

**Fire Support Coordination
by the
MAGTF Command Element**



U.S. Marine Corps

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FOREWORD

1. PURPOSE

Fleet Marine Force Manual (FMFM) 2-7-1, *Fire Support Coordination by the MAGTF Command Element*, sets forth doctrine for fire support coordination by the Marine Air-Ground Task Force (MAGTF) command element.

2. SCOPE

This manual focuses on the role of the MAGTF command element in fire support coordination. It addresses how the MAGTF command element interfaces with other elements of the MAGTF and with elements/forces external to the MAGTF. The manual is designed to supplement FMFM 2-7, *Fire Support in MAGTF Operations* and FMFM 6-18, *Techniques and Procedures for Fire Support Coordination*.

3. SUPERSESSION

None.

4. CHANGES

Recommendations for improving this manual are invited from commands as well as directly from individuals. Forward suggestions using the User Suggestion Form format to—

Commanding General
Doctrine Division (C 42)
Marine Corps Combat Development Command
2042 Broadway Street Suite 210
Quantico, VA 22134-5021

5. CERTIFICATION

Reviewed and approved this date.

BY DIRECTION OF THE COMMANDANT OF THE MARINE CORPS



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User Suggestion Form

From:

To: Commanding General, Doctrine Division (C 42), Marine Corps Combat Development Command, 2042 Broadway Street Suite 210, Quantico, Virginia 22134-5021

Subj: RECOMMENDATIONS CONCERNING FMFM 2-7-1, *FIRE SUPPORT COORDINATION BY THE MAGTF COMMAND ELEMENT*

1. In accordance with the foreword to FMFM 2-7-1, which invites individuals to submit suggestions concerning this FMFM directly to the above addressee, the following unclassified recommendation is forwarded:

Page	Article/Paragraph No.	Line No.	Figure/Table No.
Nature of Change:	<input type="checkbox"/> Add		
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2. Proposed new verbatim text: (Verbatim, double-spaced; continue on additional pages as necessary.)

3. Justification/source: (Need not be double-spaced.)

Note: Only one recommendation per page.

Fire Support Coordination by the MAGTF Command Element

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Chapter 1

Introduction

This manual focuses on the Marine Air-Ground Task Force (MAGTF) command element (CE) and its role in fire support coordination. It addresses how the elements of the MAGTF work together in fire support coordination and with forces external to the MAGTF. This manual is applicable to all MAGTFs and all types of operations in which a MAGTF may be employed. The reader should be familiar with FMFM 2-7, *Fire Support in MAGTF Operations* and FMFM 6-18, *Techniques and Procedures for Fire Support Coordination* before reading this manual.

Fire Support Coordination

As discussed in FMFM 2-7, fire support coordination includes fire support planning and coordination in operations. Fire support planning is the continuous and concurrent process of analyzing, allocating, and scheduling of fire support to integrate it with the maneuver forces to maximize combat power. Fire support planning results in a fire support plan which outlines how the commander directs the use of his available indirect fire weapons and armed aircraft. Coordination in operations is the process of implementing the fire support plan and of managing the fire support available to combat units. Coordination in operations involves the execution of prearranged fires contained in fire plans and the coordination of unscheduled fires requested by tactical units. The coordinating responsibility includes the requirement to disseminate timely fire support information, to institute coordination measures as required, and to integrate fire support activities which affect two or more fire support agencies, troop elements, or adjacent units.

Fire support coordination is the responsibility of all commanders—from amphibious task force (ATF)

and MAGTF to and including companies. Commanders are assisted by various agencies/personnel in the conduct of fire support coordination. These agencies/personnel include supporting arms coordination center (SACC), fire support coordination centers (FSCCs), supporting arms representatives (e.g., forward observers [FOs], naval gunfire [NGF] spotters, forward air controllers [FACs], air/naval gunfire liaison company [ANGLICO], etc). The fire support coordination functions conducted by these agencies/personnel are similar and overlapping to some degree. Thus, the possibility could exist that two agencies take or plan actions simultaneously which are contradictory to each other or that significant fire support coordination functions could be left undone. These possibilities are precluded by applying the principles of fire support coordination (FMFM 2-7), by practicing the spirit of cooperation among personnel within a unit, with other elements of the command and with adjacent units, and by developing an understanding of each other's functions through training.

Fire support coordination involves personnel from various agencies, communications equipment, and procedures. These are vital elements for success. You can see and talk to the personnel; you can see and

touch the communications equipment; and you can see and read the procedures. However, there is another critical element necessary for success which cannot be physically seen, talked to, touched, or read. This element is unity of effort. This is the coordinated effort towards a common goal of making the most efficient use of available fire support assets; it is cooperation. It is the working together by all commanders toward the accomplishment of a common mission which is imperative for complete and final success. Commanders develop the desire to cooperate, not only among their staffs and subordinates but also with other elements of the MAGTF. Such spirit of cooperation results in a unity of effort. The unity of effort must extend down the chain of command so that all echelons are working to attain the same goal. The commander's mission-type orders must reflect and foster this spirit when addressing the necessary coordination tasks.

Overview of Fire Support Coordination in the MAGTF

The MAGTF conducts fire support coordination to achieve combined arms effects in three overlapping, concurrent operations on the battlefield; deep, close, and rear operations. Appendix B defines these operations. The organization of the battlefield into deep, close, and rear operations serves to orient commanders and their staffs. This orientation promotes continuity in fire support planning, and minimizes duplication of efforts. For effective and efficient fire support coordination, an understanding of the distinction of deep, close, and rear operations requires the use of area of influence, area of responsibility (AOR), and area of interest.

- **area of influence**—(DOD, NATO) A geographical area wherein a commander is directly capable of influencing operations, by maneuver or fire support systems normally under his command or control. (Joint Pub 1-02)
- **area of responsibility**—(DOD, NATO) A defined area of land in which responsibility is specifically assigned to the commander of the area for the development and maintenance of installations, control of movement and the conduct of tactical operations involving troops

under his control along with parallel authority to exercise these functions. (Excerpt from Joint Pub 1-02)

- **area of interest**—(DOD, NATO) That area of concern to the commander, including the area of influence, areas adjacent thereto, and extending into enemy territory to the objectives of current or planned operations. This area also includes areas occupied by enemy forces who could jeopardize the accomplishment of the mission. (Joint Pub 1-02)

Within the MAGTF area of influence lies the MAGTF AOR. In joint operations, the AOR is defined by the joint force commander (JFC). The MAGTF commander subdivides his AOR and assigns his major subordinate element(s) (MSE) an AOR. In making this division, the MAGTF commander considers the area of influence of each MSE, the MSE's mission, the enemy, and the terrain. The MAGTF commander retains responsibility throughout his assigned AOR. He focuses on operations occurring outside his MSE's AOR(s) and allows the MSE(s) to concentrate on operations within its respective AOR(s). AORs shift with changes on the battlefield. The MAGTF commander continuously seeks battlefield information throughout his area of interest. (See fig. 1-1.)

While the MAGTF commander's responsibility lies throughout the MAGTF AOR, his focus is on deep operations. He conducts deep operations primarily within his AOR. The MAGTF CE coordinates the engagement of targets detected outside the MAGTF AOR if these targets affect the MAGTF commander's mission accomplishment. The MAGTF participates in joint/combined deep operations outside the MAGTF AOR as directed by the JFC. Fire support for deep operations includes those fires delivered to isolate and shape the battlefield. The MAGTF commander uses these fires to create weaknesses in the enemy forces. The MAGTF commander uses these weaknesses to create openings which elements conducting close operations can exploit. Fire support planning and execution in deep operations must consider the scheme of maneuver of close operations. The MAGTF commander influences close operations through targeting, allocation of assets, and tasking. The MAGTF CE ensures an orderly transition between deep and close operations.

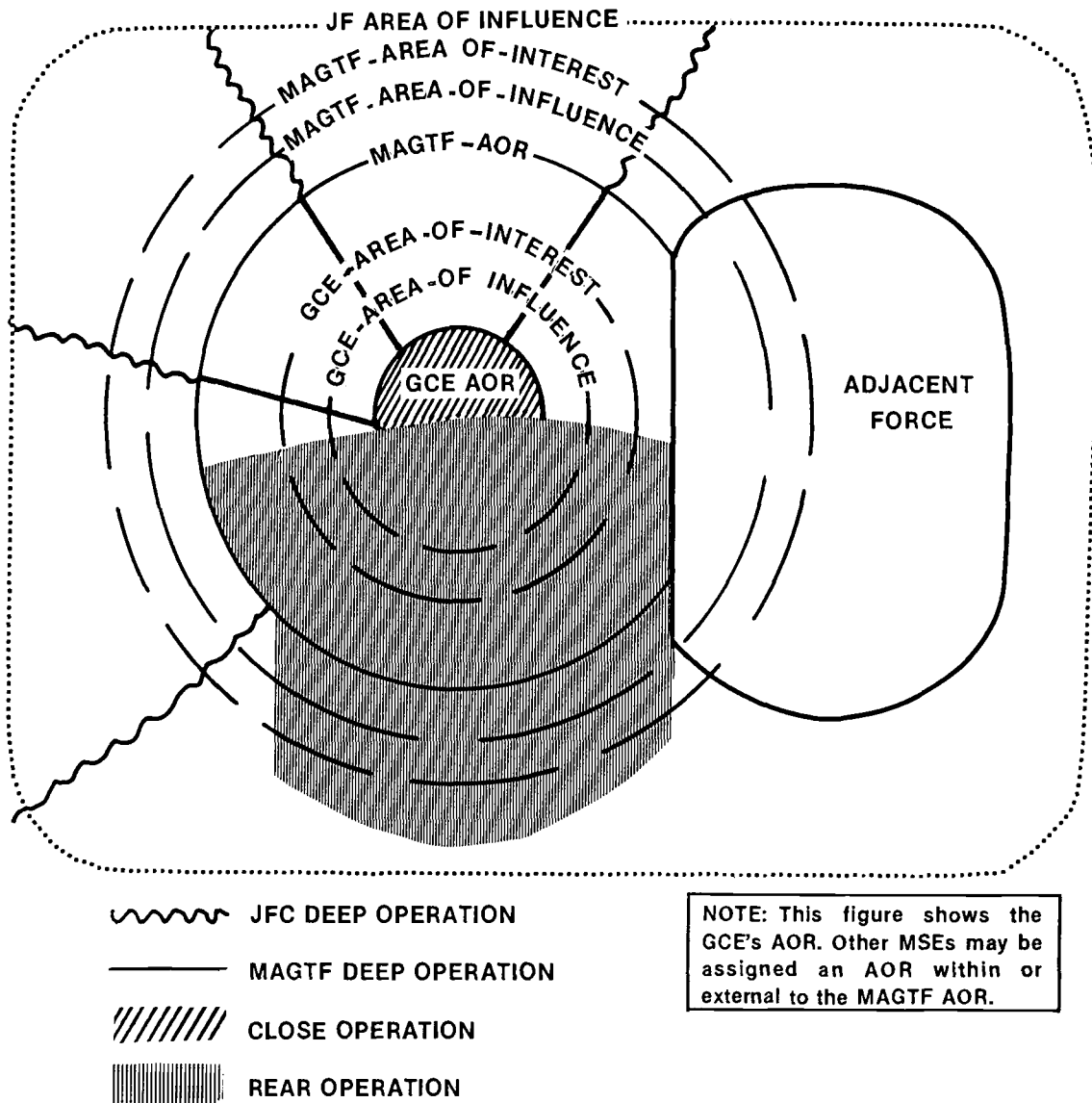


Figure 1-1. The MAGTF Battlefield.

