrison. I believe we have the best lesson learned system in the DoD and I look forward to helping you utilize its capabilities in order to increase our combat readiness. Our goal is to save one Marine or Sailor by getting information that is needed to the decision makers and to operating forces.

Lessons learned is one of the many tools used to influence training, equipping and organizing our Marine Corps. Your input through after action reports, lessons learned, and observations is critical to making the system work and ensuring your input or voice is heard. Please log on, register, and read what is available on the system and then input your data or observations. Your input is used and it is very valuable. Thank you and Semper Fidelis.

Please contact me with any comments, concerns, or areas of interest that should be considered for lessons learned analysis.

Col Monte E. Dunard, USMCR, Director MCCLL, monte.dunard@usmc.mil or dunardme@mccdc.usmc.smil.mil DSN: 378-1286
News

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Forum for JTF/MARFOR Katrina/Rita to Capture Lessons Learned from Hurricane Katrina and Hurricane Rita Disaster Relief Efforts: A special Forum has been established on the MCCLL web site to provide a location for JTF/MARFOR Katrina/Rita to post briefings and other documents of interest to JTF participants and other organizations, as well as to capture lessons learned during the conduct of disaster assistance to Federal, state and local agencies responding in the aftermath of Hurricanes Katrina and Rita. Please visit this Forum located on the Home Page of the MCCLL website at: JTF/MARFOR Katrina/Rita Forum. Note: If you are not already a registered user of the site, please complete the registration information at the login, and you will receive authorization notification within 24 hours.

3rd Battalion, 4th Marines Focused Collection Effort: In order to expedite the collection of lessons, observations and TTPs from Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF), the Commanding General (CG) Training and Education Command (TECOM) has directed that MCCLL train and deploy collection teams to interview and gather information from units as they return to CONUS. An initial collection team was deployed in August of this year to the 3rd Battalion, 4th Marines to conduct interviews with unit personnel and ensure pertinent lessons, observations, TTPs, material issues, and pre-deployment training data were captured. The goal was to ensure that information was collected in an expeditious manner so that applicable agencies could effect positive and timely change in support of the operating forces. The initial 3/4 saturation collection report on pre-deployment lessons learned is now available at: 3d Battalion, 4th Marines Pre-deployment Training Lessons and Observations

Some other key lessons from the saturation collection effort (that were not included in the above report) are New Equipment & Modifications to Existing Equipment, JP8 as the Single Fuel Concept, Personal Role Radios, and Use of Explosives for Breaching. Please visit the MCCLL website for additional lessons and after action reports from the 3/4 collection effort.

Marines from the 1st Battalion, 8th Marines, cross a canal to search homes in a remote community in St. Bernard Parish, Louisiana.
The key to any successful combat operation is the coordinated **Combat Service Support (CSS)** resupply convoys that are sent from the MEF rear areas forward to support those units engaged with the enemy. These convoys must be well organized tactically and be provided with close air support (CAS) or close-in fire support (CIFS) to ensure they reach their destination.
**Combat Stress:** MCCLL recently sponsored a study effort in response to the growing interest within the Marine Corps on the impact of combat stress on readiness. Interviews were conducted with key personnel involved in the management of combat stress, including mental health professionals, unit commanders and their staff, staff noncommissioned officers, and unit chaplains. Recent lessons and best practices by mental health professionals within the Marine Operating Forces and the Supporting Establishment were collected, and an overview of their perspectives was formulated by MCCLL analysts. Individual Marines were also interviewed or surveyed to determine what techniques they individually used to deal with the stressors of combat, together with their own assessment of the effectiveness of these measures. The Marines contributing to the information in this topic paper ranged from those who had positive reactions to stressors to those who encountered significant difficulties coping, ultimately requiring hospitalization. A review of existing doctrine and the considerable body of literature on combat stress was also conducted in support of this paper.

The approved topic paper is at: [Combat Stress: What Every Marine Should Know](#)

“In the violent arena of combat, there are many circumstances that could potentially lead to combat stress injuries. This is particularly true for life-threatening situations. If the nature of the circumstances are so unexpected by our Fire Team Leader that he can not consciously develop a strategy to deal with the threat or make sense of the event, our Fire Team Leader can be overwhelmed by this single experience. He can be temporarily or even permanently stunned in a way that damages his ability to command and control the fire team. In this injured state, the fire team leader can no longer exercise sufficient controls over the team. In the most severe situations, the fire team leader may be injured repeatedly with each new threat response, unable to regain control of the team.”

