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**Maneuver Support Center of Excellence  
(MsCOE)**

**Quality Assurance Office  
Lessons Learned Program**



**Initial Impressions Report (IIR) / Lessons Learned  
Operation Serval  
French Engineer Support in Mali  
January – April 2013**



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Initial Impressions Report / Lessons Learned: Operation Serval French Engineer Support in Mali

**Exerpt:**

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## **Chapter 4, Lessons Learned Process**

The lessons learned process (LLP) is a deliberate and systematic process for collecting and analyzing field data and disseminating, integrating, and archiving observations, insights, and lessons collected from Army operations and training events. Information gathering will be integrated into DOTMLPF, research (industry and academia), development, acquisition, and planning activities in order to sustain, enhance, and increase the Army's preparedness to conduct current and future operations. The process is solution-oriented. It is designed to support organizations at all levels of command and staff and can be adapted for use in all operations, to include combat, training, maintenance, installation support, experiments, and equipment fielding. ***Observations, insights, and lessons do not constitute lessons learned without changing individual, unit, or Army behavior, which is accomplished through the application of the LLP.*** (emphasis added)

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### Executive Summary

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### Initial Impressions Report / Lessons Learned: Operation Serval French Engineer Support in Mali

In January 2013, France launched an expeditionary force into Mali to assist the Mali government with stopping the Islamist insurrection. The primary mission was to conduct major combat operations and not to become ensnared in stability operations or counterinsurgency operations. Combined Arms Brigade Combat Teams composed of battalion sized combined arms Groupement Tactique Interarmes (Combined Arms Tactical Group) (GTIAs) and company team sized sub-Groupement Tactique Interarmes (SGTIAs) were the building blocks for the forces. These modular units could be task organized and retask organized to tailor the force package as the operation continued. These units gave the commanders combined arms capabilities down to the company level. After over ten years of service in Afghanistan, the combat veterans were exposed to a new type of combat – long range operations– with a clear order to:

- Support Malian forces to stop the progression of the terrorists
- Strike the rear depth terrorist bases to prevent any further offensive or resurgence
- Prepare the conditions necessary for the organization and intervention of African armed forces and enable faster deployment of UN

Engineers are typically organized with one battalion per brigade combat team. Trained and combat experienced in mobility, countermobility and survivability missions, Operation Serval gave them the opportunity to execute the overall panel of engineer missions in the most dynamic operation France has conducted since Desert Storm. River crossing operations, force protection, power generation and water production were also among the varied missions executed.

The objectives of Operation Serval were met by April 2013 and the majority of combat forces began redeploying. France kept a small contingent to supplement its regionally aligned forces. True to their original mission, the forces did not become involved in stabilization but had assisted Mali forces in defeating the Islamist forces.

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### Collection Process

The purpose of this memorandum is to document and summarize comments captured from the key leader interview with Lt Col Valérie Grosse, MScCoE French LNO, with the the Maneuver Support Center of Excellence's Quality Assurance Office's Lessons Learned Program. Lieutenant Colonel Grosse served as the current operations chief of the Brigade Engineer cell during Operation Serval and wrote most of the Rules of Engagement and C-IED TTP. Information for this report was also collected from the Rand Corporation's "France's War in Mali, Lessons for an Expeditionary Army" by Michael Shurkin.

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### Commander's Foreword

France has been deployed in Afghanistan for more than a decade: tour of duty after tour of duty, terrain and enemy were well known. Conducting counter insurgency operations, take risks, pay the highest price for it, were part of the mission. The French Army is now made of thoughen professional men and women soldiers.

Going to war, is what we are trained for... but when on short notice, the time comes to leave our comfort, our garrison, our family.....to an unknown place, to fight an unknown enemy for an unknown period of time...it is too late for questioning. As a leader and specially as a "sapeur" (name of "engineer" in the French army and the origin of the American word Sapper) we are going into battle to give answers, to lead the way to our combined arms "band of brothers" . Brigadier General Funkhouse, Commandant, US Army Engineer School likes to say, "we are the heart of the battle." We like to say, "no step without engineers".

