Air Assault Companies

Effectively equipping Marines for offset insertions

by Capt Alexander Dean

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America's next war is coming, and it will not be fought in a counterinsurgency environment. Just as our forebearers prepared for war on the plains of Europe and found themselves in the jungles of Vietnam, the Marine Corps will fight a different kind of warfare in the conflicts to come. Our opponent will be a near-peer adversary capable of leveraging an A2/AD (anti-access/area denial) network against us. This network will deny us air supremacy, keep our Navy out of the littorals, and make it nearly impossible to mass forces for a decisive blow. In the opening stages of this conflict, satellites will be shot from the sky, communications will be degraded, and the tide of battle will change at the speed of sound. The combatant who can best harness this chaos, orient it, and close with the enemy in a decisive manner will be victorious. Fighting forward from the sea from over the horizon, the Marine Corps will be crucial to the United States' success. Launching multiple company landing teams from sea bases and heretofore unknown specks of sand, the Marine Corps will be able to disrupt our enemy's rear battle area, successfully shaping operations for follow-on forces.

With this concept comes a set of challenges. Advances in technology have made landing on or near the objective (on the "X") extremely dangerous. One well-placed machine gun, rocket, or missile could disrupt or deny an entire insertion. To effectively conduct air assault in the future, we must conduct offset insertions miles away from our intended objectives to better preserve our aircraft and personnel. Currently, the Marine Corps is not properly equipped to effectively perform this mission set. This is the direct result of recent wars in which victory on a tactical and operational level was a certainty but was far less certain on a strategic level. In the culture of forward operating bases, improvised explosive devices, and counterinsurgency, our vehicles got bigger and took on more armor in an attempt to minimize casualties. This article is not an indictment of a previous generation of warfighters; rather, it is a suggestion of a direction forward that the Marine Corps should adopt. We must redouble our efforts to push an effective internally transportable vehicle down to infantry battalions throughout the Marine Corps.

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Early experiments have exposed a critical vulnerability to the viability of a maneuver element conducting offset insertions on a modern battlefield, specifically its ability to sustain and maneuver itself relative to an opposing force upon insertion. From doctrine published in *MCRP 3-10A.1, Infantry Company Operations,* and *MCTP 3-01B, Helicopterborne Operations*, it is clear that all heliborne forces face three inherent constraints. These are the reliance upon open air lines of communications, limited maneuverability upon insertion, and a lack of supporting arms.[1] These constraints all stem from a rotary-wing or tilt-rotor aircraft's lift capability. "Helicopterborne forces lack tactical mobility and heavy weapons; therefore, it is important that the force lands on or near the objective."[2] In order for the air assault company to effectively conduct an offset insertion, it must be able to provide itself with a limited sustainment capability (extra ammunition, water, and a charging capability) and speed relative to an enemy force, while still having enough combat power to accomplish its mission upon arriving at an objective.

This vulnerability has been identified in multiple experiments conducted by the Marine Corps that tested effective CLT (company landing team) employment. RIM of the PACIFIC Exercise 2014 utilized India Company, 3d Bn, 3d Marines as an experimental CLT in the mountainous jungle terrain provided by the Kahuku Training Area. The company experienced great difficulty sustaining itself for the duration of the exercise. In an attempt to lighten the load of the Marines, they coordinated daily resupplies via rotary-wing and tilt-rotor aircraft. Additionally, the

company prefilled water bladders and established resupply points along their axis of advance in an attempt to avoid tying themselves to a road.

> Despite all of these preparations, the logistical system failed to deliver and resorted to ad hoc resupply and bulk delivery that tied the CLT to terrain. This forced the CLT to halt in place and abandon an attempt to take [the Company Objective.][3]

Daily resupply by aircraft ended up being too great a logistical and administrative burden to be feasible. To prevent a similar problem from occurring again, the CLT must have a simple, streamlined ability to sustain itself, or it may encounter self-induced friction finding ways to economically resupply. In this experiment, the CLT was ultimately forced to defend an iron mountain despite detailed planning to the contrary and, as a result, was no longer able to effectively maneuver.

Another experiment, TALON REACH III, conducted with students at the Infantry Officer Course, took a different approach: utilizing the CLT as a lightweight force that carried everything it needed on the backs of Marines, to include solar chargers, water purification pills, and tablets with which the company could coordinate fires with adjacent units, aircraft, and other assets. The after-action report provided by TALON REACH III identifies multiple challenges that faced the experimental company in the conduct of the exercise. One of the primary challenges the experiment faced was sustainability. This manifested itself as a challenge to continuously charge batteries; the

> use of multiple electronic devices throughout Talon Reach III continued to identify the need to find ways to increase sustainable battery power for the CLT. In short, while new technologies provide unique capabilities, these technologies are often limited by battery life (for example, the tablets have a battery life around eight hours).[4]

The exercise also identified a deficiency in the CLT's logistical maneuverability. During the conduct of the experiment, participants mitigated this by utilizing a Polaris all-terrain vehicle to enable logistics and ammunition resupply. Despite the CLT's dispersed maneuver elements, the all-terrain vehicle was incredibly useful during the experiment, providing timely resupply across broken terrain.[5] Both of these after-action points indicate the need for a heavier footprint than what a Marine's or Sailor's pack provides.

