

# CHAPTER 3

## Planning

### 3.1 SCOPE

Naval gunfire support planning begins upon receipt of directives concerning a forthcoming operation. The commander provides guidance and instructions to his staff. This guidance may take a variety of forms, including planning directives, memorandums, or outline plans; or it may be announced at informal staff conferences or briefings. The guidance is the commander's assistance to his staff in preparing and revising their estimates.

**3.1.1 Planning Guidance.** Landing force gunfire planners will rely on the commander's guidance to ensure the integration of the gunfire plan with the landing, scheme of maneuver, and concept of operations ashore. The commander's guidance normally will include, but not be limited to, the following:

1. An announcement or affirmation of commander's policies.
2. Commander's analysis of the overall mission.
3. The general plan for using nuclear weapons or chemical agents.
4. Assumptions that are necessary because of lack of positive information.
5. Broad and general courses of action which the commander particularly desires to be considered.
6. Previous decisions as to related operations. The commander's initial guidance is usually incomplete, but is developed and expanded as more information is received.

**3.1.2 Planning Phases.** By an orderly and systematic planning process, the NGFO arrives at a complete NGFS plan that can be understood by all affected naval and LF agencies. The four general phases of NGF planning involve the preparation of:

1. Estimates of supportability
2. Initial or overall NGF requirements
3. Detailed NGF requirements
4. NGFS plans.

Selection of weapons and ammunition in gunfire support planning is described in Appendix C. Overall guidance on the preparation of operations orders are found in FMFM 3-1.

NGFS plans are normally tabs under the fire support plan appendix of the operations annex of the operations plans or orders of the CATF, the CLF, the advance force commander, and the attack group commander, when attack groups are formed. Each plan is designed to provide sufficient information and instructions to the fire support ships to ensure that efficient NGFs will be provided. Tables and forms for computing requirements in ammunition and ships are in Appendix F.

**3.1.3 Responsibility.** The CATF is responsible for the preparation and execution of the overall NGFS plan. The plan is based on the support requirements of the LF, as represented by the CLF, and on requirements to support naval forces such as mine warfare, SEAL operations, and reconnaissance task groups. The CLF is responsible for determination of LF requirements for NGFS. The CLF determines the troop requirements for NGFS, including the selection of targets to be destroyed in the pre-assault operations, those to be fired on in support of troops, and the timing of these fires. The CLF presents his requirements to the CATF for consolidation with naval requirements.

**3.1.4 Coordination.** In order to provide unity of effort at all levels of command and prevent duplication, close coordination between naval commands and the LF

is required in planning NGFS. The following commanders are particularly concerned:

1. CATF
2. Attack group commander (when an attack group is used)
3. Advance force commander
4. CLF
5. Landing group commander (when a landing group is used)
6. TAO
7. Tactical air control group (unit) (element) commander.

The timely interchange of information between CATF and CLF is necessary if the final NGF plan is to reflect optimum support for the landing force. A planning schedule indicating deadlines for the submission of certain requirements will be promulgated by CATF early in the planning for an operation. When attack and landing groups are formed, the attack group commander translates D-day and post-D-day requirements submitted by the landing group commander into a gunfire support plan to be executed by the fire support unit that is a part of his attack group. The attack group commander is responsible for the execution of the gunfire support plan in his area of operations; however, he receives CATF definitive guidance during the planning phase.

**3.1.5 Requirements.** NGFS plans must support the LF scheme of maneuver and the operations of naval units. Estimates of overall requirements are submitted by the naval and LF commanders as soon as practicable after the directive for the operation is received (see Figure 3-1). These estimates enable the CATF to determine the general extent of fire support required. They form the basis for his decision concerning the adequacy of fire support means provided him by higher authority. When NGFS means have been balanced with naval and LF requirements, the CATF makes a tentative allocation of forces so that detailed planning may begin. This may take the form of a tentative task organization.

Detailed requirements are determined after the details of the LF scheme of maneuver and supporting naval operations have been established. A final allocation of fire support ships is made and detailed NGFS plans are prepared based on the established detailed requirements. They provide the basis for preparing de-

tailed NGFS plans. To aid the planner in preparing the overall and detailed requirements, sample forms are included in Appendix F.

**3.1.6 Flexibility.** The NGFS plan is based on information available during the planning phase and will contain many estimates. Additional information on enemy installations, forces, capabilities, and so forth, will be provided as it becomes available. The plan should be written so that changes in schedules of fire, targets scheduled for destruction, duration of pre-D-day operations, delay of H-hour, or other entries that require modification of the plan may be effected expeditiously.