SERVAL was a different type of war with long range operations, facing well equipped and organized enemy, friendly forces deployed far away from their logistical base for an unpredictable time through urban, mountainous or desert areas or facing the wide river Niger. This war was challenging everyday, where the French engineers had a preponderant role, conducting mobility, countermobility and survivability missions.

This document is made for you, "leaders" and "engineers". Those lessons learned prove, just once more, that they is always a solution to a problem and "engineers" are, most often, the one tasked to find it, so be ready!!!! It proves that technology is not always the answer, that going back to basics is sometimes the solution. It proves that doctrine, what we have been taught and our experience are what will help you to "Lead the Way!"

The French engineer branch moto is "sometime destroy, often built, always serve". In Mali our moto was undoubtedly "essayons".



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#### Initial Impressions



French vehicles cross using civilian ferries. Indication of use of non-military assets and river crossing doctrine.

#### Doctrine

**Observation Name:** French Engineer used non-military equipment to support Operation Serval

**Observation Description/Issue:** Engineers used all available resources to enhance commanders' freedom of action (maneuver).

**Discussion:** French army forces needed to deploy maneuver, maneuver support and logistic units very quickly to and in Mali. Due to a limited air capability during the first couple of weeks, the choice was made to use non-military engineer equipment to enhance the APOD of Bamako and later the airfield of Tessalit and its facilities. Also, during the operation Serval, river crossing operations were conducting using local barges in order for battle group and logistics units to cross the Niger River. Some of those equipment were rented from locals, abandoned by the Malian army forces or even spoils of war. FM 3-34.170, paragraphs 6-44 and 6-45, discusses Engineer Resource Assessment. This includes equipment and supplies that engineers can use to meet mission requirements. This is part of Engineer Reconnaissance.

**Insights:** Training to accomplish missions with less than optimal assets and to be able to identify and use non-traditional equipment improves the unit's ability to support maneuver forces. Engineer reconnaissance including identifying civilian equipment and supplies can provide commanders additional assets. Including plans for procuring and reimbursing for civilian equipment and supplies will prevent offending local nationals by US Soldiers.

**DOTMLPF Recommendations:** Doctrine. Units need to conduct thorough Engineer Reconnaissance to include Engineer Resource Assessment.

Training. Training on alternative methods, less than optimal conditions and equipment and alternative equipment increases a unit's adaptability.

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**Observation Name:** Combined Arms River Crossing

**Observation Name:** Operation Serval, Mali, River Crossing Operations

**Observation Description/Issue:** French Engineers provided river crossing support without military bridging assets.

**Discussion:** During Operation Serval, the French engineers executed a river crossing to allow maneuver forces to maintain their tempo despite having no bridging assets. The engineers acquired civilian crossing assets such as ferries to move the units. By enlisting and reimbursing the local civilians, they not only crossed the units to surprise the enemy, they helped the Mali government maintain the support of its people. The operation was a success because of applying combined arms operations and leadership initiative.

Using this approach, engineers were able to quickly provide crossing capabilities for the maneuver forces and allow them to employ the element of surprise as the enemy did not think they could cross the river at that location.

**Insights:** Use of non-military assets not only allows for successful mission completion but can provide options to commanders despite not having the required MTOE equipment but the crossing must be a combined arms effort.

**DOTMLPF Recommendations:** Leadership. Developing a command climate that encourages commanders and subordinates to seek alternative solutions increases effectiveness.

Doctrine. Doctrine, including river crossing doctrine, is an outline of how to execute missions that can be successfully executed using alternative methods and equipment. Doctrine provides the overarching way to execute, leadership provides the initiative to find and execute alternative ways.

Additional Doctrine Comments: River Crossing



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### Training

**Observation Name:** French Engineer Support to Airfield Seizure in Timbuktu during Operation Serval

**Observation Description/Issue:** Engineers provided extensive support to the airfield seizure in Timbuktu despite limited engineer equipment.