We can provide units with internally transportable vehicles. *(Photo by Maj Evan Z. Ota.)*

For every asset given to the heli-borne force, fewer Marines are able to travel with the company because of lift constraints. This creates a Catch-22; too much combat power, and the company will be unable to sustain itself for any worthwhile amount of time; too many supporting assets, and it will not have enough combat power to accomplish its mission. In order for an air assault to be a viable option for the Marine Corps, a solution to this problem must be found. Lacking a solution, a commander would be forced to accept undue risk when committing forces for the accomplishment of an assigned mission. Providing an air assault company with a means to maneuver from an offset insertion boils down to one key issue: the need for an internally transportable vehicle that would allow the CLT to rapidly shape a battlefield, update a commander's situational awareness, and transport personnel, additional ammunition, medical equipment, and sustainment equipment (such as an ability to create water) with relative speed against an opposing force. In short, rifle companies require a vehicle that would serve as a force multiplier upon insertion.

Air assault companies must immediately be assigned four MRZR-4s and two tactical trailers as a baseline that could be scaled depending on the needs of the mission. The MRZR-4 gives three immediately tangible benefits—size, weight, and cost. An MV-22 can transport two MRZR-4s in its cargo hold at a time or one vehicle with an attached tactical trailer. They are relatively lightweight at 1,937 pounds each and can carry 1,500 pounds each in addition to a capability of towing 1,500 pounds in a trailer behind it.[6] This adds up to a weight of 6,874 pounds plus the personnel to operate the vehicle in an MV-22, which is well under the maximum weight of 20,000 pounds transportable.[7] Additionally, the MRZR-4 is much cheaper than previous vehicles utilized by the Marine Corps. For the price of one up-armored HMMWV, the Marine Corps could pay for all four MRZR-4s required by an air assault company. These vehicles have already been disseminated to Marine Corps regiments, are currently fielded by Special Operations Command, and are in testing with U.S. Army Airborne Divisions.[8]

Upon insertion, the first benefit this vehicle would lend to a company is speed. A MRZR-4 is capable of traveling at a rate of 62 miles per hour with up to six passengers, allowing the CLT to insert itself via MV-22 to a landing zone over the horizon from an objective. This will enable the company to avoid dangers inherent in landing on the "X." From this safer insertion point, the MRZR-4 could then be used to scout attack positions, rapidly deliver supplies, and even ferry Marines to an attack position much more rapidly than if the Marines traveled by foot. For example, if a rifle company conducted insertion fifteen miles from its objective, it would be required to march under sustainment load for five hours (at a rate of three miles per hour) while maintaining security for itself and rapidly depleting its supply of water. At the conclusion of this hike, the company would be required to fight an enemy. With the four MRZR-4s this article proposes, the commander would immediately have a screening force pushed in front of him, updating his understanding of the battlespace in realtime. Additionally, the commander could employ his vehicles to ferry Marines from the insertion point to an attack position, delivering a better-informed, better-rested rifle company to the objective in less time. Utilizing this vehicle to maneuver would also mitigate dangers inherent in an offset insertion, namely giving the enemy time and space to reorient its forces and organize an effective defense. A squadron of tilt-rotor aircraft would be able to deploy a company, the vehicles, and the trailers with ease, in two waves—sacrificing neither combat power nor an added sustainment capability.

The MRZR-4 could also be used to tow additional weight that is not feasible for foot-mobile forces to carry. In a tropical climate, a Marine rates 4.87 gallons of potable water per day.[9] However, through closely monitoring our Marines' water consumption at the Jungle Warfare Training Center, we found that Marines actually consumed closer to 1.5 gallons per day. 182 Marines and Sailors would consume approximately 1,911 gallons of water in a seven-day period—roughly 16,000 pounds. This staggering amount of weight leads one to conclude that an air assault company must be capable of making its own water if it plans to stay in the area of operations for any sustained amount of time. This vehicle allows an air assault company a method of bringing equipment to purify water without adding additional weight to an already heavy pack. This weight also includes, but is not limited to, ammunition, communications equipment, batteries, and a capability to recharge batteries, greatly reducing the need for an open-air or ground line of communication to the company. Admittedly, adopting these vehicles would tie the company to a road or relatively flat terrain; however, the relative maneuverability gained and the lack of reliance on a line of communication far outweighs this consideration.

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Equipping air assault companies with internally transportable vehicles and a limited ability to self-sustain them would open all sorts of interesting doors for future CLT employment. With increased self-sustainment and maneuverability, the Marine Corps will be capable of disrupting our enemy's rear battle area like never before. Given the current budgetary realities of sequestration, this low-cost proposal will allow the Marine Corps to continue to operate expeditiously in increasingly austere environments far from friendly lines. The Marine Corps has taken a bold and positive step by adding the MRZR-4 to its inventory. These vehicles should be immediately pushed down to infantry battalions for use and experimentation. Assigning them to air assault companies is just the beginning of an internally transportable vehicle potential. One day, we may arm combined anti-armor teams with them and rapidly deploy screen and guard forces in front of battalions or equip raid forces with them to rapidly close with, destroy, and withdraw from an objective. Entire battalions would be able to conduct deep air assault operations to seize objectives without the need for steady resupply.

Notes

1. Headquarters Marine Corps, *MCTP 3-01B, Helicopterborne Operations*, (Washington, DC: 2004).

2. Ibid.

3. Maj Chad Buckel, *Company I Advanced Warfighting Experiment After-Action Report*, (MCBH Kaneohe Bay, HI: 2014).

4. Maj Scott Cuomo, et al., "IOC Operation Talon Reach III After Action Report," *Marine Corps Gazette*, (Quantico, VA: 2014), available at https://www.mca-marines.org.

5. Ibid.

6. Polaris Defense information available at http://military.polaris.com.

7. Headquarters Marine Corps, *V-22 Osprey Guidebook*, (Washington, DC: 2011).

8. Richard Sisk, "82nd Airborne Division Tests New All-Terrain Vehicles in Poland Jump," 23 May 2016, available at http://www.military.com.

9. Headquarters Marine Corps, *MCRP 3-40D.14, Water Support Operations*, (Washington, DC: 2015).