

# Applying Mobile Mission Command in Support of Battlespace Integration

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The adaptability of Soldiers and leaders manifests when posed with difficult problem sets. One such event occurred while preparing 1-4 Cavalry's assault-command-post platoon for a major operation during National Training Center Rotation 12-05. The squadron's ingenuity was challenged in adapting its protective-services detail for mobile mission command during this rotation.

"PSD" describes tactics, techniques and procedures that have been implemented for several campaigns but that became more significant during stability operations in the Balkans. The war on terrorism and subsequent campaigns in Afghanistan and Iraq have emphasized the requirement to provide mobility, security and mission command in a highly fluid operating environment.

Due to the decentralized nature of counterinsurgency operations, it became clear the PSD needed to evolve into a mobile command post providing mission command supporting squadron-led operations. The ACP's usefulness for 1-4 Cavalry manifested during NTC 12-05 with the development and implementation of our "mobile mission-command vehicle."<sup>1</sup> The employment of an ACP is a combat multiplier that provides unparalleled forward mission-command capabilities for any commander on the battlefield. This capability is even more critical in Operation Enduring Freedom with the recent transition from partnered operations as a battlespace owner<sup>2</sup> to battlespace integrator<sup>3</sup> with security forces' advise-and-assist teams.<sup>4</sup>

## Concepts

To establish common terminology for the purpose of this article, we must first define the concepts. The 1-4 Cavalry ACP platoon is first and foremost a PSD; the primary function is principal security for the squadron commander or command sergeant major during battlefield circulation.<sup>5</sup> Based entirely on mission requirements, any PSD can man and equip its vehicles to facilitate a mobile, tactical ACP. For simplicity and clarity, ACP will represent the PSD platoon and its functions, while the MMCV is the platform within the ACP that contains critical communications

equipment for the mobile command group.

The mobile command group is defined as the "... commander and selected staff members who assist the commander in controlling operations away from a command post."<sup>6</sup> During squadron-level operations, the ACP expands to integrate the MMCV platform and mobile command group.

The ACP is "... austere [and] performs critical ... command functions in tactical operations for special purposes."<sup>7</sup> The squadron ACP is therefore defined as a combat platoon that executes PSD and security functions for battlefield circulation and facilitates mission command for the mobile command group in the MMCV during squadron operations.

## Mobile command and control

The concept of mobile command and control is not new; it dates back to the earliest days of maneuver warfare. The difference in this case is the require-

ments of modern COIN warfare in the decentralized operational environment of Afghanistan, combined with the implementation of the latest command, control, communications, computers, intelligence, surveillance and reconnaissance technology. The ACP's Soldiers and leaders were selected based on warfighting skills and the potential to operate in a complex mission set. The platoon was trained not only as a scout platoon but also received more training in battlefield circulation-related duties based on the *Protective Services Handbook*.

The idea of creating an MMCV in 1-4 Cavalry stemmed from mission requirements while training at NTC 12-05. The ACP platoon sergeant took the baseline communications setup for an M577 Mobile Command Vehicle (M113 variant) and reallocated assets within the platoon to create the MMCV using a hardtop M1097 humvee. Based on the M577, the platoon installed an additional radio stack (for a total of four available frequency-modulation radios), a high-frequency system for long-range communication and a dismount-



The 1<sup>st</sup> Squadron, 4<sup>th</sup> Cavalry Regiment (4<sup>th</sup> Brigade Combat Team, 1<sup>st</sup> Infantry Division), implements the ACP for the first time during a named, combined operation in eastern Paktika, Afghanistan, in June 2012. (U.S. Army photo)

ed tactical satellite. The intent was also to install the One-System Remote Video Terminal into the vehicle; however, this did not happen due to the tactical operations center's need to maintain control of the feed. Using simple tools from a mechanic's toolkit, ACP Soldiers installed the additional radios into the vehicle.

## Who's needed

The ACP platoon has two primary tasks in the operating environment: provide security for the command group during battlefield circulation and secure MMCV personnel during named operations that require mobile mission command. Based on personnel requirements, the squadron commander or S-3 directs what personnel are required for a particular mission based on military decision-making process sessions. This can be, but is not limited to, the S-3 (or battle captain), fire-support officer, Joint Terminal Attack Controller and S-2 (or a representative).