“Stressors, whether they are physical, mental, or emotional, act against us all at the same time and their effects can build up over time. Minor stressors, acting together, make us more vulnerable to the effects of more serious stressful events. For this reason, it is important not to let minor stressors, and the stresses they cause for us, go unresolved or unmanaged. And a series of extremely stressful events that occur over a short period of time, before we have an opportunity to decompress from the earlier events, increases the risk of stress injuries.”

Coping mechanisms for the stresses of combat, including “buddy aid” (i.e., talking it out), unit cohesiveness, chaplain support, and community service, are addressed in the full report at: [Combat Stress: What Every Marine Should Know](#)
**Significant Trends:**

Recent lessons collected by the MCCLL have highlighted the following trends in enemy TTPs:

- **Propane Tanks Used as Improvised Explosive Devices:**
  - Within the MNF-W, Anti-Iraqi Forces (AIF) have used propane tanks filled with combustible gases to attack MNF. One of the most effective types of gases used in propane tank IEDs has been acetylene. When generated out of a small gas grill-sized propane tank, this device can generate a fireball with a diameter of 10–15 meters that burns at approximately 8,540° F.
  - The small propane tanks used in these attacks are so common in Iraq that the IED can be emplaced without arousing local suspicion. Due to the extremely hot fireball and the shrapnel this type of IED produces, AIF will often use this TTP to attack CF foot patrols and other unarmored targets.
  - It is recommended that the Army’s Global Anti-Terrorism Operational Readiness Course (GATOR) at Redstone Arsenal, and courses like it be required training for all Marine EOD technicians deploying to OIF. In particular, the GATOR course provides focused instruction on techniques for specific areas of operation, ordnance, methods of employment, and enemy tactics. Additional information is included in the lesson at: EOD IED/VBIED Training

- **Remotely-Detonated Improvised Explosive Devices:**
  - This summer, the incidence of remotely-detonated IEDs has steadily increased and continues to be a major source of combat casualties.
  - When an IED problem persists, one of the most effective means used by Marines for addressing the problem is to gather all military-aged males (MAM) within a specified radius of the IED site. Once gathered, their names can be screened against the Automatic Apprehension List (AAL). HET Marines can then identify suspected or known insurgents who might have been involved in the attacks. The local populace may have concerns with this tactic, but it has proven to be effective, sending a strong message to potential insurgents.

Recent experiences of in-country Marine Corps units have highlighted the following problem areas and potential solutions:

- **Pre-Deployment Training**
  - Many of the units that have been attached to (or assigned in direct support of) deploying units have not had an opportunity for sufficient pre-deployment training with the supported unit. This situation greatly limits proficiency and unit cohesion. Although it may not be feasible in the current environment to schedule the desired full six months of combined combat training, every effort must be made to plan for at least three months training, particularly in R-CAX or SASO.

- **Global Positioning System (GPS) Resources**
  - After action reports (AARs) from recently returning units highlight the continued reliance upon GPS in theater, and the frequent purchase of smaller, lighter, more accurate commercial GPS devices by individual Marines. The procurement by the Marine Corps of additional commercial GPS devices would greatly alleviate the need for individuals to procure these devices on their own.

- **Personal Role Radios (PRR)**
  - Recent AARs have also emphasized the utility of Personal Role Radios (PRR) in OIF operations. PRRs have proven to be particularly useful during satellite patrols, cordon and searches, and mounted convoys. However, recent experiences reinforce those of earlier units that the connections to the headsets, as well as the headsets themselves, are relatively flimsy. Additional training on the proper means of connecting/disconnecting the headsets is recommended until the problem can be resolved permanently.
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### News

**3rd Battalion, 25th Marines focused collection effort is underway**

The second in a series of focused unit collection efforts by the Marine Corps Center for Lessons Learned (MCCLL) is currently taking place, with a collection team from the Training and Education Command (TECOM) deployed to Camp Lejeune to conduct interviews with Marines and Sailors from the 3d Battalion, 25th Marines. This effort is focused on the areas of pre-deployment training and mobilization and their applicability to combat operations. The collection team arrived at Camp Lejeune on 28 September 2005 to interview the recent returnees and gather important lessons learned and other observations.

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**Marines Raise Combat Training Standards**

*The Strategy Page*

*September 23, 2005*

The U.S. Marine Corps is raising the training standards for its personnel, by making it mandatory that everyone go through a more intensive weapons training program each year. Until recently, every marine had to pass a pretty basic shooting test each year. Now everyone will get a test similar to the one every recruit has to pass in boot camp. This includes shooting in combat type situations. Failure to meet minimum qualifications in this weapons test can get you booted out of the marines.

