“The only excuse for aviation in any service is its usefulness in assisting the troops on the ground to successfully carry out their missions” 1

- Alfred Cunningham, First Director of Marine Corps Aviation, 1920

Alfred Cunningham’s essay in the Marine Corps Gazette nearly a century ago was an impassioned argument to a hesitant Marine Corps that aviators could provide tremendous value to them on the battlefield. The main arguments against inclusion of aviation assets in the early 20th century centered on doubts of aviation’s usefulness to ground commanders and the value the Marine Corps would receive from a heavy investment in equipping and training aviators. While aviation is now a cornerstone of each service’s capabilities, questions on the employment of aviation assets once again surfaced when applied to operations in a counterinsurgency (COIN) environment. Over the past decade of conflict, attack aviation elements accomplished many notable successes with over 2 million hours flown by attack and scout rotary wing aircraft conducting reconnaissance, attack, and security operations. However, paired with these successes are many notable setbacks including the failed deep attack against the Medina Division at the dawn of Operation Iraqi Freedom and concerns over collateral damage from airstrikes such as the Apache engagement of two Pakistani border posts this past November.2 The question this article seeks to address is what lessons should maneuver leaders take from the experiences of the past decade to optimize attack aviation for the most effective support possible for ground forces, especially in a counterinsurgency environment.

The debate over how to best employ forces in a COIN environment continues to flourish in the Army’s professional military journals. However, little mention is made of the employment of attack aircraft in these operations even though attack aviation is ubiquitous on the battlefield. The Army’s capstone field manual on COIN operations, FM 3-24, does not provide much direction for attack aviation leaders and their supported ground forces as it devotes a scant four pages to aviation assets in COIN. A search for “counterinsurgency” in the Attack and Reconnaissance Helicopter Manual, FM 3-04.126, yields one reference in the entire document. The lack of discussion regarding attack helicopters in COIN operations in doctrine and professional journals begs the question of what employment considerations should be addressed when utilizing attack aviation assets in a COIN environment.

This essay focuses on doctrine, organization, and integration considerations to capture lessons learned for maneuver leaders employing attack aviation operations in a COIN environment. While history instructs that the next war will probably not look like the current conflicts, as an Army we must place the lessons learned from Iraq and Afghanistan into the proper context to consider what role attack aviation should play on future battlefields to best support ground forces in achieving their objectives.
Current Counterinsurgency Doctrine

The Army and Marine Corps Counterinsurgency Field Manual published in 2006 drew on principles expressed in the writings of counterinsurgency experts Sir Robert Thompson and David Galula among others to provide guidance for Army leaders in such operations. The manual emphasizes that the counterinsurgent must “adopt appropriate and measured levels of force and apply that force precisely” in COIN environments because conventional tactics can lead to support for insurgents among the population. Proportionality is a critical factor the counterinsurgent must take into account during operations. As Galula cautioned, measuring how many insurgents are killed is not nearly as important as targeting insurgent leadership and critical operatives. In turn, the counterinsurgent must be cognizant of which weapons he chooses to employ and whether employing lethal means is even desirable. If civil security exists in an area, the counterinsurgent should often pursue nonlethal means first and use lethal force only when necessary.

While only a brief treatment of the lessons codified in the counterinsurgency manual, the principles above demonstrate the dramatic differences between conventional and COIN operations in which the population is the center of gravity. When the battle is for political power, not military supremacy. Army leaders must employ their forces much differently than they would when military power can be decisive in its own right.

Due to the ground-centric nature of COIN doctrine, the mindset of some in the attack aviation community remains on killing insurgents with less attention paid to the primary goal in a counterinsurgency of engendering support among the population and separating them from the insurgents. A comment from an Apache battalion commander in Iraq that attack pilots should not be concerned “with winning hearts and minds because that is ground guy stuff” reflects the view of some in the attack aviation community that COIN doctrine is not relevant for attack helicopters. Policies such as exempting attack helicopter commanders from the COIN academy that tactical commanders attend upon their arrival into theater further isolates the attack aviation community from the COIN debate.

The following analysis centers on the proposition that the goal of attack aviation elements should go beyond aiding ground maneuver forces to achieve military supremacy. Because ground maneuver commanders work across multiple lines of operations in COIN operations ranging from political development to strategic communications, attack aviation forces must go beyond focusing on the destruction of the enemy and shape their operations to nest their goals and objectives with the ground maneuver forces they support. The lack of a doctrinal template for operating in a COIN environment leads some in the attack aviation community to remain focused on the conventional mindset of killing as many enemy as possible instead of the COIN principle of preserving order—a nuanced, but important, difference of approach to operations.