**3.1.7 Alternate Plan.** In addition to the preferred NGFS plan, one or more alternate plans are required. These plans normally are based on the use of an alternate landing area and/or a radical change in order or timing of the landing. The same considerations are applicable in the preparation of the alternate plan as in the preferred plan.

The alternate plan will follow as closely as possible the preferred NGFS plan in task organization, assignment of direct and general fire support ships, and allocation of radio frequencies. The steps in preparing the alternate NGFS plan are the same as those previously described. However, additional adjustments to the detailed requirements may be found necessary and will require a different allocation of fire support means.

**3.1.8 Rehearsal Plan.** The NGF annex to the rehearsal plan is a duplication of the annex contained in the main operation order with regard to task organization and communications. Its purpose is to test the task organization, communications, and the timing of prearranged fire.

A prerehearsal briefing and a postrehearsal critique will be held. It is desirable that gunnery and CIC personnel assigned to fire support ships attend both. Direct liaison will be established between CIC personnel and LF liaison officers of the LF/NGF organization.

### 3.1.9 Special Amphibious Operations

**3.1.9.1 Landings in Reduced Visibility.** The preparation of the NGFS plan for night landings or landings under conditions of reduced visibility is similar to that described in preceding paragraphs, except for the following considerations:

1. These landings usually are intended to achieve various degrees of surprise. This may require

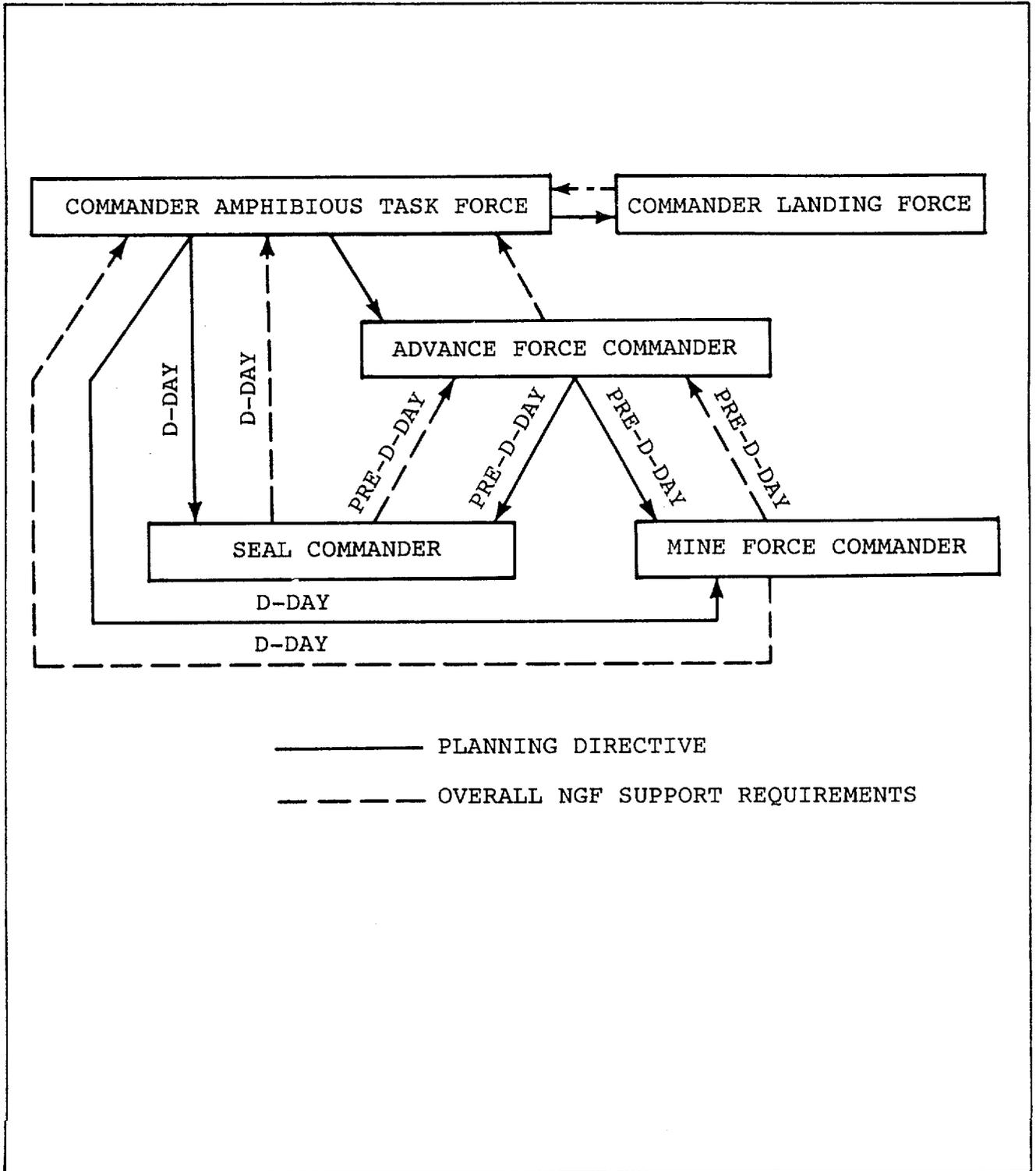


Figure 3-1. Flow Chart for Overall Naval Gunfire Requirements

that the landing site or area not be disclosed by prelanding NGF.

2. The number of illuminating projectiles required usually will be considerably greater than for normal operations.
3. Navigation may be much more difficult for a landing of this type, making unobserved fire less accurate. Use of radar beacons or ships with the Mk 86 gunfire control system will assist in overcoming this limitation.
4. Normally, air spot will not be available for operations of this type. This will force greater reliance on ship spotters and shore spotter, while most fire will be "unobserved."

**3.1.9.2 Helicopterborne Assault.** Planning considerations peculiar to helicopterborne operations are:

**3.1.9.2.1 Planning for Fire Support.** The speed with which ship-to-shore movements employing helicopters are executed demands detailed, exacting plans for fire support. Shifting or cessation of fire is executed on a strict basis in relation to the leading helicopter wave. Fire support ships are notified by the SACC of the position of the leading wave in relation to control points. Each ship ceases or shifts fire from its assigned target areas within the approach and retirement lanes in sufficient time to ensure against damage to helicopters. Time of flight of the projectile and speed of the helicopter wave are considered in determining when to cease firing.

