CHAPTER 2. OFFENSIVE AIR SUPPORT IN MARINE AVIATION

Modern tactics facilitate the use of combined arms. They combine the effects of various arms-infantry, armor, artillery, and aviation to achieve the greatest possible effect against the enemy. The strengths of the arms complement and reinforce each other. At the same time, the weaknesses and vulnerabilities of each arm are protected or offset by the capabilities of the other. (Extracted from Marine Corps Doctrinal Publication [MCDP] 1-3, Tactics)

OFFENSIVE AIR SUPPORT IN MAGTF OPERATIONS

Combined arms operations are central to the Marine Corps’ maneuver warfare philosophy. The MAGTF’s organization exploits the synergy inherent in closely integrated air and ground operations, generating maximum combat power in the area of operations. Combined arms present the enemy not merely with a problem, but with a dilemma—a no win situation. The commander combines supporting arms, organic fires, and maneuver in such a way that any action the enemy takes to avoid one threat makes him more vulnerable to another.

Single battle concept allows the commander to effectively focus the efforts of all the elements of the force to accomplish his mission. Under the single battle concept, the area of operations consists of three major areas - deep, close, and rear. To orchestrate actions throughout the area of operations, the commander must determine what, where, when, and how to apply OAS in MAGTF operations.

OAS involves “those air operations conducted against enemy installations, facilities, and personnel to directly assist in the attainment of MAGTF objectives through the destruction of enemy resources or by the isolation of the enemy’s military forces” (Marine Corps Reference Publication [MCRP] 5-12C, Marine Corps Supplement to the Department of Defense Dictionary of Military and Associated Terms). The MAGTF commander uses OAS to shape the battlespace for future operations, create windows of opportunity for decisive action, restrict the enemy’s freedom of action, and disrupt the cohesion and tempo of the enemy’s operations.

The MAGTF exemplifies a balanced combined arms team. For example, during Desert Storm, 1st Marine Division began a series of “roving gun” artillery raids, firing on suspected enemy positions in Kuwait. These raids were designed to provoke an enemy reaction, with aerial observers, tactical air on station, and artillery waiting to engage the Iraqis should they come out of their fortified positions.

EA-6Bs protected Marine artillery from Iraqi counterbattery fire by providing jamming. As Iraqi artillery returned fire, their positions became exposed to aerial observers, who then marked the target for Marine artillery, F/A-18s, and AV-8Bs. These raids were very successful in keeping the Iraqis off balance and presented them a dilemma—a no win situation—return fire and become exposed to OAS aircraft and artillery counterbattery fire or do nothing.

As one of the six functions of Marine aviation, OAS provides the MAGTF commander the capability to project firepower to shape the events in time and space to influence the battle. See figure 2-1, page 2-2.

EFFECTS OF OFFENSIVE AIR SUPPORT

OAS allows the commander to shape the deep, close, and rear battlespace and ultimately results in the protection of the forces by delaying enemy reinforcements, degrading critical enemy functions, and manipulating enemy perceptions. OAS operations deliver firepower against selected enemy targets and capabilities to directly assist in the attainment of MAGTF objectives by destroying enemy resources or isolating the enemy. Neutralization and destruction are the principal effects achieved by OAS operations.
Neutralization

Neutralization effects of OAS missions render areas and weapons ineffective or delay enemy forces for a specified period of time. These missions provide temporary neutralization of hostile fires and can protect friendly forces during movement. Other missions can include attacks against installations or areas the enemy uses to support his combat activity.

Destruction

The destructive effects of OAS missions destroy enemy forces, equipment, supplies, and installations. They are of primary interest to the MAGTF commander. Due to the number of sorties and amount/types of ordnance required, total destruction of enemy forces, equipment, supplies, and installations is hard to achieve. Destruction missions are therefore reserved for high priority targets.

CATEGORIES

The MAGTF’s single-battle concept exploits the combined-arms nature of MAGTF operations. The capabilities of OAS, including its speed, range, and mobility, provide the necessary aviation based fires to support committed maneuver units and shape the battlespace to enable decisive MAGTF operations. Its primary support of warfighting functions is provided through CAS and DAS. The degree of coordination with MAGTF units determines the OAS categories.