Aviation Doctrine and the Focus on Major Combat Operations

While the lack of discussion regarding attack aviation in the Army’s COIN manual contributes to the non-COIN mindset of many attack pilots, the lack of COIN discussion in its own doctrine further isolates attack aviation from COIN principles. Army Aviation’s capstone field manual, FM 1-100, acknowledges the traditional boundaries of close, deep, and rear operations are becoming blurred as the battlefield continues to take on nonlinear characteristics. However, the manual does not connect this new battlefield with the need for different approaches to conventional versus irregular warfare. It makes slight mention of counterinsurgency operations and provides leaders with little indication of how attack aviation missions
should change in a counterinsurgency environment.

In regard to operations on the lower end of the spectrum of conflict, the Attack and Reconnaissance manual states that attack aviation elements “simply perform the same mission sets described above (in offensive operations) with a different operational environment and certain specific mission planning considerations,” encouraging the reader to check FM 3-0 for further details. The manual does not discuss counterinsurgency in depth and what effects the actions of different employment techniques may have on the local population or the ground commander’s plan. It remains focused on defeating an enemy militarily whereas counterinsurgency principles emphasize defeating the political subversion of insurgents, not the guerrillas themselves.

While the Rules of Engagement (ROE) in Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) reflect the COIN principle of using the minimum force necessary, the lack of a doctrinal foundation for attack aviation in COIN operations leads some in the attack aviation community to retain a conventional mindset. With no aviation-focused doctrine for how to operate in a counterinsurgency, many attack aviation forces rely on the only mission set they were trained to execute: operations focused on conventional firepower and killing as many insurgents as possible. Promoting disorder is a fundamental objective for the insurgent as witnessed in Iraq and Afghanistan because it disrupts the economy and produces discontent with the government and the counterinsurgent forces. Many of the tactics employed by attack aviation forces play directly into this strategy as a lack of understanding of counterinsurgency within the branch at times results in a reliance on conventional tactics in an unconventional environment, fostering the very disorder amongst the local population the insurgent seeks to create. Three particular tactics utilized in OIF and OEF demonstrate this mindset.

First, because of the need to test fire their weapon systems, many attack aviation forces requested terrain denial targets which were essentially empty pieces of terrain aircraft could engage by coordinating with the battlespace owner. By placing many of these targets within major population centers, attack aviation forces constructed the very environment of disorder the counterinsurgent should seek to avoid.

Second, because of the low quality of first generation FLIR (Forward Looking Infrared Radar) systems employed by AH-64 Apaches in the beginning of the insurgency, crews often flew at low altitudes to accurately assess threat activity. Similarly, to provide security for ground elements, OH-58D aircraft frequently operated below 150ft AGL (Above Ground Level). These actions, while occasionally fruitful in terms of detecting enemy activity, may also result in a constant annoyance of the local inhabitants, thereby separating the civilian population from the counterinsurgent forces. Such actions represent the focus of aviation forces on killing insurgents rather than supporting ground elements in separating the insurgents from the political support of the population. Helicopters can scatter a farmer’s sheep only so many times before he begins to view coalition forces as an annoyance rather than an ally.

Third, in many instances aircrews failed to fully take into account the second and third order effects of their aircraft’s weapons systems. By operating with the intent to kill insurgents on every mission rather than shaping the environment to deny the insurgent the support of the population, attack aviation forces violated the maxim of applying the minimum amount of firepower necessary to accomplish the objective. For example, AH-64 teams were given approval to engage suspected IEDs with 30mm fire, but with very few exceptions the result was engagement of rocks or other debris on the side of the road. Even though such actions complied with the ROE, the reliance on conventional firepower to counter the IED threat further strengthened the hand of the insurgents by reinforcing an environment of chaos on the streets patrolled by coalition forces.

A final point regarding current attack aviation doctrine is that it remains heavily company and battalion
focused as demanded by conventional operations. It stresses that mission sets remain the same for operations on the lower end of the spectrum of conflict, but recent operations in Iraq and Afghanistan utilize centralized control with decentralized execution at the team level during counterinsurgency operations, similar to the concept of “mission command” in FM 3-0. In operations in Iraq and Afghanistan, missions employing aircraft in formations above team level are extremely rare. The emphasis on decision-making at the team level is an important doctrinal consideration for the employment of aviation forces in a COIN environment that is missing in current attack aviation doctrine.