**3.1.9.2.2 Assault Against Deep Objectives.** If the assault is against deep objectives, destroyers may have insufficient range. In determining NGFS ship requirements for helicopter operations, the scheme of maneuver ashore and future objectives are ascertained, so that the requirements may reflect needs throughout the operation.

**3.1.9.2.3 Vulnerability of the Force.** The vulnerability of the helicopterborne force while effecting the landing is such that extremely dense fire support must be available. Offensive air support and NGF may be the only arms at hand during this period. NGF requirements reflect the anticipated offensive air support available, both in quantity and location. Protective fire on a 360° perimeter may demand additional NGF control personnel and equipment.

**3.1.9.2.4 Helicopter Lift Limitations.** Limitations that deprive the helicopterborne force of certain fire support means, for example, heavy artillery, may make

it necessary to provide heavy fire support by aircraft and NGF; however, if the helicopter operation is conducted in conjunction with a surface landing, long-range artillery may be able to provide some heavy support.

**3.1.9.2.5 Neutralizing the Assault Area.** The geographic area involved in helicopterborne operations may require prohibitively large quantities of ammunition and ships to neutralize the approach and retirement lanes and defended landing zones, unless nuclear weapons are used. Scheduled fire is placed only on areas known to contain weapons and personnel that must be neutralized in order to execute the landing. Great reliance is placed on air spotters to discover and take under fire unforeseen targets that threaten the success of the landing. Counterbattery targets and targets of opportunity in the approach and retirement lanes must be given top priority. There will be no restriction of fire on these targets prior to the assault. Permission, however, must be obtained to fire into the approach or retirement lanes after the assault has commenced.

**3.1.9.2.6 Helicopter Approach Retirement Routes.** If the maximum effectiveness of NGFS is to be obtained, helicopter approach and retirement routes used during a specific time period must be kept to a minimum. Approach and retirement lanes will be planned, if possible, to avoid landing beaches in order to allow for unrestricted beach preparation. The NGFO examines the operations plan and determines, in view of time and space factors, what degree of NGFS can be expected if various alternate approach and retirement routes and landing zones are selected during the ship-to-shore movement. He advises the supported commander (or higher echelon) of what such changes will mean in the execution of NGFS.