**Discussion:** To provide additional troop and logistic support in northern Mali, the French had to rapidly seize Timbuktu and repair its airfield as rapidly as possible. Due to limited air capability and the need to drop maneuver and support units on ground, only the minimum engineer assets were deployed to repair the airfield. This was previously determined by a precise map analysis of the damage on the airfield. After providing mobility support to seize the airfield, the engineers cleared the airstrip, its surrounding area and its facilities of IEDs and booby-traps. They then repaired the airstrip with only two bulldozers and one dump truck.

**Insights/Lessons Learned:** The airborne engineer must be able to conduct the full spectrum missions including with limited assets. Engineers need to conduct a precise mission analysis in order to provide the commander with at least the fundamental necessary means in order to accomplish the mission.

#### **DOTMLPF Recommendations:**

Training. Training on less than optimal conditions and equipment. Even simple training must focus on mission analysis and trainees have to be prepared to deal with a lack of assets at any time even if not expected. Trainers have to push trainees/leaders to find substitution solutions.

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French Engineers provide route clearance and mobility support. With no Route Clearance platoon deployed in theater, all Sappers had to conduct route clearance.

**Observation Name:** French Route Clearance in Operation Serval, Mali

**Observation Description/Issue:** Route Clearance Capabilities and Techniques in Operation Serval, Mali

**Discussion:** The French Army has one Route Clearance unit in its Army which was not deployed to support Operation Serval. All French Engineers receive basic route clearance training to provide some route clearance support to any unit. During Serval, all units conducting a movement had engineer capability which could conduct route clearance at least on particular identified points of the terrain (crossroad, dry ford, culvert, etc.) The techniques used during Operation Serval were primarily visual inspection and mine detectors. At the start of the operation, all IEDs contained some kind of metal, making the mine detectors very effective. This has now changed as the IEDs have become more complex. They also used local guides and population who were pro-government to assist in identifying where the IEDs were planted.

During the initial operation, only two lives were lost to IEDs on the routes. In both cases, the commanders had decided to not conduct route clearance on those routes. This was a deliberate decision.

**Insights/Lessons Learned:** Route clearance is not just a mission for Route Clearance units and does not necessarily require route clearance specialized equipment. Training in route clearance fundamentals enables all engineers to be able to clear routes.

**DOTMLPF Recommendations:** Training. Individuals must train on the basics of route clearance and units must be able to provide route clearance as part of its basic mission capabilities. raining. Individuals must train on the basics of route clearance and

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French Sappers bridge the gap to replace a damaged bridge across the Niger River so both military and civilian traffic could cross. This 24 meter Double Single Bailey was shipped from France and left in place.

**Observation Description/Issue:** The French Engineers replaced a damaged bridge with a Double Single Bailey Bridge shipped from France

**Discussion:** During Operation Serval, the Islamists dropped a major section of a bridge across the Niger River to stop the French or African Armies' progress coming from Niger. The Allies were able to bypass the damaged bridge with minimal delay using a ford. After the assault forces had cleared the area and moved forward, follow-on forces were able to assess the damage to the bridge and develop a plan to replace or repair the bridge. With no bridging assets in Mali, the French decided to emplace a Bailey Bridge using the abutments and remaining, stable portions of the concrete bridge. Basing their design on the classification of the damaged bridge, the engineers ordered a double single Bailey from France. It took two weeks to get the bridge shipped via sea but a stable line of communication bridge was installed and providing crossing capability that remained in place for the civilians after the war. All French combat engineers train on building the Bailey, so the only delay was the time required to ship the bridge.

**Insights/Lessons Learned:** Patience, planning and training can provide solutions to routine problems that are made more complex in a jungle environment.

**DOTMLPF Recommendations:** Training. Training on all equipment not only keeps skills sharp but enables leaders to plan to use items that are not necessarily in theater but can be brought in a reasonable time.

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**Observation Name:** French Airfield Certification in Mali

**Observation Description/Issue:** Certifying airfields for use became a critical task during Operation Serval in Mali.

**Discussion:** Airfields in Mali ranged from abandoned airstrips to airports with paved runways. The French quickly realized that they needed to be able to quickly evaluate these airfields to determine if they could be used and to what capability. Developing several small teams that could be moved forward rapidly or attached to lead maneuver elements enabled them to determine which, if any, of the unpaved airstrips could be used for cargo planes for resupply or troop movement. This increased logistics capabilities.