Revising Attack Aviation Doctrine for Irregular Warfare

Failure to address the doctrinal innovations needed for success in counterinsurgency operations may lead to potentially disastrous consequences for the ground elements attack aviation forces support. What doctrinal changes should be made that would provide attack helicopters suitable roles in environments such as Iraq and Afghanistan? First, attack aviation doctrine should make clear that airpower alone cannot defeat an insurgency. The use of massive firepower will only enhance the efforts of insurgents, so aviation forces must structure their missions in a way that separates the enemy from the mass of the population. This end can be accomplished by emphasizing that missions that take place across the spectrum of conflict—reconnaissance, security operations, and attacks—should be employed with different considerations in counterinsurgency operations vice conventional offensive operations.

The doctrinal considerations in each of these types of operations must take into account the materiel and organizational changes inherent in the addition of Unmanned Aircraft Systems (UAS) to the battlefield. The Department of the Army recognized the high demand for aviation assets in OIF and OEF necessitated a study of the force’s capabilities, leading to the commission of the “Aviation Study II” in 2009. This study contributed to the approval of a “Full Spectrum Combat Aviation Brigade” (FSCAB), an organizational adaptation that integrates assault, general support, attack, reconnaissance, and support elements into one Aviation Brigade. An important component of the FSCAB is the integration of UAS into the reconnaissance squadron, providing the FSCAB an organic capability to employ manned-unmanned (MUM) teaming which habitually occurs in theater. The next important step is to establish a doctrinal template for the integration of UAS operations into the FSCAB that emphasizes employment considerations across the spectrum of conflict.

Reconnaissance Operations

Because the enemy relies on stealth instead of mass in an insurgency, reconnaissance is a critical task for aviation forces to gain visibility on the actions of insurgent forces. Aviation and maneuver doctrine should address the advantages and disadvantages of using UAS versus helicopters. UAS are not as detectable, often have better sensors, are a stable platform with a long loiter time, and can provide a real time feed to operation centers at a fraction of the cost (in terms of risk, dollars, and manpower) of rotary wing assets. The counterinsurgent needs platforms of slow speed, high endurance, and protected against small arms ground fire, characteristics that more closely match a UAS than rotary wing assets.

However, helicopters are much more advantageous for the counterinsurgent when there are actual troops on the ground because they are better suited to facilitate smaller patrols working in isolation without fear of being overrun. An attack helicopter pilot can bring intuition, a sense of the big picture on a battlefield, and lethality of aircraft armament that a UAS cannot replicate. The threat of an airstrike is often sufficient to deter insurgent forces which makes attack helicopters an ideal asset for supporting ground patrols. Maneuver doctrine should therefore address what kind of reconnaissance attack helicopters should perform during counterinsurgency operations to maximize attack aviation’s advantages while minimizing its disadvantages.
Both UAS and rotary wing assets are ideal for supporting missions that do not call for developing a relationship with the local populous or warrant the risk of involving ground troops. Reconnaissance of borders, infiltration routes, and key infrastructure such as power lines or pipelines are missions well suited for aviation assets in a counterinsurgency to provide reconnaissance for the ground force commander while reducing intrusion on the local population.

Security Operations

Similarly, consideration should be given to employment considerations of both rotary wing and UAS assets during security operations. According to the Attack and Reconnaissance Helicopter manual, security operations “provide the protected force early and accurate warning of threat operations and develop the situation to provide time and maneuver space within which to effectively use the protected force to exploit or react to threat actions.”

Examples from recent conflicts include convoy security, aerial escort, air assault security, response to troops-in-contact situations, and general support to ground patrols. A recent study by the Aviation Center of Excellence predicted that UAS will perform 50% of these missions in the 2016-2025 time period and 80% by 2026-2035.15 While the UAS brings advantages of stealth, endurance time, and lower risk for aircrews, it is arguably more suited for some types of security missions than others.

