



AGI IN SOUTHERN IRAQ

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The importance of effective air ground integration (AGI) has grown significantly, and now commanders at all levels have access to an aerial view of the battlefield. However, when used inappropriately, air assets can become distracters rather than enablers, or they can be wasted in a task not appropriate to their current abilities. Effectively integrating and synchronizing unmanned aerial systems (UAS), rotary wing (RW), close air support (CAS), and a plethora of other Intelligence, Surveillance, and Reconnaissance (ISR) platforms in support of the ground scheme of maneuver remains a constant challenge. This article will look at the current operational success as a result of effective AGI as part of the tactical scheme of maneuver, and will highlight ongoing challenges from the ground commander's point of view.

Operational Environment

Upon entrance to the Iraqi theater in June 2008, the 4th Brigade Combat Team, 1st Cavalry Division found itself the battlespace owner of three provinces in southern Iraq (Maysan, Dhi Qar, and Muthanna). These provinces cover an area of approximately 80,000 squared kilometers, roughly the size of South Carolina. They contain only a few population centers, with a majority of the population living in sparse rural villages and minimal infrastructure in all three provinces. These three provinces were "PIC" provinces, meaning that they were under Provincial Iraqi

Iraqi Army troops and Soldiers with the 4th Brigade Combat Team, 1st Cavalry Division stage for an air assault mission 30 August 2008.

SPC Lester Colley

Control and not being directly governed and secured by coalition forces. The security situation in Maysan province was vastly different than in Dhi Qar and Muthanna. Intelligence indicated that insurgents had freedom of maneuver in the province and were using it both as a safe haven and as a weapons transshipment point. At the time of our rest-in-place (RIP)/transfer of authority (TOA) in July, the 2nd Battalion, 7th Cavalry was already in position in Maysan and actively supporting the 10th Iraqi Army Division in cordon and search operations focused in the capital of the province, Amarah. Clearing operations continued throughout July and August, while the 1st Battalion, 9th Cavalry was quickly relocated from Scania to Maysan and given the mission of countering the weapon smuggling occurring in the remote areas of the province.

Maysan province is the province furthest east and shares its border with Iran. Maneuver was especially impeded in this southeast region of our battlespace due to the presence of swamps, waterways, and other larger bodies of water, which provided food, transportation, and a livelihood through smuggling legal and illegal goods for the various tribes in the area. Many locations were completely inaccessible by ground movement.

AGI in 4/1 CAV Operations

To overcome the terrain and intelligence challenges in our battle space, 4/1 CAV used a combination of several different intelligence tools to create an operational capability to interdict smuggling. Ground movement target indicator (GMTI) data from Joint Surveillance and Target Attack Radar System (JSTARS) aircraft provided information on possible smuggling routes in the province. This pattern analysis information allowed smuggling named areas of interest (NAIs) to be identified and prioritized for UAS coverage. While monitoring these NAIs, real-time GMTI data was used to cross-cue the Predator UAS onto activity for evaluation. The Predator coverage was a huge advantage over other ISR enablers. This communications relay package enabled the battalion tactical operations center (TOC) to maintain command and control over units encompassing a much larger communications range.

Prior to their arrival in the province, 1-9 CAV trained several border teams on specific counter-smuggling tactics. If suspicious activity was identified through ISR and deemed to be probable smuggling, two possible courses of action were available:

* If nearby patrols were in position to intercept the activity, they were vectored onto the potential smuggling activity

through constant communication back to the TOC, which was in direct communication with the Predator operators.

* However, if terrain prevented ground interception, the border teams were also trained on aerial insertion tactics and would set up traffic control points (TCPs) that interdicted the movement of the suspected smuggling operation.

These air-inserted snap TCPs gave the 1-9 CAV commander a very mobile force that could overcome the terrain restrictions in the province. This force was also augmented by a JTAC (Joint Terminal Attack Control) team and two JFOs (Joint Forward Observer). This was created specifically in order to support an intelligence-driven interception of hostile movement.

