Deep Strike Option for an Asymmetric **Battlespace**

A new chapter of tactical relevance by Mais Bradford R. Carr & Samuel Schoolfield

he history of the United States Marine Corps is replete with proud examples of daring warfighters conducting bold operations in the face of a determined foe. At times these tactical solutions were straightforward in their design, and then they became noteworthy by the skill and courage in which they were executed. Yet there are other examples of dynamic resolutions to complex tactical problems, born from mission-type orders and commander's intent, which in the planning phase may have seemed very unorthodox or conceived with inappropriate risk tolerances. The iconic figures of LtCol Pete Ellis detailing the arena of amphibious warfare before World War II that led to the islandhopping campaign and later Col John Ripley's actions on Dong Ha Bridge during the Easter Offensive are two remarkable examples of visionary thinking and bold initiative that turned the tables on our adversaries. Considering today's requirements for operational risk management, we have come to thoughtfully integrate this technique into every aspect of both our planning and execution. One could only imagine what the operational risk management briefing slides would indicate for the destruction of the bridge at Dong Ha if executed today. Our common history is further etched by the tactical actions of numerous other daring men who have left an indelible mark on our Corps by doing something that seemed illogical at the time but, as time passed, was proven to be courageous genius.

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"When once you have tasted flight, you will forever walk the earth with your eyes turned skyward, for there you have been, and there you will always long to return."

—Leonardo Da Vinci

One area of tactical operations that has been largely ignored within the MAGTF is the personnel insertion technique of air delivery. When used alongside the long-range and highaltitude capabilities of the MV-22, these airborne insertions during direct combat operations, specifically Operation ENDURING FREEDOM, take on a whole new chapter of tactical relevance. In an effort to develop and then further refine the mission essential task list training requirements of both the ground combat element and the aviation combat element participants, the concept of a "deep strike capabilities exercise" was synthesized between select air and ground units of the II MEF. The training and development effort was targeted in order to maximize the number of and variety of mission tasks consistent with a full mission profile long-range insertion and effectively simulate what the planners could best foresee as an expected utilization of the required special skill sets.

The concept of the deep strike capabilities exercise was derived from the intent to combine the MAGTF aviation combat element's indigenous mediumlift assault support aircraft with the MAGTF command element's organic deep reconnaissance force. The natural objective was to exploit existent capa-

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bilities at the corner of their respective capabilities. The MV-22B, with its long range and 25,000 feet mean sea level service ceiling, makes power projection take on a new operational dimension. The Osprey's high-altitude capabilities make for an insertion platform that can vertically bypass surface-to-air threat systems like no other seabased Marine Corps assault support platform in the past. The MV-22's before mentioned capabilities, when merged with the force reconnaissance element's specialized equipment and training, allow for exiting aircraft at altitudes well above enemy surface-to-air threat systems and also with very low risk of mission compromise. This capability fusion allows the operational planner to carefully place ground reconnaissance elements at points on the map where they can observe, verify, report, and potentially engage targets of opportunity at times and places that were previously impossible when the capabilities of now legacy Marine transport aircraft were limited to much smaller radii of action and lower service ceilings.

Though similar in scope, the deep strike capability here explored is focused exclusively on terminally controlled air fires (or, effectively, close air support) versus Vietnam-era "Stingray" operations, which were usually within the range of indirect fire support, but that is not to say that the use of the highmobility artillery rocket system would not be a well-suited fire source for a remote terminal control team.

Upon completion of assigned missions, the force reconnaissance teams move as required to conduct a linkup with an MV–22B for extraction and return to base for follow-on tasking. The end state is to provide the commander with a deep strike capability

in order to deliver battlespace shaping beyond his normal area of operation in order to extend into what would have normally been considered only an area of limited influence. While existent joint and coalition aircraft routinely deliver precision fires well beyond the ranges illustrated and exercised here, the distinction is made by the integration of terminal control. A high-altitude low-opening-qualified joint terminal air controller exiting an MV–22 deep in the battlespace, with an appropriate deep reconnaissance and security element, has further strategic capabilities.

In December 2010, II MEF—Force Reconnaissance Company, Marine Operational Test Squadron 22, Marine Electronic Attack Squadron 1, and Marine Light Attack Helicopter Squadron 467—conducted a deep strike capabilities exercise in the vicinity of Atlantic Airfield and BT–11 (a



Maintaining skills is important, and the MV-22 gives power projection a new dimension. (Photo by author.)

10,000-plus-acre electronic practice range) north of Camp Lejeune. The deep strike capabilities exercise concept of operations originated from the intent to exercise the combat radius of the MV–22B and the mission essential tasks of the supported ground combat element.