In its simplest form, the ACP platoon provides security for personnel on the ground, and the MMCV provides C2 from the center of the formation.

## Validating proof of principle

The primary intent for the ACP and MMCV was to operate doctrinally as an ACP. It was therefore necessary to facilitate creation of a platform-specific vehicle that met the doctrinal requirements to supplement the squadron TOC, allowing the squadron commander to C2 the battle from wherever the mission dictated. We used NTC Rotation 12-05 in February 2012 to validate the concept.

The squadron's culminating mission was to conduct a deliberate attack in complex terrain with six companies or troops. Because of the ACP's mobility, the squadron commander was able to move behind the main effort and maintain constant communication with both maneuver elements and the squadron TOC. Due to the rough terrain, communication was extremely difficult. Having direct-line-of-sight communication with ground forces allowed the squadron commander to develop the situation, provide guidance and make decisions as required. This proved even more useful when Grey Eagle Retrans moved off-station mid-mission, breaking all communication within the pass back to the squadron TOC.

NTC provided proof of principle that regardless of the platform, the com-

mander must have the capacity to execute mission command on the move in any operating environment. Engineering the MMCV with essential communication equipment such as FM, HF, TACSAT and battle-tracking products, such as Blue Force Tracker and mapboards, allowed the squadron commander to track operations with greater situational awareness and understanding. Also, if there is a chance of poor communication between the TOC and maneuver elements, the ACP or MMCV can move forward to serve as a link between the TOC and the fight. The greatest asset the ACP brings to bear is flexibility to adapt to any mission. Given time and guidance, any platform can be manipulated to provide mission command to the forefront of the battle.

The MMCV provided the squadron commander with the necessary tools and skillsets to fight the squadron. While austere relative to the TOC to maintain mobility, the communication platforms and configuration of the vehicles worked well and gave the commander and key personnel capability for face-to-face discussion in a secure setting.

There were, however, many improvements to make to the MMCV based on lessons-learned. First, we needed to install an OSRVT to provide greater battlefield awareness, as the JTAC computer did not link in with certain Army platforms. Also, we needed a central battle-tracking board complete with map, enemy and friendly graphics to create a common picture among the staff. Lastly, the S-3 shop can develop an MMCV kit, which would contain the baseline items required to conduct any mission set such as markers, additional maps, butcher board and extra paper.

The creation and implementation of the MMCV added to the overall success of the squadron's culminating mission during NTC 12-05. The capabilities the MMCV brought to the fight allowed the squadron commander to C2 the squadron, and the mobility the ACP provided allowed the commander to move anywhere on the battlefield. Most importantly, the use and validation of the ACP or MMCV as TTP provided a critical capability for our deployment to Afghanistan.

## Operational employment

The ACP was a critical enabler the squadron leveraged in Afghanistan. The squadron, as the BSO operating in Western Paktika Province (with an area of operations larger than Rhode Island), would participate in a squadron-level partnered operation with the Afghan

National Army in the most remote district of Territorial Force 1-4's AO, far removed from an established TOC's capabilities. The squadron commander required functionality for every communications system available, including the Installation Status Report feed and battle-tracking capabilities.

With guidance in hand and experience from NTC, the ACP began work on an entirely new MMCV built in an MRAP platform. The squadron would participate in several named operations in OEF 12-13 requiring MMCV functionality and finalized maturation of the concept. Beginning with "Version 1" and ending with "Version Final," the MMCV contained all the original equipment from NTC 12-05, with more capabilities only available in the Ammunition Technical Officer Course.

The vision began with one goal in mind: create mobile mission-command capability using a MaxxPro MRAP platform combined with the latest in fielded technology. The S-6 noncommissioned officer in charge was an integral contributor to the solution, as he took personal pride in creating a modern mission-command platform.