Marines are tightening up combat skills training for the same reason the Army, and even the Air Force, have been doing so. Experience in Afghanistan and Iraq has made it clear that during wars against irregulars and terrorists, everyone in uniform may find themselves in combat situations. The Army was the first to get caught by lack of preparedness in this area. Army support troops had let their combat training slide over the last decade. Thus Army support troops often found themselves fatally unprepared when they ran into a combat situations over the last few years. Marine support personnel had far fewer problems in this area, as the Marines always maintained higher combat training standards for non-combat troops. But the new rifle training routine is intended to raise those combat skill levels even higher.

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**Marines Seek 'Combat Tactical Vehicle' to Replace HMMWV**

*National Defense Magazine*

*October 2005*

By Sandra I. Erwin

The Marine Corps intends to replace its fleet of more than 20,000 Humvee trucks with larger, sturdier vehicles that are better suited to the rigors of combat, officials said.

Lt. Gen. James Mattis, head of the Marine Corps Combat Development Command, recently directed a group of officers at MCCDC to begin drafting technical and performance requirements for a "combat tactical vehicle" that ultimately could replace the Humvee. The team, led by Col. Clarke Lethin, will present proposed concepts to the Marine Corps Requirements Oversight Council in December. The MROC has the final authority for approval of new weapon systems before they get evaluated by the Pentagon's Joint Requirements Oversight Council.

The Marine Corps expects to allocate funds for this new vehicle in fiscal year 2008, Lethin said in an interview. The program eventually may be merged with the Army's Future Tactical Truck System, which also is seeking a replacement vehicle for the Humvee.

(continued)
Marines Seek 'Combat Tactical Vehicle' to Replace HMMWV (continued)

The Humvee has served the Marine Corps well, but recent conflicts have spotlighted its limitations, Lethin said. "The Humvee was designed as a utility truck for Cold War era, not as a vehicle for combat or direct combat ... We want something that is much better than the Humvee in protection and capability."

During the past three years, the Marine Corps and the Army have scrambled to upgrade their Humvees with armor protection, in response to the suicide bombers and buried roadside explosives that haunt U.S. troops in Iraq. The added armor, however, has degraded the Humvee's mobility and payload, Lethin said. "Even with an upgraded engine and suspension, we are not getting the payload and capacity we need."

A replacement "combat tactical vehicle" will need to be large enough to seat six passengers and accommodate their gear, he said. By comparison, the Humvee fits four people and its limited space often gets crammed with radios and other hardware.

The Marines will follow a similar approach to the Army’s armorng strategy, which calls for trucks to be manufactured with some level of armor protection (the ‘A’ kit) and will be equipped to handle additional armor (the ‘B’ kit) if needed.

See more of this article at: National Defense Magazine

Marines Probing New Ways to Fight Future Insurgencies

National Defense Magazine
October 2005
By Sandra I. Erwin

Marine Corps planners are drafting a new strategy for tackling insurgencies in future conflicts. Officials stress that the aim is not to write a war plan for the current conflict in Iraq, but rather to generate fresh ideas for countering so-called "irregular" threats in the coming decades. Part of the latest thinking among Marine strategists is the notion that Islamic militant organizations such as Al Qaeda are labeled terrorist organizations when in fact they should be viewed as insurgencies.

Spearheading the project is Lt. Gen. James Mattis, head of the Marine Corps Combat Development Command in Quantico, Va.

"Gen. Mattis has asked us to write a concept for counterinsurgency," said Lt. Col. Lance McDaniel, who oversees the concepts and plans division at the command. Operations in Iraq certainly motivated the Corps to pursue new ways to fight insurgencies. "But we are not going to write a concept for Iraq," said McDaniel. "We are writing a concept for the future, and taking advantage of the energy and lessons we learned from it."

Mattis is expected to review a draft counterinsurgency strategy before the end of the year, and he wants to make it a "living document" that can be revised over time, said McDaniel.

The counterinsurgency strategy will shape scenarios in future war games. Marine planners will feed it into next year's Title 10 war games, said McDaniel. The first one will be Expeditionary Warrior 2006, in January. Title 10 war games are annual service events that highlight combat capabilities and influence weapons budgets, doctrine and training requirements.

(continued)
Marines Probing New Ways to Fight Future Insurgencies (continued)

In the current draft, the terms "counterinsurgency" and "irregular threats" are used interchangeably. The Defense Department generally characterizes non-state enemies and terrorist cells as "irregular." The Marine Corps will focus on counterinsurgency as one piece of a broader plan to build the new strategy.

Mattis' decision to launch this effort is an indication that the Marine Corps remains largely a conventional force, even though it is far ahead of the other services in developing tactics for urban warfare and unconventional so-called "small wars."