**Insights/Lessons Learned:** The ability to inspect and certify airfields and airstrips allows commanders to determine the level of serviceability, level of repairs needed and whether the airfield/airstrip can be made serviceable without decrementing maneuver.

**DOTMLPF Recommendations:** Training. Training multiple NCOs and Soldiers to inspect and evaluate airfields and airstrips can provide maneuver commanders with more agility and increase resupply capabilities.

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**Observation Name:** French Airfield Maintenance

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**Observation Description/Issue:** Rapid Runway Repair is not runway maintenance

**Discussion:** French engineers conducted rapid runway repair on multiple airfields during Operation Serval. This allowed commanders to use those airfields to bring more troops and logistics into the area more quickly. The problem began when the commanders realized that the runways were damaged faster than expected due to overexploitation. The Joint Force Engineer began planning for additional engineer support to maintain the runways.

**Insights/Lessons Learned:** Planning for rapid runway repair does not solve the entire equation. Routine maintenance must also be planned.

**DOTMLPF Recommendations:** Training. Training to conduct runway/airfield (rotary) maintenance can provide timely repairs to avoid major repairs or aircraft losses.

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French Sappers recover resources hidden by Islamist groups ( Bombs and ammunitions) during Operation Serval in Mali .

**Observation Name:** Counter Improvised Explosive Device Operations

**Observation Description/Issue:** Lack of Improvised Explosive Device (IED) intelligence does not mean there will be no IEDs.

**Discussion:** Prior to entering Mali to launch Operation Serval, there was no intelligence to show the National Movement for the Liberation of Azawad (MNLA) and the al-Qaeda in the Islamic Maghreb (AQIM) were using Improvised Explosive Devices (IEDs) in Mali. The army decided not to deploy a C-IED cell at the Brigade HQ. But rapidly The French encountered IEDs throughout the operation. Since there is no C-IED unit with the French Army, one was rapidly build up (mostly from engineer capabilities found in French BEB) and deployed to Mali. This unit was composed of one C-IED cell, one combat engineer platoon, one IEDD team, one advanced military search platoon, two explosive detection dog teams, and one weapon intelligence team.

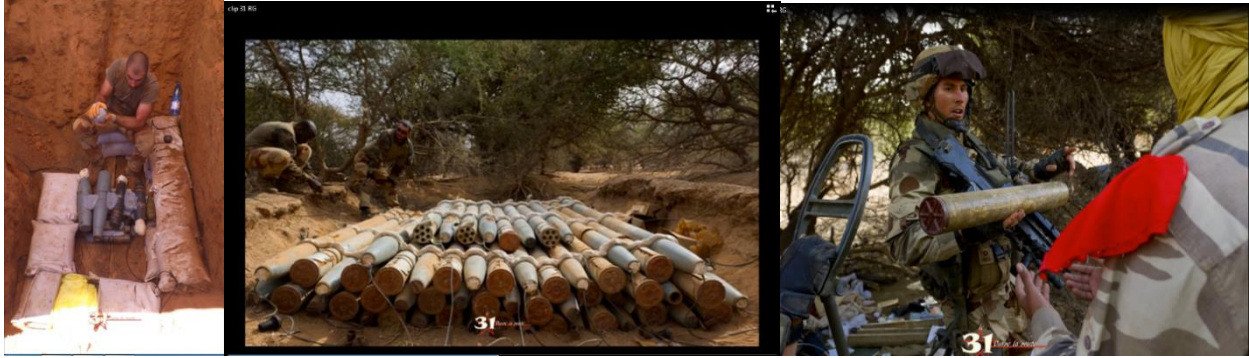
The force generation of the unit was rapidly done because of the C-IED lessons learned during Afghanistan conflict. This *ad hoc* unit was an engineer asset at the brigade level.