"Version 1" required installation of a second BFT into the back of a MaxxPro, a mapboard hanging from the ceiling and a Remotely Operated Video Enhanced Receiver fastened to the Common Remotely Operated Weapons Station with Velcro. The truck contained FM (line-of-sight, common net), HF (long-range, system-to-system link), TACSAT (long-range, common net) communication capabilities and the ability to establish network connectivity, with dismounted Distributed Tactical Communications System (handheld satellite push-to-talk system) and an Iridium satellite phone on hand for emergency backup. The truck proved to be an overwhelming success, but it required improvements.

For each mission, the ACP and "MMCV staff" determined shortcomings and improvements required for the platform, and also facilitated the installation of mission-specific equipment based on specified or implied tasks from the commander. After the initial squadron operation, the S-6 NCOIC mounted the DTCS and Iridium for mobile use through vehicle-installation kits or well-routed antennas and Velcro. "Version Final" allowed the commander and staff to manage assets such as close-air support, Army warrior tasks, ISR, nontraditional ISR and organic assets such as mortars and lethal miniature aerial-munitions systems.

Also, the ACP's adaptability allowed the platoon and staff to operate independently or "plug and play" into other command posts or TOCs based on location and requirements while still maintaining the MMCV's standalone functionality. This agility will be important for future BSI operations as coalition forces reduce force structure in Afghanistan.

Throughout its use, the MMCV proved a combat multiplier. By staffing the vehicle with the S-6 NCOIC, battle captain, FSO, S-2 and JTAC, the vehicle housed all the necessary functions to coordinate any BSO mission required.

The last inclusion within the ACP or MMCV was a radio tuned to the ANA net, which allowed cross-communication between the two partnered forces, enabling the BSO (TF 1-4) to track and push-and-pull information to and from the ANA.

## BSO to BSI

As coalition forces in Afghanistan transition from BSOs to BSIs, the ACP capability must transition as well. The final squadron-level mission during our deployment to Afghanistan was used as a proof of concept for the shift to BSI. With the focus of SFAATs coming to the forefront, TF 1-4 looked to further emphasize its role in advising and assisting the ANA as the "way ahead" for the ANA.

As a capstone to the fighting season, the ANA corps and advisers planned and executed an operation spanning two provinces. TF Dragon (4<sup>th</sup> Infantry Brigade Combat Team, 1<sup>st</sup> Infantry Division) facilitated its capabilities through assisted planning and ISR coordination, as well as SFAATs moving with their ANA counterparts to facilitate cross-talk and asset synchronization. The TF 1-4 ACP staged to provide C2 for squadron elements forward for security or advisory roles. The MMCV was also co-located with the ANA brigade's tactical command post, which provided the ability for added crosstalk capabilities and BSI training.

The ACP helped coach and mentor the ANA on battle-tracking, emphasizing the necessity for situational awareness. We explained that as we transition, the ultimate intent is to have the ANA call for assets, and the ability to do so hinges on their knowledge of their force arrayal. Without an accurate picture of their forces on the battlefield, there can be dangerous consequences. As coalition forces continue the transition to BSI, it is imperative that the ANSF increase their basic C2 functions, and co-

locating the ACP and MMCV with an ANA TOC facilitates information flow and training for the ever-improving ANA.

## OEF lessons-learned

There are three critical lessons identified and learned for the MMCV implementation during OEF 12-13. The first improvement is the use of a larger MRAP platform to facilitate installation of more communications and battle-tracking equipment. The amount of extra equipment mounted into the Maxx-Pro platform proved taxing, not only on space but also on power consumption. A larger vehicle such as a Caiman would have streamlined further improvements.

The second improvement is using a turret platform instead of a CROWS. The CROWS, while a useful system, reduces the amount of passengers in the vehicle.

The last critical improvement is the earlier adoption of Afghan National Security Forces crosstalk capabilities within the ACP. The final solution was the platoon interpreter with a Multiband Inter/Intra Team Radio on the ANA frequency, but a dedicated radio system would facilitate more efficient cross-talk.

The identification of system limitations through the after-action review process was the most important "sustain" for the MMCV. Because of lessons-learned from each mission, subsequent operations brought about new and tailored equipment sets.

Also, the installation of another BFT in the vehicle's rear allowed flexibility in reporting. The second system allowed the S-2 and FSO to receive and publish intelligence and asset updates, while the battle captain received and published operationally specific updates.