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Close Air Support

CAS is air action by fixed- and rotary-wing aircraft against hostile targets that are in close proximity to friendly forces and which require detailed integration of each air mission with the fire and movement of those forces (Joint Publication [JP] 1-02). This detailed integration is accomplished using positive control. Positive control is provided by terminal controllers, i.e., FACs or FACs (airborne) (FAC[A]s).

Deep Air Support

DAS is air action against enemy targets at such a distance from friendly forces that detailed integration of each mission with fire and movement of friendly forces is not required. Deep air support missions are flown on either side of the fire support coordination line; the lack of a requirement for close coordination with the fire and movement of friendly forces is the qualifying factor (MCRP 5-12C). DAS missions include AI, AR, and strike coordination and reconnaissance (SCAR). See figure 2-2.

Air Interdiction Missions

AI missions destroy, neutralize or delay the enemy’s military potential before it can be brought to bear effectively against friendly forces. These missions re-
Offensive Air Support

Offensive Air Support

spond to known targets briefed in advance. AI usually involves the employment of large strike packages against targets such as command, control, and communication (C3) nodes, bridges, railways, etc. AI denies the enemy the use of a particular area, route or facility. AI can neutralize, destroy, or even delay the enemy’s military potential before it is brought to bear against friendly forces. The particular mission will determine AI support requirements. AR, electronic warfare (EW), SEAD, airborne early warning (AEW), and tactical air-launched decoys (TALDs) are support requirements that may be involved in the planning and execution of a successful AI mission.

Armed Reconnaissance Missions

AR missions locate and attack targets of opportunity (i.e., enemy materiel, personnel, and facilities) in assigned areas. AR differs from AI because AR target’s locations are not known or briefed in advance. AR provides the MAGTF commander an economy of force to cover and defend terrain not suited to other forces and—

- Identifies enemy forces and engages them before they can threaten MAGTF forces.
- Denies the enemy undetected movement and use of key terrain.
- Provides timely warning of enemy intentions or attacks.
- Prevents or degrades the enemy’s mobility.
- Collects and reports high-value information on the enemy’s disposition.
- Covers large areas of open terrain by observation and fire.

Fire support coordinating measures protect armed reconnaissance aircraft from friendly fire. Armed reconnaissance missions do not exclude other supporting fires from the sector in which they operate. If supporting arms are necessary, the DASC, fire support coordination center (FSCC), and/or the force fires coordination center (FFCC) conduct the necessary coordination.

Strike Coordination and Reconnaissance Missions

SCAR missions are closely linked with AR missions. SCAR missions acquire, report, and coordinate the destruction of targets. SCAR aircraft may discover enemy targets and provide a target mark or talk-on for other AR missions or accurately locate targets for AI missions. SCAR missions can be flown by any AR aircraft that has been assigned an area to coordinate the attacks of other DAS flights. During Desert Storm, F/A-18Ds served as SCAR platforms by coordinating AR missions to attack targets in “kill boxes.”

Some planning considerations for SCAR missions are:

- Does not require a FAC(A) qualification or terminal control.
- SCAR missions can be performed by any type of aircraft capable of executing AR missions.
- May provide target, location, description, threat, and area weather.
- Prevents redundant targeting.
- Confirms or locates surface to air threats.
- Assist with bomb or battle damage assessment (BDA).
- Assists the MACCS in the flow of aircraft through radio relay.
- Generally different from a reconnaissance mission in that SCAR missions locate and coordinate target destruction and will typically be armed with munitions and systems that better enhance target designation.

See MCWP 3-23.1, Close Air Support, and MCWP 3-23.2, Deep Air Support, for more information.

REQUIREMENTS FOR EFFECTIVE OFFENSIVE AIR SUPPORT

Effective OAS planning and execution revolve around a few basic requirements to achieve desired mission results. When any one or any combination of these requirements is omitted, mission results may not be as effective. For example, an OAS aircraft may be shot down or may miss the target due to the inability to suppress the enemy’s air defenses. The aviation combat element (ACE) may be conducting OAS, but at what risk or to what effect? The requirements for effective OAS are as follows.
Air Superiority

To attain air superiority, efforts must be made to create an operating area that allows attack aircraft to prosecute targets without prohibitive interference from enemy fighter aircraft. This can be achieved by conducting an aggressive antiwar warfare (AAW) operation prior to conducting OAS or by tasking aircraft as fighter escort during OAS operations. It is imperative that the MAGTF ground combat element (GCE) understands why air superiority is important. If the enemy can interfere with our attack aircraft by launching fighters, then they can potentially launch attack aircraft against our GCE.