**3.1.9.2.7 Need for Continuous Fire Support.** When possible, NGFS ships are placed on each side of helicopter approach and retirement routes, in order to permit fire support without interrupting helicopter operations. It may be necessary to change to alternate approach or retirement routes during the operation. To permit continuous fire support regardless of changing situations, a system of flight restrictions and NGF trajectory limitations may be invoked. Such a requirement may be met by the use of airspace coordination areas along approach and retirement routes. Figure 3-2 illustrates such a system. By using trajectory charts in pertinent range tables, the NGFO ascertains the areas in which each fire support is able to place fire and thereby has an immediate guide for assigning ships to attack targets. For additional information on airspace coordination areas, see paragraph 7.2.8.3.2(d).

2. Designation of zones of fire and assignment of fire support ships to each
3. Designation of fire support areas and/or stations and assignment of ships thereto
4. Amount or percentage and types of ammunition required for destruction, neutralization, targets of opportunity, and other fire missions
5. Designation of specific targets to be destroyed and assignment of specific ships to accomplish destruction
6. Employment of air spot
7. Periods during which firing will be conducted
8. Schedule of fire
9. Screening of fire support ships (usually accomplished by the screen commander, hence does not appear in the NGFS plan)
10. Relief of fire support ships
11. Support of mine warfare operations
12. Support of beach reconnaissance and SEAL operations
13. Replenishment of ammunition, if required.

**3.6.1.1 Extent and Duration of Advance Force Operation.** The extent and duration of pre-D-day operations, once the decision to employ an advance force has been made, is determined, in large part, by the tasks to be accomplished. The tasks to be accomplished may include any or all of the following:

1. Destruction of defenses ashore
2. Preparation of sea areas
3. Preparation of beaches and beach approaches
4. Isolation of the objective and maintenance of local air superiority
5. Pre-D-day landings
6. Demonstrations
7. ECM

8. Meteorological information.

**3.6.1.2 Naval Gunfire in Advance Force Operations.** The duration of pre-D-day operations may not be dependent on the time necessary to complete requirements designated for NGF. The duration of preliminary bombardment depends upon many factors. Among them are:

1. Hostile surface and air reaction
2. Number of targets to be destroyed and disclosure of new targets
3. Extent of minesweeping and SEAL operations required
4. Ability of advance force to resupply ammunition to the fire support group
5. Enemy capability of reinforcement
6. Weather
7. Extent to which planned bombardment can accomplish the expected results.

**3.6.1.3 Planning Considerations.** After the decision to employ an advance force has been made by the CATF, the planning considerations confronting the major commanders are:

1. The CLF is responsible for the preparation of LF requirements for NGF and air support, pre-D-day seizure of supporting positions, demonstrations, and reconnaissance. If pre-D-day landings or demonstrations are to be conducted, he will direct the landing group commander of that force to report to the commander of the advance force for planning. The CLF is also responsible for indicating the troop staff representatives he desires to accompany the advance force commander.
2. The CATF is responsible for consolidating the requirements of the LF with those of the other elements of the ATF. He directs the commander of the advance force to prepare the detailed plans for the operation of that force and reviews them to ensure that they meet his overall requirements.
3. The advance force commander is responsible for the detailed planning for the operations conducted by his force. He prepares the NGF, air, minesweeping, landing site reconnaissance, SEAL, mine and net laying (if required), and pre-D-day landing plans.

**3.6.2 D-Day Operations.** General provisions are made in the D-day schedule for:

1. Continuation of target attack begun during the pre-D-day bombardment
2. Prearranged close support of the landing group, based on the expected rates of the ship-to-shore movement and the subsequent LF advance ashore until approximately H-hour plus 2 hours
3. Prearranged deep fire support of the landing group, extending throughout the hours of daylight, and assignment of adequate ships in direct and general support of assault force units.

Specific provisions are:

1. Assignment of tasks (destruction, neutralization, and so forth) for each fire support ship
2. Designation of zones of fire and assignment of fire support ships to each
3. Designation of fire support areas and/or stations and assignment of ships thereto
4. Amount, or percentage, and types of ammunition to be fired on D-day
5. Neutralization of high-priority targets that may remain after completion of the pre-D-day bombardment and periods during which this fire will be conducted in the various zones of fire
6. Assignment of ships in direct and general support of certain units of the landing group
7. Targets and target areas to be suppressed on D-day and assignment of ships to these missions
8. A flexible system for lifting or repeating fire delivered during the period between the time the landing craft or amphibious vehicles cross the line of departure and the shore fire control parties are established ashore
9. A schedule of fire prescribing the periods during which firing will be conducted
10. A flexible system similar to that in item 8 is necessary for landing by helicopters.

**3.6.3 Post-D-Day Operations.** Unlike pre-D-day and D-day schedules, post-D-day firings are not consolidated in a "schedule of fire," because many unknown

factors preclude preparation of a detailed schedule; there are, however, certain foreseeable requirements.