The final "sustain" was identifying and clearly defining roles and responsibilities for the TOC and forward ACP. TF 1-4 defined which mission-command element had primacy for control of enablers, requests to brigade, reporting from subordinate units and reporting to brigade. With the MMCV's capability to "plug" into existing infrastructures (command posts/TOCs) or operate independently, it was extremely important to establish roles and responsibilities based on mission requirements.

## Conclusion

The ACP or MMCV, or similar organization and capability, will be a critical asset in BSI to enable mission com-

mand. Regardless of echelon, the same basic package can be used to support BSI with SFAAT and security forces, or large-scale operations where the squadron commander requires mobility, mainly to provide enablers for the SFAATs, security forces and ANSF "in extremis." The basic package can also provide situational awareness for the release of certain assets and weapon systems. This requirement will be critical while coalition forces retrograde and ANSF operations increase in size and scope. The way ahead for the ACP/MMCV concept is to train the ANA on integrating and training on a similar C2 asset that is a reflection of Afghan capability.

Through continued advising and mentorship, the ANA will become proficient enough to battle-track its forces and request Afghan assets as required. As we continue to push the transition from BSO to BSI, the ANA will become increasingly self-reliant but must work to develop its systems further to increase its overall battlefield awareness. The ANA is highly capable; however, Afghan soldiers must continue to make progress on their own as coalition forces draw down in Afghanistan. Through continued advisement in MMCV-related capabilities, the ANA can improve and develop into a self-reliant force capable of protecting the people of Afghanistan.

No matter the mission, whether it is stability operations in Africa, BSI in Afghanistan or future high-intensity conflicts, there will always be a requirement for mission command. Regardless of the future vehicle platform, the skills 1-4 Cavalry and the ACP developed through NTC 12-05 and OEF 12-13 will translate to new forms of MMCVs tailored for future operations.



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## Notes

<sup>1</sup> The 1-4 Cavalry coined the term “mobile mission-command vehicle” during OEF 12-13 to describe a tactical truck built on a MaxxPro platform.

<sup>2</sup> “Battlespace owner” indicates partnered operations conducted in coalition forces’ area of operations with a greater than 1:1 coalition forces to ANSF ratio. Coalition forces conduct unilateral missions as required and assist ANSF with supporting CF operations. CF develops concepts of operations with ANSF in support.

<sup>3</sup> The “battlespace integrator” provides resources, enablers and intelligence reports to SFAAT in support of ANSF operations and provides security forces for SFAAT. BSI provides C2 and life-support functions for combat outposts. In BSI operations, there are minimal unilateral operations.

<sup>4</sup> The “security forces advise-and-assist team” advises the ANSF kandak (battalion), assisting the ANSF in determining operational priorities and facilitating enabler support and mission command.

<sup>5</sup> Field Manual 19-10.

<sup>6</sup> FM 5-0.

<sup>7</sup> FM 71-100.

## ACRONYM QUICK-SCAN

**ACP** – assault command post

**ANA** – Afghan National Army

**ANSF** – Afghan National Security Forces

**AO** – area of operations

**BFT** – Blue Force Tracker

**BSI** – battlespace integrator

**BSO** – battlespace owner

**C2** – command and control

**CF** – coalition forces

**COIN** – counterinsurgency

**CROWS** – Common Remotely Operated Weapons Station

**DTCS** – Distributed Tactical Communications System

**FM** – frequency modulation

**FM** – field manual

**FSO** – fire-support officer

**HF** – high frequency

**ISR** – intelligence, surveillance and reconnaissance

**JTAC** – Joint Terminal Attack Controller

**MMCV** – mobile mission-command vehicle

**MRAP** – mine-resistant, ambush-protected

**NCOIC** – noncommissioned officer in charge

**NTC** – National Training Center

**OEF** – Operation Enduring Freedom

**OSRVT** – One-System Remote Video Terminal

**PSD** – protective-services detail

**SFAAT** – security forces advise-and-assist team

**TACSAT** – tactical satellite

**TF** – territorial force

**TOC** – tactical operations center

**TTP** – tactics, techniques and procedures