For instance, a UAS provides an ideal platform for a long-distance convoy security mission with a low risk of hostile contact. However, manned platforms are more advantageous for troops-in-contact situations or general support missions to ground patrols because manned aircraft can quickly provide the “big picture” for a ground commander in a way that a UAS cannot. Rotary wing assets can provide security for ground patrols which lessens the chance of contact, thereby building trust with the local population by preventing hostile contact from occurring. Similarly, attack aviation assets can assist in establishing security for key leader engagements but then depart the immediate area during the actual meeting, thereby avoiding an overbearing presence on the local population. Consideration must be given to what type of security missions are appropriate for both manned and unmanned aircraft. METT-TC (mission, enemy, terrain, troops, time, and civilian considerations) will dictate particular platforms and associated tactics depending on the type of security mission, so a doctrinal template should discuss these considerations for maneuver commanders to draw upon.

Attack Operations

Two primary operations that occur in the COIN environment are close combat attacks (CCA) and interdiction attacks (IA). Close combat attacks occur in close proximity to friendly forces whereas interdiction attacks “divert, disrupt, delay, degrade, or destroy enemy combat power before it can be used effectively against friendly forces.”16 Aviation doctrine should emphasize proportionality and the overwhelming harm collateral damage can have to the counterinsurgent’s mission in both operations. Even the employment of non-lethal means such as flares can work against the counterinsurgent if the result is that the flare falls to the ground and burns a farmer’s crops. While the Rules of Engagement (ROE) are likely to vary from conflict to conflict, in any counterinsurgency extreme care should be taken to only engage targets that are clearly insurgents. Even then, the most limited means necessary should be employed to achieve the desired effect.

With interdiction attacks, the utility of terrain denial fires should be seriously questioned in a counterinsurgency. Since the insurgent’s goal is to instill a feeling of disorder among the population, terrain denial fires aid his efforts by disrupting life for neutrals or those that support the new government. It is doubtful that the denial of a small area through the temporary employment of attack aviation weapons is worth the costs to the overall effort of separating the insurgent from the population.
Interdiction attacks can be hasty or deliberate. While deliberate attacks are typically infrequent in a counterinsurgency operation due to the insurgents’ tactic of blending with the local population, hasty interdiction attacks occur in situations when friendly forces discover targets such as a weapons cache or insurgent activity not in close proximity to friendly ground forces. Which aircraft are more appropriate to conduct such operations in a COIN environment, a UAS or rotary wing asset? With the arming of many UAS platforms, logic might suggest that whatever platform discovers the suspected target should conduct the weapons engagement. However, some experts, such as David Kilcullen and Andrew Exum of the Center for a New American Security, favor restricting use of UAS strikes, citing evidence from UAS operations in Pakistan that UAS attacks there are responsible for high rates of civilian casualties, with as many as 50 civilians killed for every militant. Proponents of increasing the role of UAS in counterinsurgency operations cite the fact that civilian casualty rates in Afghanistan have decreased markedly since 2009, due in part to restrictions on ordnance released from manned aircraft and greater integration of UAS with intelligence and maneuver commanders.

While there is no clear answer as to which platform is best suited to reduce civilian casualties, a technique to consider is maximizing the benefits of both systems with joint employment. Such procedures often occur in theater with the practice of MUM teaming between aircraft, UAS, and the battlespace owner. For example, a UAS may observe an IED emplacement team and then conduct a handover with an attack aviation team who can perform more detailed reconnaissance prior to target engagement. This practice has the tremendous benefit of minimizing collateral damage while freeing the battlespace owner from committing ground forces to support such operations.

Integrating Air and Ground Operations

Whether conducting reconnaissance, security, or attack operations, maneuver doctrine cannot overemphasize how important it is to target the right people in a counterinsurgency. In turn, doctrine should address the importance of nesting attack aviation operations with the actions and intent of supported ground commanders. As a recent After Action Review from a reconnaissance squadron operating in Afghanistan noted, the circumstances in each supported area of operations will likely differ significantly. To understand the unique situations in each area, this squadron conducted face to face and liaison officer operations with the supported ground units as much as possible. Through these habitual relationships, aircrews were aware of the enemy situation, civil considerations, and military operations within the different supported areas. In turn, aircrews possessed an enhanced awareness of possible second order effects of weapon systems employment and flight profiles within different areas.