The ground combat element (GCE) focuses on close operations. Close operations involve those activities which, in terms of distance and time, are close to the ground forces. Close operations require the detailed integration and coordination of fire support with the scheme of maneuver or plan of defense. Close operations are conducted primarily within the GCE's AOR. The GCE's area of interest extends outside its AOR. The GCE considers those targets detected outside its AOR that can rapidly close with the GCE. Engagement of a target outside its AOR requires coordination if the target is in another unit's

AOR. The GCE supports rear operations and deep operations as directed by the MAGTF commander.

The aviation combat element (ACE) is employed across the MAGTF's area of influence in support of deep, close, and rear operations. The ACE can be assigned its own AOR in situations where the ACE is assigned a maneuver function.

The MAGTF rear area is located within the MAGTF's AOR, extending from the rear boundary of close operations to the MAGTF rear boundary. Rear

operations are those operations conducted in the MAGTF rear area. Within the rear area, units must take measures to minimize the effects of enemy actions. These measures are called rear area security (RAS). The MAGTF commander supervises RAS in rear operations. He *normally* designates the combat service support element (CSSE) commander as the rear area security coordinator (RASC) and gives him authority to conduct RAS in rear operations. However, during planning

and operations the MAGTF commander keeps abreast of the situation and assists the RASC. He tasks other elements of the MAGTF to support the RASC. The RASC establishes a rear area operations center (RAOC). The RAOC plans and coordinates fire support for RAS in rear operations. The RAOC maintains close coordination with the MAGTF FSCC for fire support coordination requirements. The MAGTF participates in joint rear operations as required.

Chapter 2

MAGTF Organization for Fire Support

The continued primacy of the MAGTF in our philosophy of warfighting and the inevitability of future operations conducted in an increasingly dominant **joint environment** demand an expansion in scope, functions, and capabilities of our fire support coordinating systems. The principal agency for fire support coordination in the MAGTF CE is the MAGTF FSCC. The establishment of a MAGTF FSCC, task-organized around an existing core of personnel, demonstrates the MAGTF's focus on joint/combined interoperability. It serves as the commander's principal agency to achieve synergism and cohesiveness. This chapter discusses the organization of a MAGTF FSCC. It identifies the fire support coordination functions of the MAGTF CE and how it interfaces with the fire support coordination agencies of the other elements of the MAGTF.

MAGTF Command Element

The MAGTF commander task-organizes his FSCC with the personnel, equipment, and communications links appropriate to the fire support coordination functions to be conducted and to the tactical situation. For example, the fire support coordination functions of a Marine expeditionary unit (MEU) FSCC in a noncombatant evacuation operation (NEO) and those of a Marine expeditionary force (MEF) FSCC in a joint offensive operation differ substantially. Accordingly, the composition of the FSCCs will differ. Regardless of the composition, the role of the MAGTF FSCC is to implement the MAGTF commander's intent.

The MAGTF FSCC conducts fire support planning and coordination in operations. Fire support planning involves the anticipation and allocation of fire support, including targeting assets. Targeting and attack guidance are critical to fire support planning. The MAGTF FSCC develops fire support plans to support the *deep operations* portion of MAGTF operations and participates in the planning for joint/combined deep operations. The MAGTF FSCC

maintains close coordination with the GCE(s) FSCC for continuity between deep and close operations. Transition between these operations is enhanced by the proper use of control and fire support coordination measures, through targeting, and by the allocation of assets. The MAGTF FSCC provides feedback to the GCE(s) FSCC on the disposition of targets encountered during deep operations. The GCE(s) FSCC uses this feedback to develop plans for supporting future GCE operations. In this way, the GCE(s) is able to exploit the success of deep operations which enhances the success of the GCE's close operations. The MAGTF FSCC keeps abreast of and assists the RAOC in planning for RAS in rear operations.

During coordination in operations, the MAGTF FSCC continues to gather and disseminate fire support information to the GCE(s) FSCC, senior air control agency, and RAOC. It maintains liaison with other agencies and elements as required. It also integrates the delivery of fires for deep operations. The MAGTF FSCC coordinates those matters that cannot be coordinated by GCE FSCCs and those matters that affect the MAGTF commander's mission

accomplishment and coordinates with higher, adjacent, and external (i.e., joint and allied) agencies. The MAGTF FSCC serves as the terminal for GCE fire support requirements. The MAGTF FSCC receives the GCE's target nominations and coordinates the GCE's requests for fire support from external agencies; e.g., coordinating the provision of an Air Force air strike for the GCE. The MAGTF FSCC is also the terminal for fire support requirements of the ACE and CSSE (e.g., suppression of enemy air defenses [SEAD], fire support for rear operations).

The MAGTF FSCC is linked to the ACE Marine air command and control system (MACCS) through the tactical air command center (TACC). The disposition of other MACCS agencies is driven by various factors, including the size of the airspace to be controlled, the number and disposition of units, the extent of projected air operations, communications requirements, and mobility requirements. Various options of employment exist, particularly when the MAGTF is comprised of multiple division-sized GCEs, each deployed with a direct air support center (DASC). *Paramount to the employment of the MACCS is the requirement for both the MAGTF FSCC and the GCE(s) FSCC to be collocated with a MACCS agency.* Such connectivity promotes the integration of MAGTF air-ground assets into a combined arms effort. Collocation is achieved physically, electronically, and/or via task-organized MACCS liaison teams. A typical FSCC/MACCS relationship is illustrated in figure 2-1.

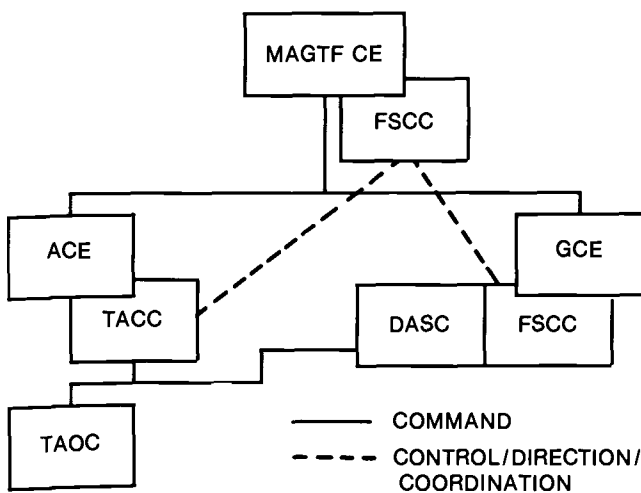


Figure 2-1. Typical FSCC/MACCS Relationship.

Ground Combat Element

The GCE commander conducts his fire support coordination functions through his GCE FSCC. FSCCs are also established by subordinate commanders of the GCE down to the battalion level. Fire support coordination functions of the GCE involve fire support planning and coordination in operations. Coordination in operations becomes increasingly dynamic in the lower echelon FSCCs of the GCE. The GCE plans fires, conducts targeting, and integrates fires with maneuver in close operations.

The capability to conduct fire support coordination functions within a GCE's area of influence exists in the FSCC/DASC organization. The GCE FSCC is typically collocated with the DASC. If this is not possible, connectivity must be provided through a MACCS liaison team. The tactical linkage between the GCE and ACE is maintained through tactical air control parties (TACP) organic to GCE units and the DASC. The GCE interfaces with other elements of the MAGTF directly as required, applying the spirit of cooperation. Conflicts that cannot be resolved directly are resolved by the MAGTF FSCC.

Aviation Combat Element

The ACE provides MAGTF air support. The MAGTF may also receive air support from external sources. The ACE commander conducts his fire support functions through the MACCS. The MACCS consists of several agencies such as the TACC, tactical air operations center (TAOC), and the DASC. The fire support functions of the ACE include control and coordination of aircraft supporting maneuver forces.

In amphibious operations, the responsibility for the control of air operations is normally passed by the commander, amphibious task force (CATF) to the commander, landing force (CLF) when the necessary facilities are established ashore and when requested. When control of air operations has been passed to the CLF, the ACE controls and coordinates air operations in the objective area, including anti-air warfare (AAW) and airborne electronic

warfare (EW). The ACE's span of control excludes antisubmarine warfare, antisurface warfare, sea mining, and mine countermeasure operations. The CATF may retain certain aspects of air control; e.g., air defense in the seaward sector of the amphibious objective area.

The MAGTF interfaces with the joint force for air control matters. This interface is normally with the joint force air component commander (JFACC) who is designated by the JFC. For example, fire support coordination measures and procedures must be coordinated with joint and/or allied forces for deconfliction of airspace for deep operations extending outside the MAGTF AOR.

The ACE provides all or a portion of the six functions of Marine aviation in varying degrees based on the tactical situation, the MAGTF's mission and size, and requirements of the JFC. The six functions of Marine aviation are offensive air support, assault support, air reconnaissance, EW, AAW, and control of aircraft and missiles. Optimum employment of ACE assets is achieved by the ACE commander managing the airspace within the MAGTF AOR.

The ACE fulfills air support requirements of the MAGTF. The MAGTF and ACE commanders identify apportionment and allocation of air support. Based on guidance received from the MAGTF commander, the ACE commander establishes his air tasking orders.

Combat Service Support Element

The CSSE commander is normally assigned responsibility for the coordination of RAS in rear operations. No formal supporting arms coordination agency exists within the CSSE. The CSSE forms a fire support coordination cell in the RAOC. In staffing the fire support coordination cell, the CSSE is augmented by fire support personnel available within the Fleet Marine Force (FMF) and/or from non-FMF assets. An example of a source of augmentation is representatives from ANGLICO, if not otherwise employed in its primary mission.

The fire support coordination cell's functions consist primarily of coordination and clearance of fire missions in support of RAS in rear operations. (Planning includes gathering information pertinent to rear operations, identifying fire support availability, procedures for engaging targets of opportunity, fire support coordinating procedures, etc.) Targeting is not a primary function. The MAGTF commander may allocate to the CSSE fire support; e.g., mortars, naval surface fire support (NSFS), close-in fire support (CIFS). The RAOC effects the necessary fire support coordination to avoid fratricide in rear operations. The RAOC maintains close contact primarily with the MAGTF FSCC for fire support coordination requirements. For example, the RAOC coordinates with the MAGTF FSCC to obtain fire support, to establish fire support coordination measures or procedures, and/or to obtain assistance in the integration of indirect fire and air support. As the battlefield becomes extended, the RAOC may have to interface with the TACC because of communications capabilities.