**Insights/Lessons Learned:** Expect to encounter IEDs anywhere in the world. Brigade level and under must be prepare to conduct C-IED operations and be trained to have C-IED units under there command.

**DOTMLPF Recommendations:** Training. Units must train counter IED operations for all types of missions.

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French Sappers recover and evaluate UXO/capture ammunition for destruction or distribution

**Observation Name:** Unexploded Ordnance/Captured Ammunition Removal

**Observation Name:** UXO/Captured Ammunition Removal

**Observation Description/Issue:** French Engineers had to dispose of 200 tons of unexploded ordnance and captured ammunition without stopping the commander's progress

**Discussion:** The French units captured over 200 tons of unexploded ordnance (UXO) and ammunition during Operation Serval. The French Engineers conduct their explosive ordnance disposal so all combat engineer units are capable of EOD actions. When small amounts of ammunition or UXO are located, any engineer unit can dispose of them, usually by blowing them in place. Stopping to destroy up to a ton at a time was too time consuming. Maneuver commanders began to refuse to stop movement for the time needed to dispose of these larger caches. The engineers began using their engineer company support platoon to haul the captured ammunition to the rear for disposal. The support platoon was behind the initial elements so could separate the safe ammunition from the UXO and unstable ammunition, which was destroyed while the maneuver elements advanced. The ammunition was then brought back to the rear so that the brigade ENG/C-IED cell could inventory and decide which ones could be turned over to Mali army, or study to find out where they were coming from in order to attack the Djihadist network. Most usable captured ammunition was turned over to the Mali army.

Historically, US Engineers have conducted EOD missions despite doctrinal issues.

**Insights:** The EOD skills of the combat engineers allowed commanders to destroy UXOs and unsafe ammunition caches without impacting momentum. These skills and internal haul assets allowed commanders to remove (and recycle) large caches without impacting momentum. The repurposing of the captured ammunition benefitted the Mali army and French intelligence cells which were able to identify sources supporting the Djihadist network.

**DOTMLPF Implications:** Training. Training engineers to conduct certain EOD missions can and does provide capabilities commanders usually lack.

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### Material

**Observation Name:** French Tactical Power Generation in Mali

**Observation Name:** French Tactical Power Generation in Mali

**Observation Description/Issue:** Power generation is a necessity to run a Tactical Operations Center with today's technology.

**Discussion:** French Engineers are responsible for power generation for Tactical Operations Centers (TOCs of Brigade and above) and Forward Operating Bases (FOBs). Battalions and companies also have generators that can run their TOCs but they were hardly capable of providing the prime power. Mostly for two reasons: hot area like Mali limits the capacities of power generator and the electrical demands of a modern army is continually increasing.

The French Engineers had to deploy more power generators than planned to meet these requirements but found that while they easily meet the requirements for power generation, their prime movers are not as tactically mobile as needed. The trucks hauling the generators struggled to cross the varied terrain of Mali and keep pace with the maneuver units. There were also challenges with the wiring harnesses that were overcome by adapting the wiring to provide the number of connections and lengths the various TOCs required.

**Insights/Lessons Learned:** Power generation today required increased wattage, more cross country hauling capability and longer wiring harnesses with more connections.

**DOTMLPF Implications:** Material. Prime movers with cross country capability to match maneuver forces along with wiring harnesses that provide more flexibility and connection is necessary.



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### Leadership and Education

**Observation Name:** French Leadership Challenge in Operation Serval, Mali

**Observation Description/Issue:** Changing from Stability Operations to Mobility, Countermobility and Survivability after ten years of Stability Operations

**Discussion:** The French Army has many leaders with extensive combat experience. This experience is in Stability Operations so they faced an extensive training challenge with a five day notification for deployment to Operation Serval where they would conduct more traditional engineer missions: mobility, countermobility and survivability. The true task was to execute these missions in a timely manner to maintain the momentum of the offense. When preparing the mission, the platoon leaders (usually officers) were focusing on providing the platoon sergeant and squad leaders with the best understanding of the commander intention. The NCOs had to quickly understand the tactical issues and conduct as well as their technical role. This allowed the French to provide more engineer support to companies, platoons or even lower level at any time. The key to success was that the French were still conducting training on Full Spectrum Operations so that while they were much more proficient at Stability Operations, when they executed the Decisive Action operation into Mali, they were able to execute missions that had not been executed in combat in over a decade with a very high level of proficiency. The French Army trains as we do with the officers providing the technique or tactical proficiency and the NCOs providing the technical proficiency but with each having to be both tactically and technically proficient.