Because attack aviation can cover so much battle space, it is important for aircrews to know whether a supported unit is clearing the area of insurgents, utilizing goodwill to conduct stability operations, or somewhere in between. By knowing the intent of the ground commander, aircrews can adjust their tactics accordingly. Some local populations may take comfort in aircraft flying low overhead because it provides them a measure of security whereas low-flying aircraft may create a state of terror within another group. The failure to consider the psychological impact of attack aviation operations on the civilian populace may be detrimental to the overall aim of the counterinsurgent forces to create support within the population.

Aviation doctrine should also address measures of success in a counterinsurgency. Standard measures of success are hours flown, or especially for attack units, number of enemy killed. Flight hours do not translate well into success in a counterinsurgency unless aircrews communicate patterns of activity, both among the local population and the enemy, to ground forces. It is possible that by flying in particular flight profiles, aviation forces may disrupt a balance ground forces have diligently fostered.
With regard to insurgents killed, current Army counterinsurgency doctrine clearly articulates that the number of enemy killed is not nearly as important as which enemy are killed. In counterinsurgencies, new recruits will replace insurgents as fast as they are killed by coalition forces.\textsuperscript{22} Instead of measuring success by body counts, as LTG Victor Krulak, the Commanding General of Marine Force Pacific in Vietnam suggested, better measures of success include harder to quantify measures such as safer roads or more secure villages.\textsuperscript{23} Because attack aviation directly supports the ground force, the ground unit’s measures of success should be nested into the aviation unit’s measures, underscoring the need for detailed integration between aviation forces and the ground maneuver units they support.

Lastly, the ability of a well trained, two-aircraft patrol to be a combat multiplier for the ground force commander in a counterinsurgency cannot be overemphasized. The two-aircraft patrol is a thinking, officer-led maneuver force that can accomplish reconnaissance, security, and attack operations within a single sortie. Because of the emphasis on offensive operations in attack aviation doctrine, the ability of two-aircraft patrols to conduct close combat attacks often receives greater emphasis than the other capabilities that attack aircraft can provide in a counterinsurgency. The two-aircraft patrol brings a sense of intuition, knowledge of the battlefield, and the capability to perform a diverse set of missions that makes it an essential multiplier for a ground force commander in a counterinsurgency. By more comprehensively addressing the role of attack aviation in counterinsurgency warfare, leaders can provide the doctrinal foundation to better integrate attack aviation assets with the maneuver units they support.

**Attack Aviation and Success Across the Spectrum of Conflict**

Army aviation remains in high demand as operations in Afghanistan progress toward the impending drawdown in the near future. Throughout operations in both Iraq and Afghanistan, aviators witnessed the advantages of initiative, surprise, flexibility, and mobility by insurgents when operating on their own terrain against coalition forces. Attack helicopters helped negate these advantages by providing maneuver commanders with detailed reconnaissance, armed support of coalition patrols, and tremendous firepower that can be delivered quickly and precisely. However, aircrews must realize that tactical success without regard for the strategic realities of population-centric COIN operations may undermine the mission of the ground maneuver elements they wish to support.

By making needed changes in doctrine, organization, and integration with maneuver forces in counterinsurgency operations, attack aviation and ground maneuver leaders can ensure that aviation capabilities are maximized and contribute to overall success in a counterinsurgency environment. While the high costs of counterinsurgency warfare in terms of manpower, money, and time lead some to question its utility as a part of military strategy in the future, it would be ill-advised to fail to consolidate the lessons learned from employment of attack helicopters in the past decade. Operation Iraqi Freedom started with attack aviation conducting a deliberate interdiction attack against armored forces and ended with operations in a population-centric COIN environment. It is likely that attack aviation forces will again be asked to operate across the spectrum of conflict. In the wake of recent conflicts, it would be irresponsible to concentrate on high intensity conflict without regard for COIN operations as attack aviation and maneuver commanders need a doctrinal and organizational template to be able to employ attack aviation assets successfully across the spectrum of conflict.

**NOTES**

2. Gregory Fontenot, EJ Degen, and David Tohn, *On Point: The United States Army in Operation Iraqi Freedom* (Annapolis: Naval Institute Press, 2005), 189. In the 11th Attack Helicopter Regiment’s attack on the night of March 23, 2003, 29 of the 30 Apaches on the mission received battle damage, two of its pilots were captured, and the mission was aborted without any significant engagements against elements of the Medina Division.


11. *FM 3-04.126: Attack Reconnaissance Helicopter Operations*, 3-64. For a discussion of mission command, see FM 3-0, chapters 4 and 5.


**About the Author**

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