Fire Support Coordination Functions of the MAGTF CE

Specific fire support coordination functions of the MAGTF CE are listed below. These functions will be discussed in detail in the following chapters:

- Planning fire support for deep operations and assisting the RAOC plan for MAGTF rear operations. This planning involves other MAGTF elements as required.
- Conducting targeting functions to meet the MAGTF commander's intent. A targeting committee may be formed consisting of representatives from the GCE(s), ACE, CSSE, G-3/S-3, G-2/S-2, and surveillance, reconnaissance, intelligence group (SRIG). In joint operations, targeting is conducted in conjunction with the JFC's targeting effort.
- Providing USMC representation at joint task force (JTF) fire support meetings/conferences. The MAGTF CE arranges for fire support liaison officers to other services as required.

- Disseminating pertinent information to other elements of the MAGTF and to forces outside the MAGTF.
- Tasking of elements of the MAGTF to conduct those functions required to integrate supporting arms with each other and with other means of combined arms.
- Establishing reporting requirements, fire support coordination measures (e.g., fire support coordination line), and fire support coordination procedures when existing procedures are inadequate.
- Resolving fire support conflicts between other MAGTF elements when these conflicts cannot be resolved at lower levels.
- Recommending to the MAGTF commander the apportionment of aviation and NSFS efforts and where necessary, reallocation of artillery assets belonging to the GCEs when more than one GCE is in the MAGTF.
- Requesting and coordinating external fire support or target acquisition support with higher, adjacent, and joint/allied forces.

MAGTF Fire Support Coordination Center

The MAGTF FSCC is a task-organized facility. The current table of organization (T/O) includes a nucleus of supporting arms representatives (e.g., artillery officer, air officer [AirO]) on the MAGTF CE staff. The MAGTF FSCC is built around this nucleus. The nucleus is augmented with personnel and equipment appropriate to the fire support coordination functions to be conducted. Sources of augmentation include USMC and external sources. USMC augmentation may be obtained from ANGLICO (if not otherwise committed), the GCE(s), assets of an uncommitted MAGTF, and/or non-FMF assets. Examples include the provision of watchstanders, individuals with specific skills such as EW, unmanned aerial vehicles (UAVs), low altitude air defense (LAAD), nuclear and chemical weapons employment, or individuals with a required level of proficiency in fire support coordination. External sources include representatives or liaison personnel/teams from

joint and allied forces. An example would be service representatives for coordination of assets such as Tomahawk missiles or multiple launch rockets. The MAGTF commander designates his fire support coordinator (FSC).

Targeting is conducted by a target information officer (TIO) or a designated targeting person. The current T/O includes a TIO for the MEU. Currently, a TIO is designated for Marine expeditionary brigade (MEB) and MEF operations. For more on targeting, see chapter 3.

Since the MAGTF FSCC is task-organized, the net composition varies. Those communications circuits necessary for the conduct of MAGTF-level fire support coordination functions are established/activated. A description of the nets is contained in FMFM 3-30, *Communications* and FMFM 6-18. Examples of nets that may be employed by the MAGTF FSCC are listed below.

- MAGTF Fire Support Coordination Net *
- NSFS Control Net
- MAGTF/Landing Force (LF) NSFS Support Net
- MAGTF/LF Artillery Command/Fire Direction (Arty Comd/FD) Net
- MAGTF Tactical Air Command (TAC) Net
- Tactical Air Request (TAR) Net(s)
- MAGTF Air Observation Net **

* A Joint Fire Support Coordination Net may also be monitored.

** Artillery and/or NSFS Air Spot Nets may also be monitored.

In Navy/Marine Corps amphibious operations, the MAGTF FSCC is the LF FSCC. For discussion of the LF FSCC, see chapter 4.

MEF Fire Support Coordination Center

Supporting arms representatives in the MEF CE are in the current operations and future operations/tactical

deception branches of the G-3 division. The supporting arms representatives assigned to the current operations branch focus on deep operations which are ongoing and occurring in the next 72 hours. These representatives also ensure transition to close operations. These individuals include an assistant operations/supporting arms officer (an artillery officer), a naval gunfire officer (NGFO), and an assistant operations officer (air).

Those supporting arms representatives assigned to the future operations/tactical deception branch focus on fire support planning for future deep operations; e.g., 72 hours in advance and beyond. These individuals include a fire support officer (an artillery officer) and an ACE operations officer.

During operations, the supporting arms representatives of both branches participate in manning the MAGTF FSCC. Additionally, they continue to provide fire support expertise to their respective branches.

In joint operations, a JTF branch is formed in the MEF CE. The T/O includes JTF billets for artillery, infantry, logistics, and intelligence officers. Additional representative requirements may be established and filled by augmentation; e.g., air, EW. The JTF branch is used for liaison purposes when the MEF is a component of the JTF or as the nucleus of the JTF staff when the MEF commander is designated as the JTF commander.

MEB Fire Support Coordination Center

Supporting arms representatives in the MEB CE are in the G-3 section. These individuals include an artillery officer/weapons employment officer, an AirO, an NGFO, and assistants.

MEU Fire Support Coordination Center

Supporting arms representatives in the MEU CE are in the operations section. These billets include an assistant S-3/FSC officer, an assistant S-3/air liaison officer, a TIO, and assistants. The assistant S-3/FSC officer is an artillery officer. NSFS expertise for the MEU FSCC may be provided by the naval gunfire

liaison officer (NGLO) of the battalion landing team (BLT) if available, the MEU assistant S-3/FSC chief, or by augmentation.

Tasks of the MAGTF FSCC Members

Although the staffing is different at the MEF, MEB, and MEU levels, there are common sets of tasks for key personnel of the MAGTF FSCC. The FSCC personnel work closely with other staff officers (e.g., G-2/S-2, G-3/S-3, nuclear and chemical weapons employment officer [WEO], electronic warfare officer [EWO], etc.) In fulfilling the functions of the MAGTF CE, members of the MAGTF FSCC conduct the following tasks. Although some of these tasks are listed for an individual member of the FSCC, the execution of these tasks often requires coordination with other FSCC members and MAGTF CE staff branches/sections.

Fire Support Coordinator

The fire support coordinator performs the following tasks:

- Identifies personnel, liaison, communications, and equipment requirements for the MAGTF FSCC. This key task ensures sufficient personnel and equipment augmentation is obtained for a functional FSCC.
- Advises the MAGTF commander and staff on fire support and fire support coordination matters. Examples include advice/recommendations for the allocation of fire support delivery and target acquisition assets, requirements for fire support coordination measures and procedures, and requirements for interface with external agencies/headquarters.
- Coordinates the activities of the MAGTF FSCC.
- Reviews NSFS, air, and artillery estimates of supportability produced by the MAGTF FSCC.
- Coordinates with the MAGTF EWO and personnel in the signals intelligence/electronic warfare coordination center (S/EWCC) (when established) to ensure that jamming, electronic deception, and destructive electronic countermeasures are

integrated with the MAGTF fire support plan and the fire support plans of other elements of the MAGTF.

- Participates in MAGTF planning sessions with other sections of the MAGTF CE and with representatives of other elements of the MAGTF. The MAGTF FSC ensures that the MAGTF commander's fire support guidance and priorities are understood and applied during the planning. The MAGTF FSC focuses on planning for deep operations. He monitors planning for close operations and assists the RAOC in rear operations planning. The GCE FSC focuses on planning for close operations.
- Establishes liaison with fire support personnel at higher, adjacent, and subordinate headquarters.
- Supervises the preparation of the fire support appendix to the MAGTF operation order.
- Coordinates with the MAGTF G-2/S-2 and personnel in intelligence and targeting facilities on intelligence and targeting matters. Takes actions to ensure fire support and intelligence efforts are compatible. For example, identifies intelligence requirements for fire support and plans fires to support reconnaissance efforts.
- Supervises the planning process for deep operations and assists the RAOC in planning fire support for rear operations.
- Coordinates the execution of deep operations.
- Assists the AirO in reviewing offensive air support requirements from elements of the MAGTF.

In **amphibious operations**, the MAGTF fire support coordinator –

- Functions as the LF FSC in the SACC and keeps the MAGTF commander advised on fire support.
- Assists the LF NGFO in reviewing the NSFS requirements from elements of the MAGTF.
- Works with representatives from other elements of the MAGTF on fire support matters.
- Represents the MAGTF commander's requirements for deep operations to the supporting arms coordinator in the SACC.

In **joint operations**, the MAGTF fire support coordinator –

- Establishes liaison and works closely with other services on joint fire support matters. The members of the MAGTF FSCC assist the FSC in this function.
- Participates in joint planning sessions.

Artillery Officer

The artillery officer performs the following tasks:

- Provides expertise and advice on artillery to the MAGTF commander and MAGTF FSCC as required.
- Prepares an estimate of artillery requirements, and if needed an artillery estimate of supportability addressing MAGTF-level considerations. FMFRP 6-17, *Combat Service Support for Artillery Units*, addresses the artillery planning requirements of the MAGTF artillery officer.
- Keeps abreast of artillery capabilities in and available to the MAGTF. Coordinates with the artillery officer in the GCE FSCC(s) and the senior artillery commander in the GCE(s) on artillery matters. Coordinates with external agencies on artillery matters as required.

In **amphibious operations**, the artillery officer –

- Mans LF stations in the SACC.
- Works with the senior artillery commander in identifying and coordinating artillery requirements for the landing; e.g., landing plan, tactical-logistical group (TACLOG).

Naval Gunfire Officer

The naval gunfire officer performs the following tasks:

- Provides expertise and advice on NSFS to the MAGTF commander and MAGTF FSCC.
- Prepares an NSFS estimate of supportability addressing MAGTF-level considerations, if needed.

- Reviews requirements for NSFS submitted by elements of the MAGTF.
- Monitors status of NSFS, including availability of ships and ammunition.
- Prepares the MAGTF NSFS plan.
- Establishes liaison with ATF and GCE NGF personnel.

In **amphibious operations**, the naval gunfire officer –

- Mans LF stations in the SACC.
- Reviews LF NSFS requirements for G-3 and forwards them to CATF on CLF approval.
- Coordinates with the ATF NGFO.

Air Officer

The MAGTF AirO performs the fire support tasks as listed below. It should be noted that the AirO conducts other duties (e.g., the coordination of assault support) not directly related to the work of the FSCC. The AirO –

- Provides expertise and advice on aviation to the MAGTF commander and the FSCC.
- Prepares an aviation estimate of supportability addressing MAGTF-level considerations, if needed.
- Consolidates MAGTF air support requirements.
- Determines MAGTF air support capabilities.
- Establishes liaison with the ACE, the GCE AirO, and the AirOs of higher and adjacent headquarters on aviation support and airspace management matters.
- Prepares the air fire plan in the MAGTF operation order and works with the ACE in the preparation of the ACE operation order.