**3.6.3.1 Ships Necessary for Landing Force Support.** It is necessary that the LF be provided the maximum amount of possible fire power. NGFS is critical until all LF artillery is ashore and operational. Thereafter, it should be used to augment the artillery until such time as the advance inland exceeds effective employment of NGF. The absolute minimum requirements for NGFS are:

1. Each committed maneuver battalion — one fire support ship with at least two mounts, direct support
2. Each committed maneuver regiment/brigade — one fire support ship, general support
3. CLF — one or more fire support ships, general support.

If commitment of the reserve is preplanned, additional ships will be assigned as LF general support and will be used for direct support when the reserve is committed.

**3.6.3.2 Ships Necessary for Screening.** The strength of the screen can be estimated by considering enemy capabilities for naval and air attacks.

**3.6.3.3 Zones of Fire.** Zones are subject to many changes after D-day because of shifting of front lines.

**3.6.3.4 Planning.** Post-D-day NGF support plans are based upon:

1. Estimates submitted by the LF
2. The amount of artillery and offensive air support available
3. The number of ships and ammunition available
4. The enemy situation
5. The planned activities of the LF.

Prearranged fire support requirements, to include preparation, defensive, interdiction, and harassing fire, can be determined based upon LF operational plans. Opportunity fire will be rare after the LF is ashore. Call fire requirements are the most difficult to determine and should be based on worst case estimates.

and of exercising control from the air of aircraft engaged in close air support of ground troops.

**4.2.4.7 Tactical Air Observers.** These are officers trained as air observers whose function is to observe from airborne aircraft and report on movement and disposition of friendly and enemy forces, on terrain, weather, and hydrography, and to execute other missions as directed. Artillery and NGF air observers also have the capability of performing this mission.

**4.2.4.8 Air Intercept Controllers.** The air intercept controllers in the CICs will control defensive aircraft assigned to them by the AAW controller in accordance with the air operation plan.

**4.2.4.9 Helicopter Liaison Officer.** He is an experienced helicopter pilot assigned to commander, anti-air warfare staff to assist and maintain close liaison with the Navy TACC/HDC and the TADC/Marine TACC concerning employment of helicopters in ship-to-shore operations, logistic support (resupply missions, air evacuation of casualties, wire laying, and search and rescue flights), and special call missions.

**4.2.5 Attack Group or Advance Force TADC.** It is located in the appropriate flagship when such forces are organized.

**4.2.5.1 Functions.** The functions of a TADC are the same as those of a Navy TACC except that they are limited to the areas of responsibility of the respective commander. A TADC is prepared to assume the functions of a Navy TACC if required.

**4.2.5.2 Organization.** The advance force TADC is operated by a TACRON, augmented by flagship personnel. The organization and the principal personnel and their duties are the same as those of the Navy TACC with the coordinators and controllers designated as directors. The equipment of a TADC is similar to that of a Navy TACC.

**4.2.6 Supporting Air Control Ships.** The radar air control capabilities of selected surface combatants are often employed to augment the air control functions of the Marine TACC. When assigned to the ATF and employed in tactical air control, the surface combatant is normally designated a TADC. Its normal functions include direct radar air control over friendly aircraft in its assigned sector (e.g., tactical air traffic control, CAP/SUCAP control, and positive aircraft identification), AAW and air warning functions. These responsibilities are carried out as an agency subordinate to the Marine TACC by ship's CIC personnel. Specific TADC functions will vary under differing operational demands

and in accordance with individual ship's equipment available.

**4.2.7 Relationship of Air Control Agencies, Afloat and Ashore.** The relationship between the control organization afloat and the control organization ashore generally corresponds to the relationship that exists between the commander afloat and the commander ashore for whom these agencies control air support operations. TACPs are landed with landing force assault elements and operate by requesting air support from the appropriate agency and by directing aircraft providing support. During the early part of the assault, Navy TACC controls all aircraft supporting the operations and operating in the objective area during this period. After CLF has established his headquarters and tactical air control agencies ashore, control of support aircraft is usually passed to him by CATF and is exercised through the landing force TADC. After control of all air operations has been passed ashore, the Marine TADC becomes the Marine TACC and the control agencies afloat may revert to a TADC or assume a standby status.

