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Cavalry Operations at the JRTC

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Executive summary

Cavalry troopers have adapted the tactics, techniques, and procedures (TTP) to meet the demands of the ever evolving battlefield. In this article the authors discusses the security and reconnaissance missions historically performed by the cavalry. They are essential to the lethality and survivability of the main battle force. Cavalry missions set the conditions for successful operations of the supported unit.

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"Altogether, Cavalry operations are exceedingly difficult, knowledge of the country is absolutely necessary, and ability to comprehend the situation at a glance"[1].
Whether on foot, horse, OH-58D, or the AH-64D/E, cavalry troopers have adapted the tactics, techniques, and procedures (TTP) to meet the demands of the ever evolving battlefield. The security and reconnaissance missions historically performed by the cavalry are essential to the lethality and survivability of the main battle force. Cavalry missions set the conditions for successful operations of the supported unit[2].
Counterinsurgency operations (COIN) have consumed the Army for the past 14 years, and Army Aviation supported the trooper on the ground with overwhelming success. This singular focus resulted in the atrophy of the skills and knowledge necessary for aviation squadron task force (ASTF) and aviation battalion task force (ABTF) staff and aviators to effectively plan, resource, and conduct reconnaissance and security missions in the decisive action training environment (DATE) at the Joint Readiness Training Center (JRTC).

Reconnaissance

"Reconnaissance is not a platform, it's a mission." –MG Mike Lundy

"Reconnaissance is a mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or adversary, or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area."[3] The focus of reconnaissance is on the enemy and terrain. Reconnaissance is a key component of the information collection process and aids in answering priority intelligence requirements (PIR), and may ultimately drive what course of action the commander selects. While some aviators may be familiar with *Field Manual (FM) 3-04.126, Attack Reconnaissance Helicopter Operations*, operations at JRTC indicate that they are not familiar with the application of the fundamentals of reconnaissance.

As a result, reconnaissance operations routinely fail to provide the informational inputs necessary to drive the operations of the ground force commander (GFC). In order to meet the information requirements of the GFC, both planners and aviators must plan, resource, and execute the mission in accordance with the fundamentals of reconnaissance.

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1. De Saxe, Murice. Reveries on the Art of War. Ed. Brig General Thomas R. Phillips, Dover Publications, Inc, 2007
2. 2. U.S. Department of the Army, Reconnaissance and Security Operations, FM 3-98 (Washington D.C.: U.S. Department of the Army, 2015), 1-3.
3. 3. FM 3-98. Glossary-5.

Orient on Reconnaissance Objectives

"Commanders direct reconnaissance operations by establishing reconnaissance objectives with a specific task, purpose, and focus."[4] Routinely, JRTC Observer, Coach/Trainers identify aviation companies that are overly reliant on the aviation task force (ATF) headquarters to conduct all the necessary pre-mission planning. Aircrews habitually rely on the ATF operations and intelligence (O&I) briefings and ATF generated concept of operations (CONOPS) in order to conduct missions. This dependent style of planning often results in limited effects on the battlefield as the O&I brief and CONOPS lack the detail necessary to enable execution. The ASTF and ABTF staff should provide the ground force scheme of maneuver, conceptual aviation reconnaissance scheme and objectives, available assets, terrain description, and enemy situation through the publishing of a warning order, operations order, or a fragmentary order. Companies should then initiate troop leading procedures and establish company planning cells based upon receipt of an order. The common operational picture (COP) feeds troop leading procedures and planning cell operations. Companies should utilize the COP and ATF orders to develop detailed plans in order to orient on the reconnaissance objective. Company level planning increases the effectiveness of air ground operations by providing detailed planning to support the conceptual planning conducted by that ASTF and ABTF staff.

Do Not Keep Reconnaissance Assets in Reserve

In order to provide effective reconnaissance, the commander must employ all available assets. Routinely, rotational unit GFCs task the ATF to provide attack aviation spread as evenly as possible across a 24-hour operations window to provide a quick reaction force (QRF); essentially using attack aviation as a brigade combat team reserve, without providing the doctrinal requirements of priority of planning and priority of commitment.

The QRF is a familiar role for attack aviation in COIN operations; however, in a decisive action environment, the QRF mission is restrictive and reactive, prevents the GFC's ability to capitalize on the speed and lethality of attack aviation to conduct reconnaissance, and violates a fundamental of reconnaissance. The GFC should provide collection priorities through the information collection (IC) plan and allow the ASTF and ABTF to apply maximum combat power to execute the IC plan in support of reconnaissance.

Ensure Continuous Reconnaissance

The ATF should conduct reconnaissance before, during, and after operations and take advantage of the unique capabilities of all of its assets, including unmanned aircraft systems (UAS). The mobility, lethality, speed, endurance, and sensors of the AH-64 make it a prime platform for the reconnaissance mission.[5]

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4. 4. U.S. Department of the Army, Army Aviation, FM 3-04 (Washington D.C.: U.S. Department of the Army, 2015), 3-12.
5. FM 3-04, 3-11.