In **amphibious operations**, the air officer –

- Plans for the deployment of aviation elements ashore. Such planning for movement ashore is also conducted by others; e.g., ACE, CSSE.
- Reviews the air support requirements from elements of the MAGTF and forwards them to the CATF on CLF approval.
- Mans LF stations in the SACC. He works closely with the LF FSC and supporting arms coordinator (SAC) and maintains liaison with the air support controller (ASC) from the tactical air control center (afloat).

Target Information Officer

The target information officer performs the following tasks:

- Supervises the processing of target data within the G-3/S-3 section.
- Works closely with the G-2/S-2 section on targeting matters.
- Maintains appropriate records of targets.
- Prepares and maintains a MAGTF list of targets. In expeditionary operations and sustained land operations, a MAGTF target list may be established.
- Works closely with higher, adjacent, external, and subordinate targeting personnel.

In **amphibious operations**, the target information officer –

- Mans LF stations in the SACC, and establishes liaison with the joint intelligence center (JIC).
- Processes nominations of targets for the ATF target list and forwards them to CATF upon CLF approval.
- Maintains the ATF target list after its responsibility has been passed to the LF.

Chapter 3

Fire Support Planning

The MAGTF uses a fire support planning process which involves an interaction between higher and lower echelons. Lower echelons conduct fire support planning concurrently with higher echelons. At the higher echelons, the fire support planning process accommodates the commander's intent and is generally focused on deep operations. The higher echelon disseminates guidance and information to lower echelons on fire support matters, on targeting, on anticipation of requirements, allocation of assets, and coordination with agencies outside the MAGTF. The lower echelon recommends refinements to the higher echelon plan, identifies and submits additional fire support requirements, and develops plans which complement and implement the plans prepared by the higher echelon. Planning between the echelons requires close liaison, unity of effort, and coordination.

Chapter 2 outlined the functions of the MAGTF CE and its relationship with other MAGTF elements. Chapter 3 expands the discussion in chapter 2 to address the MAGTF CE's function in the realm of fire support planning. The point of main effort of MAGTF fire support planning must always be establishing battlefield conditions that permit the initiation of decisive maneuver. It is at MAGTF CE level that organic and joint fires are integrated to respond to intelligence and targeting data.

The key actions of the MAGTF CE in fire support planning are—

- Gathering and disseminating information.
- Preparing estimate of supportability.
- Determining requirements.
- Apportioning and allocating assets.
- Targeting.
- Effecting coordination.
- Preparing the fire support plan.

Information

Information is the key to effective fire support coordination. As soon as a mission is assigned or a probable mission is identified, the MAGTF CE starts gathering the information it needs to plan the operation. The MAGTF CE disseminates pertinent

information to other elements of the MAGTF and to forces outside the MAGTF. Information is the key to effective fire support coordination. The MAGTF FSCC collects information which will influence fire support operations. This information is passed to subordinate, adjacent, and higher headquarters which need it. Appendix A contains examples of this information.

Estimates of Supportability

Staff estimates of supportability are prepared by the GCE, ACE, CSSE, and the MAGTF FSCC. The estimates prepared by the MAGTF FSCC focus on the accomplishment of the MAGTF's mission. During the preparation of estimates, the MAGTF FSCC supports their counterparts on the ACE, CSSE, and GCE staffs by providing them with information they know these elements need or with information requested by these elements.

Requirements

An essential function in fire support planning by the MAGTF FSCC is the anticipation of requirements of the subordinate elements of the MAGTF. Requirements prepared by each element of the MAGTF are reviewed at the MAGTF CE; duplications and conflicts are resolved; and consolidated requirements are submitted to the appropriate higher echelon for fulfillment. Requirements for support from external sources are expeditiously processed to the appropriate agency.

Apportionment and Allocation of Assets

Apportionment is the determination and assignment of the total expected effort by percentage and/or by priority that should be devoted to the various air operations and/or geographic areas for a given period of time. (Joint Pub 1-02) The MAGTF commander apportions those assets not organic to the GCE; e.g., air and NSFS. For example, the apportionment of aviation may include a specified percentage to deep air support (DAS), a percentage to close air support (CAS), a percentage to AAW, etc. The apportionment of NSFS may include a specified number of ships for an element(s) of the MAGTF. Apportionment normally extends down to the GCE level and always reflects the commander's identified main effort.

Subsequent to apportionment, an allocation of assets is made. The ACE commander determines the

allocation based on the availability of assets. For example, the allocation of aviation assets may include a specified number of sorties for DAS, a number of sorties to an element(s) for CAS, etc. The allocation is submitted to the MAGTF commander for approval. Similarly, the MAGTF NGFO makes an allocation of NSFS ships. Ships are allocated for deep strikes and to elements of the MAGTF. The GCE's higher artillery commander makes the allocation of GCE artillery with the guidance of the GCE commander. When more than one GCE is in the MAGTF, the MAGTF commander may reallocate artillery assets belonging to the GCEs.

Targeting

Targeting is an integral part of the planning process. Targeting is how the MAGTF commander focuses fire support to prepare the battlefield. Targeting is the process of selecting targets and matching the appropriate response to them taking account of operational requirements and capabilities. (Joint Pub 1-02)

The targeting activities of the MAGTF CE, the GCE, and the ACE must complement each other. If the targeting activities of the MAGTF CE, the GCE, and ACE are not carefully coordinated, they can collectively work at cross purposes or leave vital functions undone. Successful targeting between these agencies requires each element to understand the capability and functions of the other regarding targeting. The use of the procedures outlined in FMFM 6-18, and expanded on by the MAGTF CE's standing operating procedures and fire support plan facilitate targeting in the MAGTF. Within the MAGTF CE, the MAGTF FSCC, target information section (TIS) (when established), G-3/S-3, G-2/S-2, SRIG, and EWO (S/EWCC when established) work together in the targeting effort. They exchange data, make personal coordination, and form a targeting committee for critical targeting functions.

For targeting to be effective, the areas of influence and areas of interest must be understood. This understanding is required because targeting efforts tend to overlap between deep and close operations. Targets are also exchanged between all elements of

the MAGTF. The MAGTF CE has the greatest capability for targeting. Other elements identify targets detected within their respective areas of influence. The GCE may nominate targets that it detects for inclusion on target lists or request engagement/assistance in engaging these targets. The ACE also makes significant contribution to targeting through its pilot reports and electronic capabilities. The predominant targeting effort for rear operations is identifying how targets of opportunity will be engaged. The MAGTF CE ensures the MAGTF's targeting is compatible with the targeting of joint and combined forces. Close coordination, liaison, and representation is made with the JFC's joint targeting coordination board (JTCCB).

The MAGTF uses a targeting methodology which can be characterized as **decide-detect-deliver**. Decisions are made about the tasking of target acquisition, information processing, selection of an attack means, and the requirement for damage assessment. Targeting is based on the friendly scheme of maneuver and/or tactical plan and includes an assessment of the weather, terrain, and the enemy situation. Detection involves the tasking and coordination of target acquisition assets to find specific targets. Deliver relates to the attack of targets and damage assessment.

Paramount to the MAGTF CE's targeting efforts are two processes: intelligence preparation of the battlefield (IPB) and target value analysis (TVA). A decision on high pay-off targets and attack guidance results from these processes. The MAGTF CE's high-payoff targets consist of enemy units and facilities. The intent is to disperse and attrit designated enemy units and to deny the enemy the ability to mass his forces. The other focus is on facilities that contain the principal command, control, and communications agencies in order to destroy the enemy's capability to coordinate and synchronize his combat power. The MAGTF CE targets without regard to boundaries. Deep operations are the focus of the MAGTF CE's targeting efforts. Targeting is conducted for future operations involving conventional munitions, and when appropriate, nuclear/chemical fires.

A **target numbering system** is established within the MAGTF and within the joint force. The MAGTF FSCC determines the target numbering system for

the MAGTF and makes target number assignments to elements of the MAGTF. Unless otherwise required, the Marine Corps target numbering system (see FMFM 6-18) is used. This system based on NATO standardization agreements, incorporates preassigned target letters and number allocations for Marine units. When the MAGTF is a subordinate component to a higher commander, the higher commander uses the same NATO numbering system but may assign specific letters for the MAGTF.

The MAGTF CE develops and maintains **attack guidance and target selection standards** to ensure that fire support meets the commander's intent. The MAGTF FSCC works closely with its counterparts in lower, higher, adjacent, and supporting commands on these matters. Because there are numerous factors to consider when establishing attack guidance, a targeting committee may be formed to bring together specialists to advise in their respective areas.

A decision must be made on **damage criteria**. Damage criteria are the critical levels of various effects, such as blast pressure and thermal radiation, required to achieve specified levels of damage. (Joint Pub 1-02) It is the degree of damage to be achieved (e.g., destruction, neutralization, or suppression) for a specific target/type of targets. **Target damage assessment guidance** is also established by the MAGTF CE. The appropriate agency is directed to provide detailed damage assessment for important targets that are to be damaged or destroyed rather than suppressed. The commander must ensure sufficient assets are allocated for an accurate damage assessment. The results may dictate when and where to commit maneuver forces and, equally important, how much time is available to grasp the initiative. Damage assessment is not normally requested for targets that are suppressed or very mobile, thereby reducing the risks to collection assets.

The MAGTF CE, through the SRIG, determines and coordinates the employment of information and intelligence collection assets such as reconnaissance assets, UAVs, and other target acquisition assets within the MAGTF. Coordination is also made with joint and/or allied forces to ensure integration and continuous coverage.

The MAGTF CE facilitates the targeting activities of the GCE and the mission planning of the ACE by rapidly passing targets to the GCE and ACE and by responding to their requests for target data. Deciding which target data to pass to elements of the MAGTF can be difficult. If all targets are forwarded to the elements to *play it safe*, the targeting and fire support coordination channels soon become clogged and the system becomes less responsive. Certain general guidelines are applicable to the dissemination of targets by the MAGTF CE as follows:

- Targets within an element's area of influence should be passed to that element and affected elements for action as appropriate, particularly when the target is within the element's AOR. For example, the GCE has the best information on the area to its immediate front and is best able to judge the importance of a target in this area. The MAGTF FSCC may assist the GCE in obtaining the necessary fire support or other means such as EW to engage the target if required.
- Data on targets that can affect an element's operation within the next 24 hours should be forwarded to that element. For example, a tank battalion 40,000 meters from the GCE is (in the right terrain) two hours from the GCE. The tank battalion is of concern to the GCE even though it is beyond the range of artillery. On the other hand, a bunker complex 40,000 meters from the GCE is of little concern to the GCE from a targeting point of view if the GCE is planning to bypass the bunker complex and the areas which can be observed from the bunker complex.
- Targets which fall in the area of influence of two or more elements are passed to the element which can best achieve the desired results. The selection is made in consideration of mission, enemy, terrain and weather, troops and support available-time available (METT-T).