Suppression of Enemy Air Defenses

SEAD is important in that it can create a “relative sanctuary” that enables attack aircraft to concentrate on killing targets vice self-protection. Traditionally, the perception of SEAD responsibilities have fallen upon artillery. While artillery is well suited in this role, ACE planners must plan for SEAD requirements when indirect fire assets may not be available, i.e.; interdiction missions beyond the range of organic artillery/mortars. High-speed antiradiation missiles (HARMs), imbedded suppression, joint weapons (J-weapons), and jamming (EA-6B) should all be considered when addressing the SEAD effort.

Cooperative Weather

The greatest air superiority and SEAD campaign can be executed, and prohibitive interference or unacceptable attrition can still be experienced if low ceilings force attack aircraft to prosecute targets “under the weather.” From 1950 to the present, 85 percent of aircraft combat attrition can be directly attributed to anti-aircraft artillery (AAA). Aircraft forced to low altitude are in the heart of the AAA envelope. Inclement weather can negatively influence more than friendly attrition. Target acquisition, aircraft sensor performance, laser attenuation, and terminal control can be affected by inclement weather. Planners must look at available OAS assets, be knowledgeable of their capabilities and limitations, and optimize the way in which they employ them.

Effective Targeting

By their very nature, fixed targets are generally less difficult to effectively target, mark, and attack than mobile targets. Whether attacking fixed or mobile targets, a detailed pre-mission targeting effort is critical to the effectiveness of the attack. This is especially critical for mobile and time-sensitive targets. Based on the nature of mobile targets, collection assets must be optimized to provide the most updated and quality location information on a target. The overall MAGTF collection plan must encompass and be integrated with the overall MAGTF targeting plan and priorities. Priorities of MAGTF organic and nonorganic collection assets must focus on the targeting priorities within the MAGTF battlespace. Focusing the collection assets targeting priorities also focuses the terminal control assets and marking capabilities across the MAGTF battlespace. The MAGTF will always plan to use FAC(A)s and SCAR aircraft to optimize the effects of the attack aircraft on a target.

Effective Marking

Effective marking aids in the proper identification and location of targets to prevent fratricide, and greatly increases the probability of a hit/kill. For fixed targets, the availability of imagery, photographs, detailed maps, and precise coordinates will increase the likelihood of mission success. This type of data may be provided by organic assets within the Marine Corps or may require the use of joint or national assets. Reactive targeting will usually require a mark to aid in target acquisition. To facilitate strike aircraft target acquisition, a number of marking methods are currently available. FACs, FAC(A)s, and SCAR aircraft should strive to provide the most accurate and reliable marking method for the situation. The use of redundant marks is highly recommended. In addition to the use of traditional marks (e.g., smoke, white phosphorous), recent developments have made use of laser, infrared, and GPS technology to acquire targets.

Effective Weaponeering

Effective aircraft and weapon to target match must be evaluated and implemented to achieve an economy of force in attacking targets in the battlespace. See appendix A, Ordnance Selection Guide.
Capable Platforms/Sensors

To increase the probability for a successful target attack, the delivery platform needs to be technologically advanced. Historically, the most difficult task associated with the majority of OAS missions has been target acquisition. Attack platforms need accurate weapon systems and sensor equipment to aid in target acquisition/designation in day and night operations. These new systems include night targeting FLIRs, infrared (IR) pointers, generation III night vision devices (NVD’s), 10-digit GPS targeting accuracy, precise laser designators, trackers, range finders and precision-guided munitions (PGMs). See appendix B, Aircraft Weapons and Capabilities Guide.

Flexible Control

A responsive C3 system is required to ensure that proper OAS customers get what they need and when they need it. Tactical airborne controllers (TAC[A]s), FAC(A)s and deep reconnaissance and targeting platforms should be provided whenever possible and tactically feasible. The increased situational awareness will yield great dividends. Positive information flow, both ways, with a simple and redundant back-up plan is the key to successful control.