Unmanned aircraft systems provide a persistent reconnaissance capability and when paired with the AH-64D/E to conduct manned-unmanned teaming (MUM-T), the unique capabilities of each becomes synergistic. The capabilities of the AH-64D/E and UAS to share and exchange information and transmit that information to the ATF is exercised extensively during JRTC rotations. Despite the ability to transmit targeting and other critical real time mission information, to include video feeds, to the GFC, no GFC has elected to use this information to support their operations during JRTC rotations.

The ability of the AH-64D/E and UAS to provide critical mission information enables operators, staffs, and commanders to expedite clearance of fires, observe areas of interest real time, increase situational awareness, and capitalize on the inherent strengths of these platforms to provide near continuous reconnaissance. The ABTF and ASTFs must continue to train manned and unmanned systems operators to build reconnaissance skills. In order to be relevant, they must also press the education of the GFC on the capability of the aviation reconnaissance assets available to him.

Retain Freedom of Maneuver

Reconnaissance elements should avoid becoming decisively engaged unless contact is absolutely necessary to gain information. "Making contact with the smallest possible element, using redundant and different reconnaissance capabilities, conducting effective counter-reconnaissance, maximizing standoff, and employing suppressive direct and indirect fires all contribute to reducing tactical risk…"[6]

Leaders have to ensure their aviators are fully trained and confident in all flight modes and movement techniques, especially under night vision devices in red illumination, based upon the mission variables in order to maintain freedom of maneuver in the DATE. Selection and execution of movement techniques, based upon the enemy disposition, terrain, and environmental conditions is key to retaining freedom to maneuver and not making incidental and repeated contact with the enemy. The forward looking infrared (FLIR) system offers significant advantages in reconnaissance operations; however, terrain, such as dense forest (like those forested areas at JRTC) or rugged terrain, degrades the detection range and ability of aircrews to reconnoiter. It is under these situations that a perspective of the terrain from the UAS becomes invaluable to the manned reconnaissance aircraft.

Gain and Maintain Enemy Contact

"Based on the commander's intent and contact criteria, maintaining contact with the enemy force provides real time information…"[7]

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6. FM 3-04, 3-16.
7. FM 3-04, 3-16.

By employing MUM-T, aviation can use maximum standoff in order to gain and maintain contact, answer PIRs, conduct reconnaissance, and engage the enemy when required, while remaining outside the enemy sensors or weapon systems range to maximize survivability. However, there are occasions that reporting and continuing the reconnaissance mission is essential. Under such circumstances, the reconnaissance element must have guidance from the commander when bypassing the threat is necessary. Neither GFCs nor ATF commanders have established bypass criteria for reconnaissance assets in the last two years at the JRTC. Too often, when attack helicopters or armed UAS make contact with the enemy, they escalate tactical actions in order to defeat or destroy the target when bypassing and reporting would be more appropriate. Commanders and staff must develop bypass criteria in order to equip air mission commanders with the tools necessary to support ongoing reconnaissance operations.

Develop the Situation Rapidly

"Aviation reconnaissance forces must rapidly report when contact is made and conduct actions on contact to determine the composition, disposition, strength, and activity of the enemy."[8]

Aviators must possess the ability to quickly assess the enemy forces they encounter and determine their level of commitment to the fight. By developing the situation rapidly, aviation forces can transition between reconnaissance and a hasty attack based upon bypass criteria. Aviators operating in the DATE at JRTC often depart on a mission without the minimum essential information, particularly an understanding of both the enemy and friendly dispositions and composition, and spend considerable time developing situational awareness in flight. Ensuring an understanding of the ground force scheme of maneuver and CONOPS prior to takeoff will decrease the time it takes an aircrew to develop the situation while conducting reconnaissance and ultimately increase effectiveness.

Report all Information Rapidly and Accurately

Quick and accurate positive and negative reporting of information supports a commander's decision making. Aviation task forces struggle to link PIR to a location, time, and associated indicators that are observable from an aerial platform. Aircrews also struggle to pass timely reports to either the GFC or the ATF staff. Aircrews routinely wait until the post flight debrief with the S-2 to report what they saw, often delivering critical reconnaissance information well after the latest time it is of value. The ATF staff must develop executable reporting requirements and timelines that account for the complexity of conducting aviation operations and the necessity to report information in order to support the commander's decision making.

Fundamentals of Security

Reconnaissance and security operations are very similar; reconnaissance is focused on the enemy or terrain while security is focused on the force being protected. "Security operations are those

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8. FM 3-04, 3-17

operations undertaken by the commander to provide early and accurate warning of enemy operations to provide the force being protected with the time and maneuver space to react to the enemy, and to develop the situation to allow the commander to effectively employ the protected force."[9]

Provide Early and Accurate Warning

Army Aviation can uniquely provide depth to the GFC's security operations based upon the capabilities of the manned and unmanned platforms sensors, beyond line of sight communications, and maneuver speed. In order to identify enemy forces in depth, the most effective ATFs at the JRTC employ a combination of manned and unmanned systems while conducting security in the DATE. The reduced audio and visual signature of UAS allows observation and detection of enemy forces, potentially without detection from the enemy. Unfortunately, ATFs are not conducting MUM-T during home station training, and as a result, they have not codified MUM-T TTP in standing operating procedures or battle books they can reference when planning security missions with supported units.