To facilitate the passing of target data, MAGTF CEs have a TIS located in the MAGTF combat operations center. The TIS is a station from which the TIO or designated targeting person(s) coordinates targeting matters. Depending on the need and personnel availability, the G-2/S-2 intelligence section may provide assistants to work with the TIO in the TIS. The TIO works closely with the G-2/S-2 section

through his counterpart, the target intelligence officer (TGTINTELO). The G-2/S-2 is responsible for target detection/identification, target analysis, passage of target data, and damage assessment. In a MEF and MEB, the G-2 section normally includes some target intelligence personnel to conduct and coordinate these functions. A MEU CE S-2 section may not include any personnel whose sole function is target intelligence. When the number of targeting personnel assigned is inadequate, some target intelligence duties must be assigned to personnel whose primary function is not target intelligence. To be effective, targeting personnel must know what targets artillery, NSFS, aviation ordnance, and EW are effective against, and what information is needed to employ these assets effectively against these targets.

The TGTINTELO receives and analyzes target data. Target data is exchanged with the TIO as it becomes available. The TIO, in turn, analyzes the target data and disseminates it to the appropriate element/agency within or external to the MAGTF; e.g., the GCE FSCC, the TACC, the RAOC. If the target data is of interest to the MAGTF CE, the MAGTF FSC and G-3 watch officer are informed of the possible action.

The MAGTF CE may authorize the GCE and ACE direct liaison with adjacent and supporting units to exchange target data. This liaison should be authorized as early as possible in the planning cycle.

The MAGTF CE conducts preliminary weapon-eering as part of target analysis in making a decision on how and whether to attack a target. Targets can be attacked by the GCE, the ACE, other assets under the control of the MAGTF, or by external forces. If the target is to be attacked by the GCE, the target is sent to the GCE with appropriate remarks pertaining to its attack or passed to the GCE for whatever action the GCE deems appropriate. Targets passed to the GCE should be within the area of influence of the GCE. The GCE commander can attack targets with whatever means he believes are best. If the target is to be attacked by the ACE, the data is sent directly to the ACE via the MAGTF AirO. This situation usually occurs when the target is within the MAGTF's area of influence and beyond GCE's area of influence or when the target can be engaged better by ACE assets. The MAGTF CE may

use other assets under its control for the attack of selected targets, such as NSFS or attached multiple launch rockets. A request may be sent to a higher authority or external force for the attack of targets.

Time-critical information and intelligence must be disseminated as rapidly as possible. Targets capable of displacing rapidly and/or imposing an immediate serious threat must be engaged as soon as possible. For targets requiring an urgent response, the decision to attack targets must be made rapidly to allow the delivery of effective fires. Clearly-stated attack guidance enhances rapid decision making. Speed is achieved through well-understood procedures for rapid transmission of the target to the appropriate weapon system once an attack decision has been made. Consider streamlining transmissions between sensor/target acquisition assets and a weapon system.

Decisions are made for the attack of targets in various circumstances. The circumstances are the attack of a single, simple fixed- or semi-fixed target; e.g., communications node and the attack of a complex target or several targets within a given period or area; e.g., assembly area or schedule of fires, respectively. The decisionmaker must be clearly designated. The MAGTF commander normally designates the MAGTF FSC or G-3/S-3 as the decisionmaker. In some situations, the decision may require the expertise of the targeting committee.

Several factors impact on the decision to attack a target.

- Commander's guidance.
- TGTINTELO's and TIO's analysis.
- Results of preliminary weaponeering.
- Availability of attack means
- Tactical situation
- Target's capability to effect accomplishment of this mission
- Possible civilian casualties
- Rules of engagement
- Fire support coordination measures in effect.

- Which targets will not be attacked if this target is attacked. Expect there to be more targets than can be attacked with available resources.
- What collection capability might be sacrificed due to attack of the target. This would alert the enemy to the capability which acquired the target.
- Probability of achieving desired results. Consider the possible loss of surprise.
- Probability of another element/unit attacking the target. Assess the need for coordination.

The MAGTF CE maintains a MAGTF list of targets. If an ATF target list or joint target list (JTL) is not published, the MAGTF CE may establish a MAGTF target list. Caution should be exercised to avoid having more than one target list. When target data must be sent rapidly to another agency/element, a target report (TAREP) may be used. (See FMFM 6-18.) When passing a target to an aviation agency, the joint tactical air strike request (JTAR) is used.

In amphibious operations, nominations are made to the ATF target list. Updates to the ATF target list are made using target bulletins (TARBULs).

In joint operations, target nominations are made to the JTL. A JTL is a consolidated list of selected targets considered to have military significance in the joint operations area. (Joint Pub 1-02) The JTL contains targets that need to be attacked, when they are to be engaged, and the desired results. The list allows for the most effective and efficient use of collection and attack assets. The JFC also provides targeting guidance and objectives to include target acquisition and damage assessment. The JFC organizes a JTCB to coordinate targeting information, to provide targeting guidance and priorities, to prepare and refine JTLs, and to deconflict lethal and nonlethal means. As a minimum, the JTCB includes representatives from all the services. The MAGTF CE provides representation to the JTCB.

Coordination

Coordination during planning facilitates the responsive execution of the fire support plan during the

operation. The MAGTF FSCC coordinates fire support activities of elements within the MAGTF and coordinates fire support activities with external and supporting forces. Liaison officers are exchanged with external agencies, as required. Requirements for fire support coordination reports are identified. Fire support coordination measures are planned and established, as required. The MAGTF CE coordinates this establishment with adjacent and supporting forces and with appropriate higher echelons; e.g., joint task force, host nation, etc.

To facilitate laser designator employment, the MAGTF CE coordinates **pulse repetition frequency (PRF) code assignments**. These assignments require coordination between the MAGTF G-3/S-3, FSCC, communications officers, and higher and adjacent headquarters. The PRF code blocks are established in the communications plan of the MAGTF's operation order delineating code assignments to artillery, air, and NSFS. Such assignments prevent interference among supporting arms activities. Each supporting arm then subassigns codes to its subordinate units for individual missions and changes codes periodically as the situation requires. FSCCs provide positive coordination of the code settings through the various fire support representatives.

MAGTF Fire Support Plan

The MAGTF FSCC prepares a fire support plan. The plan is written from the MAGTF perspective. Through targeting, allocation of assets, and tasking, the MAGTF fire support plan projects the MAGTF commander's intent for the use of fire support for accomplishment of the MAGTF mission. The plan details fire support for deep operations. It addresses necessary procedures and information for transition to close operations. The plan establishes the MAGTF's effort for RAS in rear operations. Procedures for the interface with external and supporting agencies are addressed as required. The MAGTF fire support plan must conform to instructions issued by the joint operational commander.

Special Planning Requirements

Counterfire

Counterfire requires a collective, mutual effort between deep, close, and rear operations. The enemy may have the capability to deliver fires at extended ranges which can affect close and rear operations. Each element aggressively identifies and coordinates the attack of counterfire threats in its AOR. All MAGTF means are used in the counterfire effort.

Usually, most counterfire activities are conducted by the GCE(s) because counterfire provides freedom of maneuver and the use of friendly indirect fires in close operations. The GCE(s) is also equipped with personnel and radar for rapidly detecting and processing counterfire targets.

The MAGTF CE assists the GCE in counterfire activities. The MAGTF CE provides information obtained by various collection agencies task organized under the MAGTF CE (i.e., SRIG) and provided by higher means. Combat information and intelligence on enemy mortars, artillery, rocket launchers, target acquisition agencies, and fire direction centers which support them are provided to the GCE. The MAGTF CE also assists in the counterfire effort by making other MAGTF means available to the counterfire effort; e.g., air support, EW, etc. The MAGTF CE can also assist by coordinating the MAGTF's counterfire efforts with that of higher and adjacent echelons.

For more on counterfire, see FMFM 6-18 and FMFM 6-9, *Marine Artillery Support*.

Countermechanized Fire Planning

The MAGTF CE develops the countermechanized fire plan concept and coordinates MAGTF actions with joint and/or allied forces. The MAGTF CE also develops detailed plans for countermechanized fires as part of deep operations. Much of the countermechanized effort of the MAGTF CE involves the ACE. The MAGTF concept and target data is passed to the GCE(s) for detailed planning of the

countermechanized fire plan as part of close operations. The plans prepared by the MAGTF CE and the GCE must fit together as one plan. Unchecked duplication will probably result in confusion during the execution of the plan, wasteful expenditure of resources, and possible instances of fratricide.

The GCE prepares a tentative countermechanized fire plan within the concept provided by the MAGTF CE. The plan is submitted to the MAGTF G-2/S-2 and G-3/S-3 for review to see how it can be supported with sensors, reconnaissance teams, and other collection agencies. The countermechanized fire plan must be compatible with the barrier and obstacle plan. The MAGTF G-2/S-2, GCE G-2/S-2, and FSC(s) identify and discuss problems in supporting the plan. Based on this discussion, the GCE FSC makes required modifications and the G-2/S-2 modifies their respective collection plans.

Transition from deep operations to close operations during the execution of the MAGTF countermechanized fire plan must be orderly. This transition requires MAGTF feedback to the GCE and establishing appropriate control measures such as a phase line or a handover line. A handover line is a control feature, preferably following easily defined terrain features, at which responsibility for the conduct of combat operations is passed from one force to another.

Suppression of Enemy Air Defenses

The MAGTF conducts SEAD to neutralize, destroy, or degrade enemy air defenses by physical attack or EW. Effective SEAD requires a unity of effort to achieve a combined arms effect. SEAD is most effective when all MAGTF, joint, and allied capabilities are brought to bear on the enemy.

The MAGTF commander must expect to conduct SEAD operations. The MAGTF commander, subordinate element commanders, and their staffs assess the enemy's capabilities to influence the use of aircraft in support of the MAGTF. The MAGTF conducts SEAD planning, coordination, and execution throughout the conflict. SEAD requires close coordination between intelligence planners, fire

support planners, and operational planners at each level of the force. Effective SEAD requires an aggressive, continuous intelligence collection effort and responsive dissemination of target data. For specific SEAD planning responsibilities of each element of the MAGTF, see FMFM 5-45, *Suppression of Enemy Air Defenses* (currently under development).

The role of the MAGTF CE is to respond to joint suppression of enemy air defense (J-SEAD) requirements and to request SEAD support for the MAGTF from external sources. It initiates SEAD operations to advance the MAGTF's ability to use air support. The MAGTF CE coordinates SEAD operations of the other MAGTF elements. The MAGTF commander and his staff have the overall responsibility for planning SEAD operations.

The MAGTF CE coordinates J-SEAD requirements. Once a joint SEAD requirement is confirmed, the MAGTF CE authorizes the request. The MAGTF CE coordinates the planning for the J-SEAD requirement with assistance from the ACE and/or GCE as required. Subsequently, the MAGTF CE tasks the GCE and/or ACE to execute the J-SEAD requirement. The GCE and/or ACE then conduct the detailed planning and coordination necessary for the execution of the J-SEAD mission. For more on J-SEAD, see FMFRP 5-43, *Multi-Service Procedures for Suppression of Enemy Air Defenses*, and Joint Pub 3-01.4, *JTTP for Joint Suppression of Enemy Air Defenses* (final draft).