**Insights/Lessons Learned:** The French were able to quickly and rapidly execute the Decisive Action in Mali because they had trained to execute Decisive Action even though their major focus was on Stability Operations. They were able to apply the staff experience gained in Afghanistan and apply the integration capabilities to a fast moving Decisive Action mission. All units must be prepared to execute Full Spectrum Operations.

**DOTMLPF Implications:** Leadership and Education. Officers and NCOs had to train to execute missions above their assigned level to provide the necessary support. The French Engineer Officer Basic Course is 11 months long in order to prepare their Lieutenants to execute full spectrum missions and support maneuver units one level above current assignment.

Training. Units must train for Full Spectrum Operations even if the major mission is Stability Operations. Individuals must prepare themselves to execute Full Spectrum Operations. Officer (junior and senior) and NCO needs to be trained to advice on engineer support to commander at least one levels above current assignment.

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**Observation Name:** French Force Protection in Mali

**Observation Description/Issue:** Force Protection during Operation Serval, Mali, involved both maneuver and static force protection.

**Discussion:** Force Protection during Operation Serval covered both tactical maneuver and rear area static locations. The overall force protection guidance was “Protect but Do Not Provoke.” From a survivability aspect, this meant not having a fortress appearance (large T-walls or large Hesco walls completely separating the forces from the local populations) but still providing enough protective area so that the force could seek cover during an attack. This was especially challenging when a forward operating base (FOB) could have 500 people then surge to 2000 then drop back to 500 two days later.

An additional challenge in force protection involved social media and other aspects of the internet. Keeping service members from posting inappropriate or tactically sensitive photos, normal operational security (OPSEC) concerns to accidentally exposing tactical plans through email became a major focus for the J6.

Force Protection became an integrated effort of the Joint Force Engineer, JF2 and JF6 to cover survivability, threat intelligence and security and OPSEC. The JF Engineer was in overall charge of Force Protection to integrate JF2 and JF6 concerns.

**Insights/Lessons Learned:** Force Protection must be an integrated effort concerning the Joint Force Engineer, JF2 and JF6. Putting the JF Engineer in charge provided the best integration.

#### **DOTMLPF Implications:**

**Leadership.** Leaders must ensure all aspects of Force Protection are integrated into force protection efforts.

**Training.** Training Force Protection to all members provides a more integrated approach and the understanding that force protection is not just the Force Protection Officer’s focus.

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**Observation Name:** Three S Approach (Soldier, Sapper, Specialist)

**Observation Description/Issue:** Engineers must approach every mission with the Three S Approach – Soldier, Sapper, Specialist

**Discussion:** During Operation Serval, the French engineers were involved in long distance and dynamic combined arms operations. Since the French Army is much smaller than the US Army, its engineers conduct several missions that US engineers normally do not and they do not always have the same level of specialty that US engineers have. Several of the military occupational specialties the US engineers have are incorporated into the French combat engineers. To properly support the maneuver commander, engineers always have to keep in mind the three S approach:

Soldier – ready to fight as infantry at all times, putting their lives on the line.

Sapper – providing solutions to all obstacles impeding the maneuver forces.

Specialist – applying any specialized training they have received.

Using this approach, each level of training meets its fundamental requirements and engineers provide what is needed at that immediate time. Engineers must see the immediate requirement and provide it, not waiting to be ordered to do so.

**Insights/Lessons Learned:** We are trained to be Soldiers, then Engineers then our specialty but we have to train and execute the all of our basic missions to be a Soldier then a Sapper then a Specialist.