When launched vertically, as from amphibious shipping, the V-22 aircraft range could be limited to maybe just 300 nautical miles in some conditions. Conversely when launched from a runway, for example from Forward Operating Base Dwyer, range is significantly longer as the performance benefit of a short takeoff is made available by even the shortest runways, and then the requirement for a vertical landing at the objective is alleviated by the use of air delivery special insertion tactics, techniques, and procedures. The fuel capacity of the MV-22 can be significantly increased by use of one internally stored fuel cell, which leaves ample cabin volume for a reconnaissance team while providing more range. If air-to-air refueling is used, the range then becomes virtually unlimited as an operational planning consideration.

One of the mission essential tasks force reconnaissance Marines are required to maintain proficiency in is special purpose insertion extraction, to include high-altitude low-opening. The focus was on high-altitude airborne insertions utilizing the multimission parachute system integrated with a deep reconnaissance team's organic joint tactical air control capability and the associated employment considerations. The Marine Corps introduced the multimission parachute system in 2005. Within the Marine Corps, the multimission parachute system has the capability to insert force reconnaissance teams at altitudes of up to 25,000 feet mean sea level with external oxygen. The multimission parachute system parachute can be used in four different configurations: free fall, hand deployed with an attached pilot chute; free fall, hand deployed with a drogue chute; double bag static line in which the bag contains a pilot chute and the main chute; and static line with a drogue chute. Pilot and drogue chutes are auxiliary chutes that are used to deploy main or reserve parachutes. These configurations provide multimission parachute system certified personnel with the ability to insert in various ways based upon the mission. During the unit training phase in preparation to deploy with MEUs, force reconnaissance platoons conduct certification exercises that include military free fall insertion prior to reporting for training.

Another mission essential task for force reconnaissance teams is to maintain proficiency with certified joint tactical air control/joint fires observer personnel. The ability to control force fires at the team level provides a commander with an air-to-surface strike capability when the conditions are established. The ability to have the "MK–1 eyeball" on the ground that is joint fire control capable provides the commander with a tremendous ability to influence the battlefield.

In the spirit of boldness and daring, we took the lead in planning, coordination, and execution of all phases of the deep strike capabilities exercise to include flying the aircraft and conducting military free fall airborne operations. From this firsthand exposure we provide the below observations.

The deep strike capabilities exercise proved to be a success in combining the long-range capabilities of the MV-22 as a high-altitude platform and force reconnaissance capability of military free fall operations. In after-action review, there are a few areas that could be further refined in order to maximize capabilities. These include, but are not limited to, the Naval Aviation Training and Operating Procedures Standardization limit, which prohibits static line operations above 10,000 feet above sea level from the MV-22. The MV-22 is in need of a rapid static air delivery envelope expansion given the average elevation in Afghanistan. The integration of low-level static line, high-altitude high-opening, and high-altitude low-opening parachute operations in support of Enhanced MO-JAVE VIPER, MOUNTAIN WARRIOR, and predeployment certification exercises is highly recommended. This integration will provide commanders with a better understanding of employment considerations in training and in combat.

The final recommendation is further integration of tandem offset resupply delivery system (TORDS) capability within the MAGTF, Enhanced MO-JAVE VIPER, MOUNTAIN WARRIOR, and weapons and tactics instructor frameworks. TORDS provides force reconnaissance Marines with a parachute delivery system that can resupply combat essential equipment or personnel of a payload capacity in excess of 500 pounds. If there is a valid capability requirement, then future development toward a Firefly-like* capability, which provides a 2,000-pound payload with a high-altitude offset, is the way ahead. This has a strategic effect in the case of Operation ENDURING FREEDOM and MEU operations.

In summation, the fusion of highaltitude air delivery of personnel with the range and ceiling of the MV–22 gives the Marine commander an organic deep strike capability not presently realized. The capability to place a ground joint terminal air controller at points on the map previously not considered is at our fingertips. Observing a critical node in the remote area and then prosecuting with terminally controlled fires when required could meet rules of engagement considerations and produce changes in enemy behavior in ways not currently taking place.

*The Firefly is a global positioning system-guided parachute system that can be used for resupply. It was selected by the U.S. Army for its joint precision airdrop system. The Marine Corps is currently looking at this system that has the following capabilities:

- Payloads of 700 to 2,200 pounds.
- Deployable to 25,000 feet.
- High wind offset capability.
- No wind data required to be uploaded in the system.
- Takes wind analysis four times per second.







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