Executing AGI

The 1-9 CAV first employed its ability to tactically interface with overhead UAS support during a sniper attack on a forward operating base in September 2008. Guards on the FOB heard one round of small arms fire but were unable to locate the shooter. Predator assets were quickly retasked and picked up three individuals moving quickly towards a four-door truck. Using a communications relay package, two patrols enroute to the FOB were contacted and given the mission to intercept the truck. The Predator operator talked directly to the two

patrol leaders, and this allowed the patrols to intercept and stop the vehicle and secure the individuals. The 1-9 CAV's hard work on integrating their enablers paid off. Operation Boyne, which also occurred in September 2008, executed four separate traffic control points (TCPs) as part of a counter-smuggling interdiction plan. Human intelligence collection team (HCT) source reporting corroborated other intelligence that indicated that the Jaysh al Mahdi Special Group was moving 20-30 trainees by foot across the border from Iran into Maysan province. The reporting gave the vicinity of where the border crossing would take place, as well as the village where they would link up with vehicles at night. Around 2030, movement was detected in the vicinity of the crossing point, and when cross-cued to Predator coverage, approximately 10 individuals were seen on full-motion video (FMV) crossing the border on foot. Soldiers with the 1-9 CAV proceeded to establish a screen line of four TCPs to interdict vehicular traffic moving farther into the province. A quick reaction force was maintained at the battalion TAC. Routes that couldn't be covered by ground forces were identified and an ISR plan had to be quickly reworked to include assets that were being fed into the operation, including Predator UAS, Warrior UAS, and a pair of AH-64Ds. All of these assets were being controlled by various individuals to include platoon leaders, JFOs, JTACs, and S2 analysts. As the night continued and ISR assets ran out of flight time or were redirected, an immediate CAS request allowed the operation to continue past the expected end point with support from a pair of F-16s. During the operation, 15 vehicles were stopped and searched, and all occupants were screened using Handheld Interagency Identity Detection Equipment (HIIDE), but no evidence of lethal smuggling or our targeted individuals was found. What was found was a non-lethal smuggling network. While not a successful lethal counter-smuggling operation, it was a good example of AGI as a combat multiplier. The effective use of the various air assets allowed a Cavalry troop to cover a vast area in near real time.

In this scenario, the Predator played a dual role by providing positive ID and FMV of the target and its location, as well



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Soldiers with the 1st Squadron, 9th Cavalry Regiment maneuver over a stretch of marshland in the Maysan province of Iraq 23 January 2009.

as providing relayed communications directly to the remote units. The successful execution of operations of this type significantly reduced the enemy's freedom of maneuver and ability to conduct smuggling of lethal aid for insurgents in our area of operations.

Current ISR Issues: Optimization

Aerial ISR platforms, whether UAS platforms, close air support or air weapon teams, are essential resources in this environment. Intelligence sections can use these assets to confirm or deny activity at an NAI, identify suspicious activity, and establish patterns of life on potential targets. Ground commanders desire the reconnaissance and situational awareness these assets bring to the table for current operations. Thus we are faced with an optimization problem, distributing the precious flight time for each asset against multiple objectives across the battlefield.

These assets must be synchronized as part of an overarching intelligence plan that coordinates closely with current operations and the ground scheme of maneuver. Allocating an ISR asset on an inflexible target deck that is not linked to other intelligence sources, or that doesn't have the flexibility to adjust to time sensitive targets, is liable to leave the asset burning holes in the sky and producing FMV of a lack of activity on the ground. The end result of this is that troops on the ground are unsupported.

The complexity of the problem should quickly become apparent; competing demands can surface at any time during this process as well as during operations. Without objective standards to prioritize allocation, a common behavior that emerges is to attempt to address every situation as it arises. While having your current operations officer playing the military equivalent of "whack-a-mole" with multimillion dollar aircraft may work in cases where we have overwhelming superiority, it is not the hallmark of the military. It also doesn't work when you have more NAIs than ISR assets available, or when your area of operations is significantly large enough that the unproductive flight time between successive locations becomes a drain on resources.

The way ahead is to increase the capabilities of our enablers for ground units. Several months ago, a modification to a UAS included a communications relay package, giving every BCT the ability to coordinate operations in real-time at ranges that weren't previously possible. Other capabilities also need to be pushed out into the hands of ground commanders, including additional sensor packages such as movement or thermal, tagging capabilities, or ID capabilities.



1LT Joanne Cotton

Soldiers assigned to the 4th Brigade Combat Team, 1st Cavalry Division move to an unmanned aerial system launch and recovery site on their forward operating base in Iraq.

The deficiencies in current UAS design should also be noted. The Raven UAS system could be an excellent tool in the company commander's hands, but usage levels remain low.

Conclusion

While there are some shortcomings in today's ISR assets, these can be overcome with clear ISR asset priorities and unit initiative. Simply getting the proper ISR asset in support of a unit is not the complete story. Proper implementation of these airframes capabilities is the missing piece. Much of the success of a single BCT in such a large AO boils down to one simple factor: training. Having gone through two Combat Training Center (CTC) rotations and various AGI leader professional development (LPDs) prior to deployment, effective AGI has resulted in a CF presence and response capability anywhere in the AO.

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