The role of the ACE is to recommend the execution of SEAD operations and to respond to taskings for planning and execution of SEAD. It initiates SEAD to support ACE operations and responds to SEAD requests from other MAGTF elements. The ACE has a key role in SEAD planning.

The role of the GCE is to respond to taskings for the planning and execution of SEAD from other MAGTF elements. The GCE can also recommend SEAD targets. It initiates SEAD to support GCE requests for air support. Within the GCE, the FSCC has the lead role in SEAD planning.

The CSSE coordinates its SEAD requests for RAS in rear operations. These requests are coordinated with the MAGTF FSCC.

Joint Air Attack Team Operations

The joint air attack team (JAAT) is a combat operation involving a combination of attack helicopters and tactical fixed-wing aircraft normally supported by field artillery or NSFS and operating together to attack surface targets. JAAT operations may be executed throughout the battlefield, including deep, close, or rear operations. JAAT operations are offensive in nature but can be used in an offensive or defensive operation. JAAT operations are most effective against armor-type targets in the open.

The MAGTF participates in JAAT operations as directed by the JFC/higher authority. However,

MAGTF support to JAAT operations is limited because of the limited number of attack helicopter, tactical fixed wing aircraft, and artillery assets of the MAGTF. Final approval for a confirmed JAAT requirement rests with the MAGTF commander.

Once a JAAT requirement is confirmed, the MAGTF CE authorizes the request. The MAGTF CE coordinates the planning for MAGTF support of the JAAT operation. The MAGTF CE delegates tasking for JAAT operations to the ACE and GCE for planning, coordination, and execution. These elements then plan, integrate, and direct the employment of their respective assets for execution of the JAAT requirement.

For detailed information on JAAT operations, see FMFRP 5-44, *Multi-Service Joint Air Attack Team Operations*.

Chapter 4

Fire Support Coordination in Operations

This chapter addresses what the MAGTF CE does in fire support coordination in operations. As discussed in chapter 1, the fire support coordination functions of the various fire support agencies are similar and overlap. The role of the MAGTF CE must be clearly understood to avoid duplication of effort and possible confusion. The MAGTF CE's fire support coordination efforts focus on deep operations and coordination with external forces. The MAGTF CE monitors and influences close and rear operations but does not become extensively involved. The MAGTF CE does not interfere with those activities that are best accomplished at lower echelons. Rather, the MAGTF CE's actions serve to facilitate the accomplishment of the MAGTF's mission as a whole. The functions of the MAGTF CE in fire support coordination in operations include information exchange, coordination of fire support, tasking of other elements, liaison with other forces, and assisting and advising.

Information Exchange

Fire support coordination can only be effective if there is a timely exchange of information among all appropriate agencies. Information is exchanged in fire support planning and in operations. This information is derived from multiple sources and may flow up and down the fire support channels. Information is received from and distributed to other elements of the MAGTF and is exchanged with higher, supporting, and adjacent commands. The information is distributed by periodic reporting, by exchange of information through liaison officers, and by MAGTF communications nets. The information is distributed using the most expeditious and efficient means available. The following paragraphs discuss the types of information exchanged among MAGTF elements.

The **status of supporting arms** will be exchanged. The GCE and ACE keep the MAGTF FSCC apprised of this information. The MAGTF FSCC disseminates this information to other elements of the MAGTF, as required. The MAGTF FSCC also keeps other elements of the MAGTF informed of

the status of external sources of supporting arms, as required. The MAGTF FSCC identifies information requirements in the MAGTF CE standing operating procedure (SOP) and/or operation order. Examples of information requirements by the MAGTF FSCC include fire capability reports, target acquisition coverage, ammunition reports, and information that affects the overall fire support capability of the MAGTF. The MAGTF FSCC has many uses for this information. Some of the uses include —

- Analysis and anticipation of fire support requirements.
- Tasking for the attack of targets; e.g., target assigned to GCE is within range of its surface-to-surface fires.
- Integration of supporting arms for deep operations.
- Establishment of fire support coordination measures to achieve maximum effective and efficient employment of supporting arms.
- Coordination of the employment of other MAGTF assets and external means for a combined

arms effect and to preclude interference by these assets. For example, EW properly employed can support other elements but if improperly employed interferes with the friendly use of the electromagnetic spectrum.

Target information and intelligence are exchanged between elements of the MAGTF and with elements outside the MAGTF. During operations, targeting includes tasking for the engagement of high-payoff targets.

Information about the **enemy's tactics, techniques, and procedures** is useful in planning the delivery of MAGTF fire support. This information is developed and refined by the conduct of IPB and TVA. (Information gained about the enemy may assist elements of the MAGTF [or elements outside the MAGTF] plan and deliver fire support. This information is disseminated to the affected element.)

Fire support coordination measures are exchanged between elements of the MAGTF.

Coordination of Fire Support

Practice of fire support coordination at the lowest echelon is paramount to effective MAGTF FSCC operations. Fire support is best coordinated at the lowest echelon capable of effecting the necessary coordination. Numerous agencies or echelons becoming needlessly involved in coordination slow responsiveness, clog communication channels, and often create confusion.

The MAGTF FSCC is continuously involved in integrating fires for deep operations. The MAGTF FSCC coordinates both those matters affecting the MAGTF as a whole and issues with joint and allied forces.

Only in certain or special situations does the need arise for the MAGTF FSCC to become involved in the actual integration of fires in close operations. The MAGTF FSCC intervenes in fire support coordination matters pertaining to close and rear

operations when the matter cannot be resolved at lower echelons. For example, if elements of the GCE request more NSFS than the GCE's allocated NSFS can provide, the GCE FSCC determines which requests are to be filled. But, if the GCE is seeking more CAS sorties than the ACE states it can provide, the MAGTF FSCC resolves the issue.

Fire support coordination measures are established to facilitate the rapid engagement of targets or to restrict and control fires. Fire support coordination measures established at lower echelons (e.g., coordinated fire line, restricted fire area, etc.) are passed to the MAGTF FSCC. The MAGTF FSCC establishes those fire support coordination measures that affect more than one element of the MAGTF, or affect elements outside the MAGTF and/or the host nation; e.g., fire support coordination line, free fire area, etc. The MAGTF FSCC also establishes fire support coordination procedures, as required.

The ACE commander is responsible for airspace management within the MAGTF AOR. Airspace management is affected by fire support coordination measures such as airspace coordination areas (ACAs). The MAGTF CE, in consultation with the ACE, establishes the criteria and acceptable risk for the employment of aircraft. This information is considered in the establishment of ACAs.

Rules of engagement are directives issued by competent military authority which delineate the circumstances and limitations under which United States forces will initiate and/or continue combat engagement with other forces encountered. (Joint Pub 1-02) The MAGTF CE receives rules of engagement issued by higher authority, and disseminates these rules to elements of the MAGTF for inclusion into fire support coordination procedures as appropriate.

The MAGTF CE authorizes and coordinates the delivery of special fires such as scatterable mines and nuclear and chemical fires. Such fires require MAGTF CE involvement because of their effect on the accomplishment of the MAGTF commander's mission and their potential effects with other forces external to the MAGTF. The delivery of such fires may require close coordination and authority from a

headquarters senior to the MAGTF. In the case of nuclear and chemical fires, national-level authority is required.

The MAGTF FSCC plans and coordinates the delivery of the MAGTF's fire support in a joint or combined effort. Examples of joint missions include joint interdiction, JAAT, or J-SEAD operations.

Tasking of Other Elements

The MAGTF CE may task elements of the MAGTF to accomplish the delivery of fire support and fire support coordination. Such tasking may involve targeting where an element(s) of the MAGTF is tasked to deliver fire support on a target(s) deemed critical to the accomplishment of the MAGTF's mission. The MAGTF CE may employ NSFS in deep strikes or task the ACE to conduct deep air support on designated targets. The GCE may be tasked to engage targets within its area of influence deemed critical to the MAGTF commander's mission accomplishment. The MAGTF CE anticipates and arranges for the provision of fire support from sources external to the MAGTF, as required.

Liaison With Other Forces

The MAGTF CE establishes and maintains liaison with other forces external to the MAGTF in joint or combined operations. This liaison may be accomplished in several ways. Liaison officers may be exchanged between units. MAGTF personnel may be assigned as liaison officers and stationed with the external force and vice versa. The MAGTF CE should authorize and coordinate direct liaison between a MAGTF unit and an external force positioned adjacent to the MAGTF. Liaison with joint and allied forces is achieved partially through ANGLICO.

The liaison team represents the MAGTF CE and must be viewed as such by both the MAGTF CE and the external force. The senior member of the team must have adequate rank to represent the Marine Corps. The liaison team must be adequately

equipped and briefed before reporting to the external force and kept informed during the operation. On arrival at the external force, appropriate interface must be effected to ensure the liaison team's purpose is understood by the external force. The liaison team coordinates information flow between the MAGTF headquarters and the external force. The type and frequency of communications between the MAGTF CE and the liaison team stationed with the external force is dependent on the means available, the physical distance of the forces, and the tactical situation. As a minimum, periodic reporting is effected. The liaison team collects information from the external forces's headquarters, ANGLICO, and other sources and exchanges this information with the MAGTF CE. Similarly, the liaison team obtains information from the MAGTF CE for dissemination to the external force. The composition of the liaison team is situation-dependent, often consisting of one or more officers and assistants and necessary equipment to effect the required liaison.

Assisting and Advising

A significant role of the MAGTF FSCC is assisting and advising the MAGTF commander and subordinate commanders and staffs of other MAGTF elements in fire support matters. The MAGTF FSCC works closely with their counterparts in other elements of the MAGTF. The MAGTF FSCC meets with the adjacent and supporting commands about fire support or fire support coordination matters. The MAGTF FSCC provides advice and assistance in joint and combined operations for the employment of MAGTF fire support.

Amphibious Operations

In Navy/Marine amphibious operations, the MAGTF commander is the CLF and the MAGTF FSCC is designated as the LF FSCC. As a result, the MAGTF CE is usually collocated on the flag ship with the CATF and the SACC. The GCE headquarters may be collocated on the flag ship.

The LF FSCC provides representatives to work in the SACC during the period before the passage of

coordination responsibility to the CLF. These representatives include the LF FSC, LF AirO, LF NGFO, and an LF TIO. Other elements of the MAGTF provide representatives to work in the SACC as required; e.g., a GCE representative from the GCE FSCC.

The LF representatives review requests of LF elements ashore, monitor fire support activities, and plan additional requirements. They assist the SAC in fire support coordination matters. They make recommendations regarding troop safety and type and means of delivery and record all target information for future reference ashore. The LF TIO works closely with his counterparts in the joint intelligence center on targeting matters.