**DOTMLPF Implications:** Leadership. Leaders must instill the Warrior Ethos into all Soldiers and basic Engineer skills regardless of Engineer Military Occupational Skills.

Training. Training on specialized tasks must not be at the expense of our basic engineer tasks or our basic combat Soldier tasks.

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A French Sapper uses an excavator to build an anti-pickup obstacle for force protection.

**Observation Name:** French Expeditionary Force Protection

**Observation Description/Issue:** French Engineers provided force protection under expeditionary conditions once forces moved away from larger bases in Mali during Operation Serval.

**Discussion:** During Operation Serval, the French engineers were responsible for force protection and worked it in expeditionary conditions once forced moved forward from the Sea and Air Ports of Debarkation. Using the basic rule of “protect but do not provoke” they provided protection in FOBs and COPs using excavators and local resources. The primary threats early in the operation were indirect fire and small pickups with automatic weapons mounted in the beds. The excavators were used to dig anti-vehicle ditches away from the FOB to keep the trucks away from the FOB (the FOB did not have walls). Keeping the expeditionary mindset, most billeting space was in tents and office used the few building available. There were no bunkers for protection during harassing indirect fire attack as the FOB was not meant to be enduring. The engineer cell in charge of the force protection implemented specific techniques, tactics and procedures to protect the force against the most likely threats using only available resources.

Using this approach, engineers were able to quickly provide sufficient force protection without reducing engineer support to mobility operations for the maneuver forces.

**Insights:** Threat analyses is key to determining force protection while focusing on the maneuver mission.

**DOTMLPF Recommendations:** Leadership. Determining and communicating force protection measures enables subordinate commanders to focus efforts while preserving forces.

Training. Building and utilizing non-conventional force protection measures preserves the force.

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**Observation Name:** River Crossing

**Observation Description/Issue:** French Engineers provided river crossing support without military bridging assets

**Discussion:** French Engineers provided river crossing support without military bridging assets.

**Discussion:** During Operation Serval, the French engineers executed a river crossing to allow maneuver forces to maintain their tempo despite having no bridging assets. The engineers acquired civilian crossing assets such as ferries to move the units. By enlisting and reimbursing the local civilians, they not only crossed the units to surprise the enemy, they helped the Mali government maintain the support of its people. The operation was a success because of applying combined arms operations and leadership initiative.

Using this approach, engineers were able to quickly provide crossing capabilities for the maneuver forces and allow them to employ the element of surprise as the enemy did not think they could cross the river at that location.

**Insights:** Use of non-military assets not only allows for successful mission completion but can provide options to commanders despite not having the required MTOE equipment but the crossing must be a combined arms effort.

**DOTMLPF Recommendations:** Leadership. Developing a command climate that encourages commanders and subordinates to seek alternative solutions increases effectiveness.

Doctrine. Doctrine, including river crossing doctrine, is an outline of how to execute missions that can be successfully executed using alternative methods and equipment. Doctrine provides the overarching way to execute, leadership provides the initiative to find and execute alternative ways.

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### Personnel

**Observation Name:** Personnel & Unit Selection

**Observation Description/Issue:** The French Army had to select the most versatile and flexible units from the group of “ready to move forces” due to limited air movement capability and limited force package for Operation Serval in Mali.

**Discussion:** During Operation Serval, the French commanders had to rapidly build up a task force relying mostly on the units that were “ready to move” (having completed their cyclic training). Units selected had to provide the best overall capabilities as their missions and jobs would change throughout the operation. Units which could provide multiple skill sets were more valuable than those who might be an expert in a single skill.

**Insights:** Evaluating units based upon their abilities to perform more than just one specialty is critical when troop limitations are a major force generation factor.

**DOTMLPF Recommendations:** Personnel. Putting the correct personnel in the correct positions and units is critical.

Training. Institutional and cross training improve both the Soldier and the unit.

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“France’s War in Mali, Lessons for an Expeditionary Army” by Michael Shurkin, the Rand Corporation

All photographs are from Serval 2013 and A Brief Overview of the French Army and Engineers

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### Points of Contact

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