The ATFs are not performing precombat checks during reception, staging, onward movement, and integration to ensure manned and unmanned systems are compatible. Therefore, the ATFs generally conduct MUM-T through FM radio communication instead of incorporating more reliable digital MUM-T communication capabilities. Home station training on MUM-T operations is critical to establishing proficiency. Face-to-face discussions, ground rehearsals, and operations in a low threat environment, between attack aviators and UAS operators prior to deployment are critical to building proficiency, refining, and standardizing MUM-T TTP.

Provide Reaction Time and Maneuver Space

"Based on the protected force commander's desired reaction time, Army Aviation operates at extended distances from the main body thus offering additional time and space for the protected force commander to make an informed decision to employ forces."[10]

Screen, guard, and cover operations allow a deliberate security operation and provide the protected force with reaction time. When enabled with MUM-T, screen operations are effective at protecting the force, by providing early warning and disrupting the enemy. At JRTC, only one rotational unit has conducted sustained screening operations in the past three years—the results were devastatingly violent and highly effective. While other units attempted screen operations, constant re-tasking of aircraft from the screen line, failure to integrate with the ground force, and the demand for 24-hour attack reserve negated its effectiveness. Leaders and planners must understand the importance of screen, guard, and cover operations. To successfully provide reaction time and maneuver space to the supported unit, leaders must delineate specific re-tasking authority from security operations and avoid pulling critical security assets away for hasty mission support.

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9. FM 3-04, 3-17
10. FM 3-04, 3-21

Orient on the Protected Force, Area, or Facility

Security force movement and orientation must be nested with the protected force. Therefore, planners and aviators must have an understanding of the protected force's scheme of maneuver. This is minimum essential information that enables aviation security elements to orient on the protected force. It is relatively straightforward for aviators to orient on the supported force during defensive operations. However, rotational units operating at the JRTC routinely focus on the friendly position and do not extend their security scans outside of the immediate vicinity of the ground force. It is much more difficult to orient on the protected force while maneuvering. Aviators must use common graphic control measures and execution checklists to assist with navigation and positioning of security teams to effectively orient on and protect the supported unit. Additionally, aviators require awareness of all available support assets such as indirect fires, air defense, UAS, and sustainment capabilities in order to effectively execute security operations. The ATF must develop systems to disseminate maneuver graphics and force locations in order to allow aircrews and operators to maintain their orientation relative to the protected force.

Perform Continuous Reconnaissance

Ground and air elements perform continuous reconnaissance to ensure that enemy forces cannot make surprise contact with the protected force. The employment and positioning of forward arming and refueling point (FARP) sites and mission command nodes as far forward as possible allows Army Aviation available resources supporting continuous reconnaissance. Many rotational units are undermanned and underequipped to provide continuous reconnaissance due to a lack of trained aircrews, UAS operators, and FARP personnel and equipment. Integration with UAS and the ground force is critical to ensure coverage is coordinated during lapses in rotary wing support. Rotational aviation task forces frequently lack an understanding of the ground force's disposition and are unable to synchronize reconnaissance efforts. While the JRTC training area is relatively small, during the joint forcible entry, units spend considerable flight time transitioning between the intermediate staging base and the area of operations in order to refuel. Establishment of a FARP immediately upon the expansion of the area of operations supports maximum utilization of available assets to enable continuous operations.

Maintain Enemy Contact

Unmanned Aerial Systems provide persistent observation and allow manned aviation systems to reposition to positions of advantage.
Unmanned Aircraft Systems and attack aviation are high-demand assets. Unmanned Aircraft Systems and attack aviation are rarely available in significant quantity to enable simultaneous reconnaissance and security operations in the deep, close, and security areas. As a result, aircraft and systems are continuously transiting the maneuver area attempting to regain contact with the enemy. The terrain and vegetation at the JRTC, as in many other potential trouble spots throughout the world, favor the cover and concealment of ground maneuver elements. Therefore, the enemy air defense assets have an advantage to quickly acquire and engage aircraft as they spend a significant amount of time exposed while attempting to regain enemy contact.

Prioritization of the use of assets through the development of decision support tools and clear delineation of the re-tasking authority significantly enhances Army Aviation's ability to maintain enemy contact. Reconnaissance and security operations are squarely in the purview of the modern cavalry trooper. The horse and the OH- 58D have been replaced by the Shadow, Gray Eagle, and Apache on the modern battlefield. Regardless of the system, the essential nature of these missions remain. Aviators, UAS operators, and ABTF and ASTF staffs must understand the fundamentals of both security and reconnaissance missions before they can efficiently and effectively support the GFC.

The JRTC provides a unique environment where ABTF and ASTFs can demonstrate home station training and proficiency against a determined, adaptive, and thinking world-class opposition force. The Aviation Division at JRTC looks forward to helping ATFs see themselves and capture best practices to share across the Aviation Enterprise. Understanding the fundamentals of reconnaissance and security operations will help aviators and staffs regain a cavalry mentality and enable Army Aviation to remain Out Front!

No Slack!