For more information on the SACC, see NWP 22-2 (Rev. B)/FMFM 1-7, *Supporting Arms in Amphibious Operations* and FMFM 6-18.

Joint and Combined Operations

In joint operations, an essential function of the MAGTF CE is the interface with service organizations for the prosecution of joint fire support. A summary of the key service agencies is provided in the following paragraphs. Details of these agencies can be found in FM 6-20-30, *Tactics, Techniques, and Procedures for Fire Support for Corps and Division Operations*. MAGTF FSCC personnel should familiarize themselves with the joint publications listed in appendix C which are applicable to the MAGTF's mission.

A JFC is designated by the appropriate higher authority. In some situations, the MAGTF commander may be designated as the JFC. The JFC is responsible to ensure that joint fires are planned, coordinated, and integrated. The JFC establishes policies and procedures that facilitate unity of effort,

that ensure the efficient and effective use of intelligence, and that enhance the timely and effective engagement of targets. The JFC establishes interoperable and redundant communications to enhance rapid dissemination of information, intelligence, and command guidance.

The JFC will normally designate a JFACC. The JFACC's responsibilities are assigned by the JFC (normally these would include, but not be limited to, planning, coordination, allocation, and tasking based on the JFC's apportionment decision). The JFACC may be a naval task force commander, an Air Force component commander, or the MAGTF may be designated to provide the JFACC. In the latter case, the MAGTF commander may task the ACE commander with the function. The JFACC is not in the chain of command.

At the operational-level, the MAGTF CE interfaces with the JTF. The MAGTF FSCC interfaces with the battlefield coordination element (BCE). The BCE is a U.S. Army liaison organization that is collocated with the Air Force TACC. The BCE processes land force requests for tactical air support, monitors and interprets the land battle situation for the Air Force TACC and provides the necessary interface for the exchange of current operational and intelligence data. As discussed in chapter 3, a JTCB is established to coordinate targeting for the JFC.

At Army corps and division levels, fire support elements (FSE) are established at corps and divisions command posts. The FSE plans and coordinates fire support for the corps and divisions. ANGLICO is provided to the division, brigade, and battalion FSEs.

In combined operations, the MAGTF CE establishes appropriate integration and liaison with allied force headquarters fire support coordination agencies. ANGLICO teams are provided to division-size and smaller units of the allied force.

Appendix A

Fire Support Intelligence Requirements

1. Tactics and plans should exploit the enemy's weaknesses while minimizing his opportunities to capitalize on his strengths. The answers to the following other intelligence requirements (OIRs) provide the fire support personnel and maneuver commanders with the information that they need to develop such tactics and plans. OIRs may be submitted for those targets relating to enemy units and for those targets relating to enemy command, control, and communications resources. Additional OIRs may be required.

Targets Relating to Enemy Units

- What types of artillery and rockets do the enemy have, how many of each type, and how are they task organized?
- What criteria does the enemy use when selecting a battery position?
- How frequently does the enemy displace his rocket and artillery batteries?
- Is the enemy limited to moving his artillery and rocket batteries over fixed-road nets or is he capable of displacing cross-country?
- Where does the enemy doctrine say that his large-caliber artillery weapons will be located relative to other artillery units and front lines?
- What is the enemy's artillery ammunition supply status?
- Where are the enemy's ammunition supply dumps?
- Where are the enemy's hardened artillery positions?
- What type electronic emitters are associated with the various artillery and rocket units by type?
- What is the enemy's special weapons capability; i.e., toxic chemicals, nuclear weapons, and improved conventional munitions?
- What is the enemy's air order of battle, to include what types of enemy aircraft, airfields, etc.?
- What is the enemy's air defense capability; i.e., weapons, command and control, and proficiency?

Targets Relating to Enemy Command, Control, and Communications

- What is the organization of the typical enemy artillery or rocket battery's position?
 - What is the enemy's method of tactically employing his artillery?
 - What is the enemy's capability to locate our fire support means (including target acquisition) and to deliver effective fire on our fire support means?
 - What are the enemy's EW capabilities?
 - Where are the enemy's command, control, and communications nodes?
 - What type of communications systems does the enemy employ and what are its capabilities?
 - What is the enemy's ability to coordinate his forces?
 - Does the enemy have remotely piloted vehicles, and where are the ground stations located?
 - What are the best means to attack targets to degrade the enemy's command and control capability?
- 2.** Fire support personnel should submit their OIRs as early in the planning cycle as possible. Additional OIRs should be submitted as they become known.

Appendix B

Glossary

Section I. Acronyms

AAW	antiair warfare	IPB	intelligence preparation of the battlefield
ACA	airspace coordination area	JAAT	joint air attack team
ACE	aviation combat element	JFACC	joint force air component commander
AirO	air officer	JFC	joint force commander
ANGLICO	air/naval gunfire liaison company	JIC	joint intelligence center
AOR	area of responsibility	J-SEAD ..	joint suppression of enemy air defenses
ASC	air support controller	JTAR	joint tactical air strike request
ATF	amphibious task force	JTCB	joint targeting coordination board
BCE	battlefield coordination element	JTF	joint task force
BLT	battalion landing team	JTL	joint target list
CAS	close air support	LAAD	low altitude air defense
CATF	commander, amphibious task force	LF	landing force
CE	command element	MACCS .	Marine air command and control system
CIFS	close-in fire support	MAGTF	Marine Air-Ground Task Force
CLF	commander, landing force	MEB	Marine expeditionary brigade
CSSE	combat service support element	MEF	Marine expeditionary force
DASC	direct air support center	METT-T	mission, enemy, terrain and weather, troops and support available-time available
EW	electronic warfare	MEU	Marine expeditionary unit
EWO	electronic warfare officer	MSE	major subordinate element
FAC	forward air controller	NEO	noncombatant evacuation operation
FD	fire direction	NGF	naval gunfire
FO	forward observer	NGFO	naval gunfire officer
FSC	fire support coordinator	NGLO	naval gunfire liaison officer
FSCC	fire support coordination center	NSFS	naval surface fire support
FSE	fire support element	OIR	other intelligence requirements
GCE	ground combat element		

- PRF pulse repetition frequency

- RAOC rear area operations center
- RAS rear area security
- RASC rear area security coordinator
- RSTA reconnaissance, surveillance, and target acquisition

- SAC supporting arms coordinator
- SACC supporting arms coordination center
- SEAD suppression of enemy air defense
- S/EWCC ... signals intelligence/electronic warfare coordination center
- SOP standing operating procedure
- SRIG surveillance, reconnaissance, intelligence group

- TACC tactical air command center (USMC); tactical air control center (USAF/USN)
- TACLOG tactical-logistical group
- TACP tactical air control party
- TAOC tactical air operations center
- TAR tactical air request
- TARBUL..... target bulletin
- TAREP target report
- TGTINTELO target intelligence officer
- TIO target information officer
- TIS target information section
- T/O table of organization
- TVA target value analysis

- UAV unmanned aerial vehicle

- WEO weapons employment officer

Section II. Definitions

These definitions are from Joint Pub 1-02, *Department of Defense Dictionary of Military and Associated Terms*, except where noted.

A

air support operations center – (DOD, NATO) An agency of a tactical air control system collocated with a corps headquarters or an appropriate land force headquarters, which coordinates and directs close air support and other tactical air support. See also **tactical air control center**.

air/naval gunfire liaison company – A Fleet Marine Force unit composed of Marine and naval personnel specifically qualified to provide ground control and liaison agencies for the planning and employment of naval gunfire and USN/USMC air support for allied or U.S. Army forces of division size or less operating alongside a MAGTF in joint or combined operations; or in other operations where forces other than a Fleet Marine Force are provided U.S. Fleet naval gunfire and naval air support, or for such other supporting arms control and liaison functions as the Fleet Marine Force commander may direct. The air/naval gunfire liaison company is comprised of a command element, an operational element (air/NGF teams), and a support element (e.g., administrative, supply, maintenance). (FMFM 6-18)

airspace management – (DOD) The coordination, integration, and regulation of the use of airspace of defined dimensions.

allocation – (DOD, NATO) The translation of the apportionment into total numbers of sorties by aircraft type available for each operation/task. (NATO) In nuclear warfare planning, the specific numbers and types of nuclear weapons allocated to a commander for a stated time period as a planning factor only. (Excerpt from Joint Pub 1-02.)

apportionment – (DOD, NATO) The determination and assignment of the total expected effort by percentage and/or by priority that should be devoted to the various air operations and/or geographic areas for a given period of time.

area of influence – (DOD, NATO) A geographical area wherein a commander is directly capable of influencing operations, by maneuver or fire support systems normally under his command or control.

area of interest – (DOD, NATO) That area of concern to the commander, including the area of influence, areas adjacent thereto, and extending into enemy territory to the objectives of current or planned operations. This area also includes areas occupied by enemy forces who could jeopardize the accomplishment of the mission.

area of responsibility – (DOD, NATO) A defined area of land in which responsibility is specifically assigned to the commander of the area for the development and maintenance of installations, control of movement and the conduct of tactical operations involving troops under his control along with parallel authority to exercise these functions.

C

close air support – (DOD, NATO) Air action against hostile targets which are in close proximity to friendly forces and which require detailed integration of each air mission with the fire and movement of those forces. Also called CAS.

close operations – The combat actions of elements of the ground maneuver force, their immediate combat support, and combat service support. (FMFM 2)

combined – (DOD, NATO) Between two or more forces or agencies of two or more allies. (When all allies or services are not involved, the participating nations and services shall be identified; e.g., Combined Navies.) See also **joint**.

combined arms – The tactics, techniques, and procedures employed by a force to integrate firepower and mobility to produce a desired effect upon the enemy. (FMFRP 0-14)

counterfire – (DOD, NATO) Fire intended to destroy or neutralize enemy weapons. (DOD) Includes counter-battery, counterbombardment, and counter-mortar fire.

countermechanized defensive fire – The fire of targets planned on routes of approach which logically would be used by enemy mechanized forces. Normally, it is scheduled for delivery on-call. (NWP 22-2 (Rev B)/FMFM 1-7)

D

damage assessment – (DOD, NATO) The determination of the effect of attacks on targets. (excerpt from Joint Pub 1-02)

deep air support – 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 normally flown on either side of the fire support coordination line; the lack of a requirement for close coordination with the fire and maneuver of friendly forces is the qualifying factor. Note: the acronym DAS stands for deep air support and not direct air support. (FMFRP 0-14)

deep operations – The activities directed against enemy forces not in contact with the ground maneuver forces. (FMFM 2)

direct air support center – (DOD) A subordinate operational component of a tactical air control system designed for control and direction of close air support and other tactical air support operations, and normally collocated with fire-support coordination elements.