#### **4.2.8 Command Relationships During the Transfer of Air Control from Afloat to Ashore.**

Command relationships during the transfer of air control ashore vary with the tactical situation. Provision for shifting the various phases of air control must be flexible to meet sudden situations which may arise (such as a nuclear burst). Normally, after CLF has moved ashore and has established facilities there for a Marine TACC the control of tactical aircraft may be passed ashore at a time mutually established by CATF and CLF. Partial and/or temporary control of various phases of air operations may be based alternately ashore or afloat by mutual agreement of CATF and CLF. After complete air control has been passed ashore, the Navy TACC may perform TADC functions and monitor air control frequencies being used ashore. In the event conditions require the air control to be transferred back afloat, the Navy TADC will be standing by for immediate resumption of operations as the Marine TACC. (See Figures 4-3 through 4-5).

**4.2.9 Relationship of Air Control Agencies to Aircraft Units.** Aircraft units supporting an amphibious operation may be a part of the ATF or may be part of another force operating in support of an amphibious operation. In both cases, they are controlled by the ATF air control organization. Aircraft entering designated zones of responsibility come directly under the control of the amphibious air control agency exercising control over those zones. The designated agency controls all aircraft operating in or passing through the objective area, regardless of mission or origin.

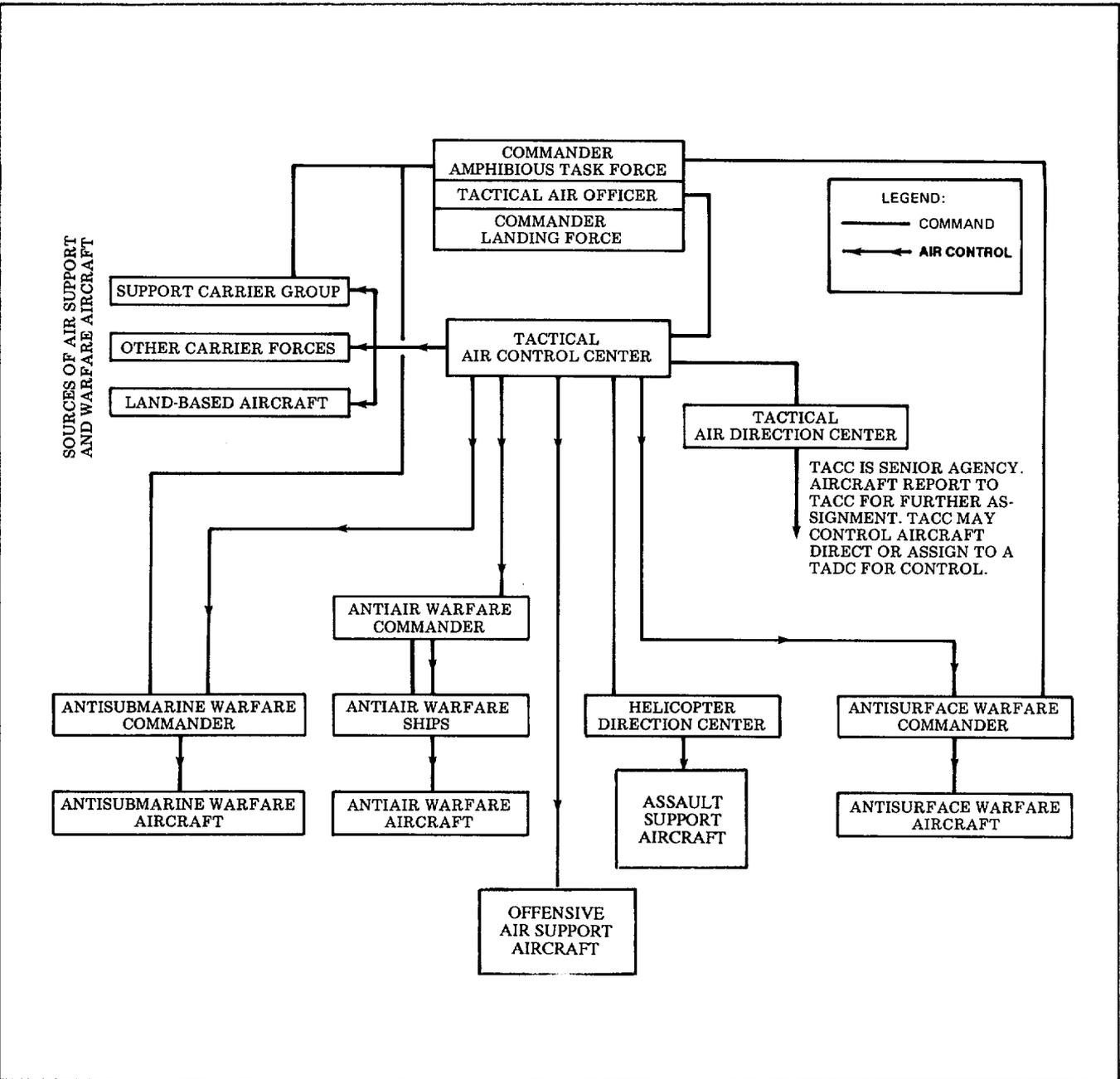


Figure 4-3. Tactical Air Control Before Passage of Control Ashore

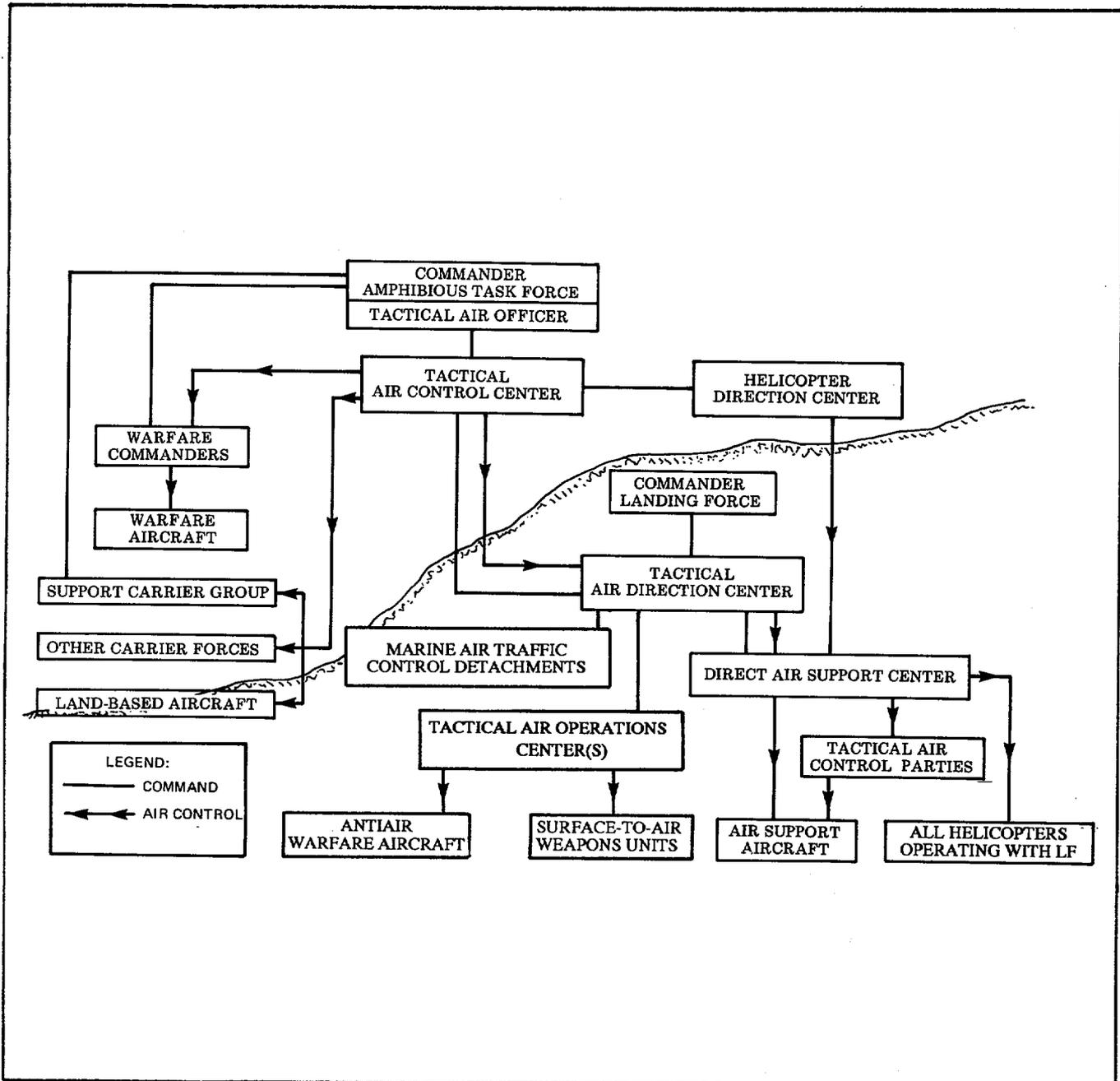