"But we acknowledge that the training we give our people and the equipment we buy is aimed at a more conventional peer threat," McDaniel said. "We are acknowledging that threats are changing."

Among those threats are organizations such as Al Qaeda, which employ terrorist tactics but also embody many of the characteristics of an insurgency, according to one Marine strategist.

Al Qaeda's transnational networking and a multi-ethnic constituency has the makings of a "spiritually based insurgency that is somewhat different than the Maoist people's war model, which underwrites most counterinsurgency doctrine," wrote Marine Lt. Col. Michael F. Morris in a March 2005 research paper at the U.S. Army War College.

See more of this article at: National Defense Magazine

Marine Corps Civil Affairs Groups work to win local hearts and minds

Sea Power

September 2005

Hearts and Minds

By Sue A. Lackey, Associate Editor

FALLUJAH, Iraq -- In a drab building surrounded by sandbags in the heart of Fallujah, a room is filled with Iraqis filing claims for reparations. Marine Corps interpreters are surrounded by groups of Iraqi men requesting assistance, and rows of benches are filled with black-robed women and hushed children.

A 10-year-old girl, missing four fingers and her face disfigured with burns, waits patiently with her mother, hoping to get advanced medical care. Next to her, a lovely young mother, her voice devoid of expression, describes how her 8-month-old baby was killed in the bombing that injured her daughter and her husband has not been right since the explosions destroyed their home.

Despite the constant threat of insurgent retaliation against them, these Iraqi citizens have come to the Civil Military Operations Center (CMOC) in Fallujah hoping that the 5th Marine Civil Affairs Group (CAG) will help them rebuild their lives. In the heart of what was once the most notorious insurgent stronghold in Iraq, CMOC has now become a model for joint efforts aimed at winning the hearts and minds of the local population throughout the country. Joining Marine CAGs in the effort are Army contractors and civil affairs units, Air Force personnel and Navy Seabees.

Unlike the long-term peacekeeping roles usually associated with the Army, the role of the CAGs is to provide an immediate base of aid and relief in order to help stabilize the Marines' area of operations. Central to Marine urban combat doctrine is the concept of the "three-block war:" direct combat in block one, security and stabilization in block two, and civil affairs and humanitarian aid in block three.

(continued)
Marine Corps Civil Affairs Groups work to win local hearts and minds (Continued)

Former Marine Corps Commandant Charles C. Krulak defined the concept, postulating that in addition to providing aid, the civil affairs groups would ensure fighting units had their rear flank covered, and the local population could be converted to supporters and intelligence assets of the Marine Air-Ground Task Force. That force coordination is vital in urban insurgencies, where the battlespace is fluid and enemies are often indistinguishable from noncombatants.

"Detachment 4/4 was right there with them during the take down of Fallujah," said Maj. Jeffrey Lipson of the 4th CAG. "There was combat two blocks away. Three days into major fighting, our Marines were setting up civil operations. The integration of force protection as well as the ability of humanitarian assistance creates a win-win situation for the Marines. From a military perspective, we have helicopters and resources a nongovernmental organization might not have."

But as ground operations in Iraq stretch into a third year, the Marine Corps has added two provisional CAGs into its normal rotation of four permanent civil affairs groups.

The CAGs are composed entirely of reservists who are rigorously selected for civilian expertise outside the normal skillsets of active duty Marines, such as advanced engineering, linguistic and cultural ability, and legal and governmental affairs. Far from being "weekend warriors," CAG Marines are expected to be trained to Marine rifleman standards, and to play an integral role in the planning and execution of combat operations.

In a combat zone, even providing basic aid is challenging - and dangerous. Approximately 10 percent of 4th CAG Marines received the Purple Heart in the battle for Fallujah, and the 5th CAG has already lost one officer since it assumed the post in March. In the midst of combat, Civil Affairs Marines had to assess damage and impose curfews, as well as provide immediate humanitarian relief before long-term reconstruction could begin. Joined by Army personnel, the job expanded in ways they had not foreseen.

"One of the major concerns of the international press was [the possibility] that we had a major humanitarian crisis brewing, primarily because the Iraqi Red Crescent Society starting publicizing reports [about lack of food and medicine] before they had ever entered the city," said U.S. Army Maj. James Orbock, 445th Civil Affairs Battalion commander.

"We also anticipated using local contractors for body removal of civilian casualties, but the [insurgents] started booby-trapping bodies and the civilians did not want to [do the job]. So we had to implement a remains removal program. As the animals starting running out of pet food, they started eating the bodies, and as we started removing the bodies, they started looking at us as the source of their next meal. So then we had to start [controlling] the dogs and cats."

See more of this article at: Sea Power