Prompt Response

OAS must be timely to be successful. The techniques available to reduce response time can be grouped into three categories: basing posture, alert states, and mission classification.

Forward Basing

Forward basing reduces the transit time to and from the battlespace, and also allows attack aircraft more time on station. Forward basing will, however, incur both logistical and security requirements.

Alert States

This is a “queuing” system that directs aircraft to be able to take-off in 60, 30, 15 or 5 minutes. As the C3 system receives requests for OAS, the alert states can be upgraded to provide OAS as required by battlespace conditions. Airborne alerts may be utilized. This represents the fastest response time, but also potentially the greatest wear on assets.

Mission Classification

The classification of the OAS mission will directly impact the timeliness of the support. Preplanned scheduled missions will occur at the planned time on target (TOT). On-call missions will be dependent on the alert state from which the asset was launched. Immediate mission response times will vary based on the distance the asset was diverted from the target area.

MISSION CLASSIFICATION

The ACE executes OAS missions as either preplanned or immediate air support. The ACE executes both types of support in response to specific requests. Requesting units submit a joint tactical air strike request (JTAR) via the FSCC for preplanned missions. Requests require approval at each level. After approval, the FSCC sends the request to the ACE (via the Marine TACC) for planning and execution. A sample JTAR is provided in appendix C. For immediate missions, requesting units normally contact the DASC directly by radio on the tactical air request net/helicopter request net. Silence by the FSCCs indicates consent for immediate missions. To minimize response time to the MAGTF’s direct air support requirements, the TACC may delegate launch/divert authority to the DASC. The type of request determines the type of support. The ACE also executes OAS missions based on direction received from the MAGTF FFCC through the TACC.

The battlespace shaping matrix and the reactive attack guidance matrix are two tools produced by the FFCC that aid the TACC in processing JTARs and immediate mission requests. These missions result from the MAGTF current fires section and the TACC executing reactive targeting on primarily mobile targets identified in planning. These targets are predominately in the deep battlespace and have a more clearly identified location based on current collection data. In this way, the MAGTF uses OAS in a flexible enough manner to attack the appropriate targets based on the current situation. See MCWP 3-25.5, Direct Air Support Center Handbook, for more information on processing JTARs and immediate air support requests.
Preplanned Missions

Preplanned air support is in accordance with a program and planned in advance of operations. Preplanned missions are either scheduled or on-call.

Scheduled
Prepared scheduled missions are executed at a specific time against a specific target at a known location. Scheduled missions allow aircrew to conduct detailed planning. Weapons loadout, flight composition, and flight profiles are optimized to maximize mission success. Scheduled missions provide the most economical use of aircraft and ordnance.

On-Call
Preplanned on-call missions involve aircraft that are preloaded for a particular target or array of targets and target area and placed in an appropriate ground/air alert status. Aircrew can conduct mission planning based on the information that is available, but not to the same detail of a scheduled mission. On-call missions allow the requesting commander to employ OAS assets as the tactical requirement arises based on prior mission analysis.

Immediate Missions
Immediate missions meet requests that arise during battle, strike unanticipated targets, and are generally urgent in nature. Immediate missions cannot be identified far enough in advance to permit detailed mission coordination and planning. Aviation assets are diverted from other missions via the MACCS to execute immediate requests. Although the diverted aircraft may not be carrying the optimal ordnance load to prosecute the specific target set, a swift attack can exploit an unexpected enemy weakness or maintain the momentum of an attack.

SUMMARY

OAS is one method MAGTF commanders can employ their MAGTF combined arms team to shape the battlespace (deep, close, and rear). Its primary support of the warfighting functions is to provide the MAGTF fires and force protection through neutralization and destruction. OAS is subdivided into two categories; CAS and DAS. CAS missions require detailed integration of each air mission with the fire and movement of friendly forces. DAS missions lack the requirement for detailed integration with the fire and movement of friendly forces and comprise of AI, AR, and SCAR missions. OAS missions can be affected by one or any combination of requirements discussed in this chapter. Preplanned and immediate air support are two types of OAS mission classifications that can affect the timeliness of support.