F

fire capabilities chart – (DOD, NATO) A chart, usually in the form of an overlay, showing the areas which can be reached by the fire of the bulk of the weapons of a unit.

fire plan – (DOD, NATO) A tactical plan for using the weapons of a unit or formation so that their fire will be coordinated.

fire support – Assistance to elements of the ground forces engaged with the enemy rendered by other

firing units, including (but not limited to) artillery, mortars, naval gunfire, close air support, and close-in fire support. (FMFM 2-7)

fire support coordination – (DOD, NATO) The planning and executing of fire so that targets are adequately covered by a suitable weapon or group of weapons.

fire support coordination center – (DOD, NATO) A single location in which are centralized communications facilities and personnel incident to the coordination of all forms of fire support. See also **supporting arms coordination center**.

fire support plan – A plan which outlines how the commander wants to use his fire support assets to support an operation. (FMFM 6-18)

fire support planning – The continuous and concurrent process of analyzing, allocating, and scheduling of fire support to integrate it with the maneuver forces to maximize combat power. (FMFM 2-7)

H

high-payoff target – Those high-value targets that must be acquired and successfully attacked for the success of the friendly commander's mission. (FM 6-20-10)

I

intelligence preparation of the battlefield – A continuous, systematic approach to analyzing the enemy, weather, and terrain in a specific geographical area. Threat capabilities are evaluated and the enemy courses of action with respect to specific battlefield conditions are predicted. (FM 6-20-10)

intelligence requirement – (DOD) Any subject, general or specific, upon which there is a need for the collection of information, or the production of intelligence.

J

joint – (DOD, NATO) Connotes activities, operations, organizations, etc., in which elements of more

than one Service of the same nation participate. (When all Services are not involved, the participating Services shall be identified, e.g., Joint Army-Navy.) See also **combined**.

joint force air component commander – (DOD)

The joint force air component commander derives his authority from the joint force commander who has the authority to exercise operational control, assign missions, direct coordination among his subordinate commanders, redirect and organize his forces to ensure unity of effort in the accomplishment of his overall mission. The joint force commander will normally designate a joint force air component commander. The joint force air component commander's responsibilities will be assigned by the joint force commander (normally these would include, but not be limited to, planning, coordination, allocation and tasking based on the joint force commander's apportionment decision). Using the joint force commander's guidance and authority, and in coordination with other service component commanders and other assigned or supporting commanders, the joint force air component commander will recommend to the joint force commander apportionment of air sorties to various missions or geographic areas.

joint intelligence center – In amphibious operations, a single intelligence organization formed to satisfy the similar intelligence requirements of the commander, amphibious task force and commander, landing force. The joint intelligence center is formed to eliminate duplicate procedures and streamline intelligence functioning. (FMFRP 0-14)

joint target list – (DOD) A consolidated list of selected targets considered to have military significance in the joint operations area.

L

list of targets – (DOD) A tabulation of confirmed or suspect targets maintained by any echelon for informational and fire support planning purposes. See also **target list**.

M

MAGTF rear area – That area extending rearward from the rear boundary of the ground combat element to the MAGTF rear boundary. (FMFM 2-6)

Marine air command and control system –

(DOD) A US Marine Corps tactical air command and control system which provides the tactical air commander with the means to command, coordinate, and control all air operations within an assigned sector and to coordinate air operations with other Services. It is composed of command and control agencies with communications-electronics equipment that incorporates a capability from manual through semiautomatic control.

military requirement – (DOD, NATO) An established need justifying the timely allocation of resources to achieve a capability to accomplish approved military objectives, missions, or tasks.

N

naval surface fire support – Fire provided by Navy surface gun, missile, and electronic warfare systems in support of a unit or units tasked with achieving the commander's objectives. Also known as NSFS. (Joint Pub 3-02) This is a collective term used when referring to the fires provided by naval guns and missiles. The term naval gunfire is used when referring to personnel and organizations associated with the delivery of naval surface fire support; e.g., ANGLICO, NGLO, etc. The term naval gunfire is also used in NATO.

P

preliminary weaponeering – A preliminary analysis of the target to determine what, if any, weapons will be effective against the target and the degree of damage it is possible to achieve with various types and quantities of ammunition. (FMFM 6-18)

R

rear area – (DOD, NATO) For any particular command, the area extending forward from its rear boundary to the rear of the area of responsibility of the next lower level of command. This area is provided primarily for the performance of combat service support functions.

rear area operations center (RAOC) – The agency responsible for planning, coordinating, directing, and monitoring rear area security. The RAOC is supervised by the tactical security officer. (FMFM 2-6)

rear area security — The measures taken prior to, during, and/or after an enemy airborne attack, sabotage action, infiltration, guerrilla action, and/or initiation of psychological or propaganda warfare to minimize the effects thereof. (FMFM 2-6)

rear operations — The activities to the rear of the ground maneuver forces. (FMFM 2)

rules of engagement — (DOD) Directives issued by competent military authority which delineate the circumstances and limitations under which United States forces will initiate and/or continue combat engagement with other forces encountered. Also called **ROE**.

S

supporting arms — (DOD) Air, sea, and land weapons of all types employed to support ground units.

supporting arms coordination center — (DOD) A single location on board an amphibious command ship in which all communication facilities incident to the coordination of fire support of the artillery, air, and naval gunfire are centralized. This is the naval counterpart to the fire support coordination center utilized by the landing force. See also **fire support coordination center**.

suppression of enemy air defenses — (DOD, NATO) That activity which neutralizes, destroys or temporarily degrades enemy air defenses in a specific area by physical attack and/or electronic warfare.

T

tactical air command center — (DOD) The principal United States Marine Corps air operation installation from which aircraft and air warning functions of tactical air operations are directed. It is the senior agency of the Marine Corps air command and control system from which the Marine Corps tactical air commander can direct and control tactical air operations and coordinate such air operations with other Services.

tactical air control center — (DOD, NATO) The principal air operations installation (land or ship based) from which all aircraft and air warning functions of tactical air operations are controlled.

tactical air control party — (DOD, NATO) A subordinate operational component of a tactical air

control system designed to provide air liaison to land forces and for the control of aircraft.

tactical air operations center — (DOD) A subordinate operational component of the Marine air command and control system designed for direction and control of all en route air traffic and air defense operations, to include manned interceptors and surface-to-air weapons, in an assigned sector. It is under the operational control of the Tactical Air Command Center.

target acquisition — (DOD, NATO) The detection, identification, and location of a target in sufficient detail to permit the effective employment of weapons. See also **target analysis**.

target analysis — (DOD, NATO) An examination of potential targets to determine military importance, priority of attack, and weapons required to obtain a desired level of damage or casualties.

target list — (DOD) The listing of targets maintained and promulgated by the senior echelon of command; it contains those targets which are to be engaged by supporting arms, as distinguished from a "list of targets" which may be maintained by any echelon as confirmed, suspect, or possible targets for informational and planning purposes. (NATO) A tabulation of confirmed or suspected targets maintained by any echelon for information and fire support planning purposes. Also called **list of targets**.

target number — (NATO) The reference number given to the target by the fire control unit.

target value analysis — A method for providing a systematic determination of which targets out of the entire target array should be attacked for the greatest tactical benefit. (FMFM 6-18)

targeting — (DOD, NATO) The process of selecting targets and matching the appropriate response to them taking account of operational requirements and capabilities.

tasking — (NATO) The process of translating the allocation into orders, and passing these orders to the units involved. Each order normally contains sufficient detailed instructions to enable the executing agency to accomplish the mission successfully.

Appendix C

References

1. Fleet Marine Force Manuals

FMFM 2-6	MAGTF Rear Area Security
FMFM 2-7	Fire Support in MAGTF Operations
FMFM 3-1	Command and Staff Action
FMFM 3-21	MAGTF Intelligence Operations
FMFM 3-30	Communications
FMFM 5-1	Organization and Functions of Marine Aviation
FMFM 5-3	Assault Support
FMFM 5-40	Offensive Air Support (under development)
FMFM 5-41	Close Air Support and Close-In Fire Support (under development)
FMFM 5-42	Deep Air Support (under development)
FMFM 5-45	Suppression of Enemy Air Defenses (under development to replace OH 5-4C)
FMFM 5-60	Control of Aircraft and Missiles (under development)
FMFM 6-18	Techniques and Procedures for Fire Support Coordination
FMFM 7-4	Field Artillery Support (being revised as FMFM 6-9, Marine Artillery Support)

2. Fleet Marine Force Reference Publications

FMFRP 0-14	Marine Corps Supplement to the DOD Dictionary of Military and Associated Terms
FMFRP 5-43	Multi-Service Suppression of Enemy Air Defenses
FMFRP 5-44	Multi-Service Air Attack Team Operations
FMFRP 5-85	Aviation Equipment and Systems

3. Naval Warfare Publication

NWP 22-2 Rev.(B)/FMFM 1-7	Supporting Arms in Amphibious Operations
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4. Allied Tactical Publication

ATP 37	Supporting Arms in Amphibious Operations
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5. U.S. Army Field Manuals

FM 6-20	Fire Support in the AirLand Battle
FM 6-20-10	Tactics, Techniques, and Procedures for the Targeting Process
FM 6-20-30	Tactics, Techniques, and Procedures for Fire Support for Corps and Division Operations
FM 6-20-40	Tactics, Techniques, and Procedures for Fire Support for Brigade Operations (Heavy)
FM 6-20-50	Tactics, Techniques, and Procedures for Fire Support for Brigade Operations (Light)

6. Joint Publications

Joint Pub 1-02	DOD Dictionary of Military and Associated Terms
Joint Pub 2-0	Doctrine for Intelligence Support to Joint Operations **
Joint Pub 3-0	Doctrine for Unified and Joint Operations ****
Joint Pub 3-01.4	JTTP for Joint Suppression of Enemy Air Defenses *
Joint Pub 3-02	Joint Doctrine for Amphibious Operations *
Joint Pub 3-02.1	Joint Doctrine for Landing Force Operations **
Joint Pub 3-03	Doctrine for Joint Interdiction Operations **
Joint Pub 3-09	Doctrine for Joint Fire Support ****
Joint Pub 3-09.1	Joint Laser Designation Procedures ****
Joint Pub 3-09.2	JTTP for Radar Beacon Operations (J-BEACON) ****
Joint Pub 3-10	Doctrine for Joint Rear Area Operations *
Joint Pub 3-11	Doctrine for Joint Chemical Operations *
Joint Pub 3-12	Doctrine for Joint Nuclear Operations *
Joint Pub 3-13	C ³ CM in Joint Military Operations (U)
Joint Pub 3-51.1	Electronic Warfare in Joint Military Operations (U) ****
Joint Pub 3-52	Doctrine for Joint Airspace Control in a Combat Zone **
Joint Pub 3-55	Doctrine for Joint Reconnaissance, Surveillance, and Target Acquisition (RSTA) ***
Joint Pub 3-56	Tactical Command and Control Planning Guidance and Procedures for Joint Operations (Information Exchange Planning Guidance) (U) ****
Joint Pub 5-00.2	Joint Task Force (JTF) Planning Guidance and Procedures **

* Final Draft

** Test Publication

*** Initial Draft

**** Under Revision