Figure 4-4. Tactical Air Control During Passage of Control Ashore

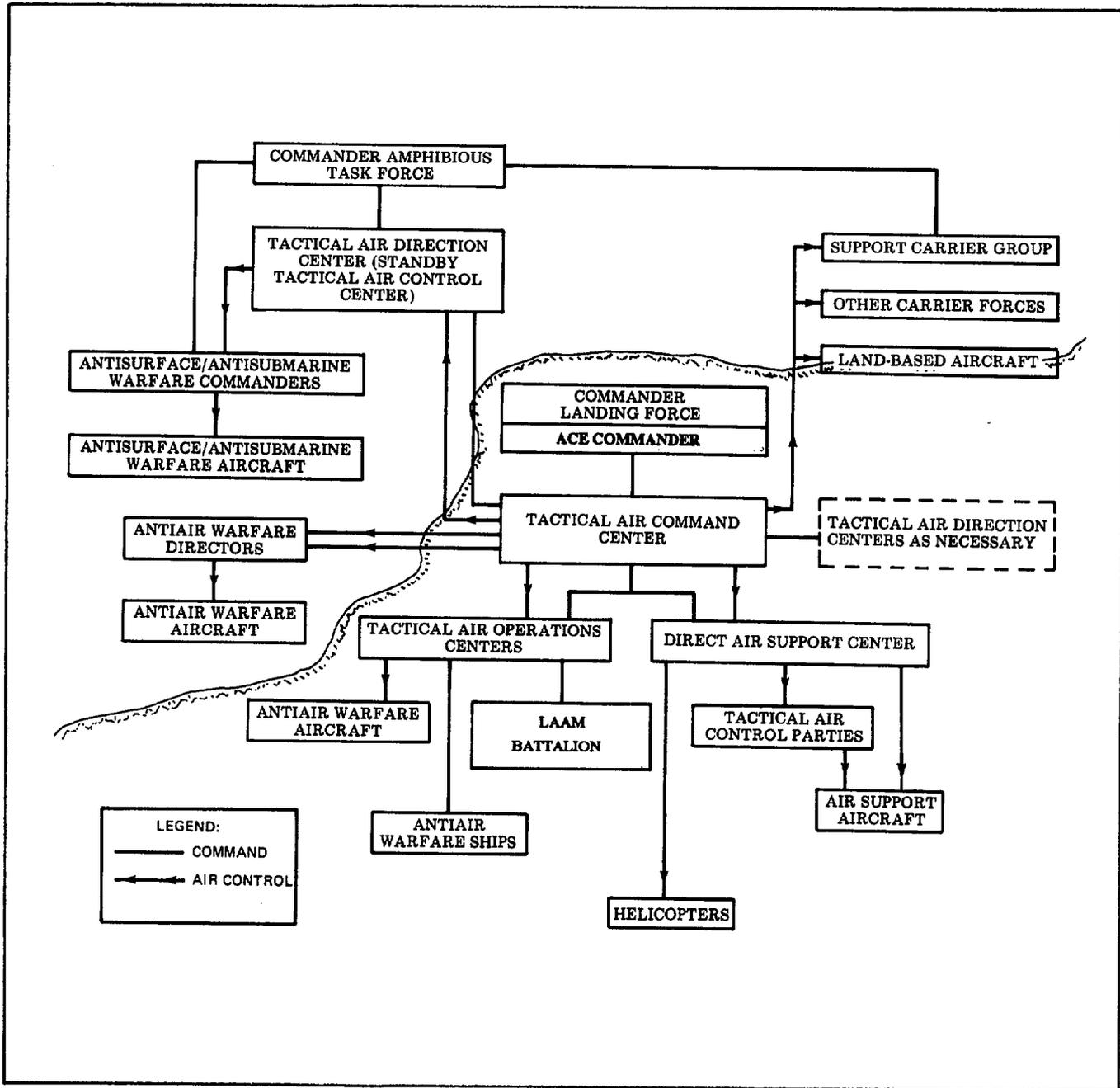


Figure 4-5. Tactical Air Control After Passage of Control Ashore

routes and timetables to be used by all airborne forces widely disseminated to responsible commanders in all parts of the ATF.

**5.1.7 Integration of Air Requirements.** The air requirements that most concern the TAO may be divided into two phases:

1. Requirements for preliminary air operations
2. Requirements for air operations during the assault.

**5.1.8 Preliminary Air Operations.** Preliminary air operations may be divided into two phases:

1. Air bombardment and reconnaissance operations conducted by land-based or carrier-based forces and initiated well in advance of the amphibious assault. These air operations are conducted under the direction of higher echelons of command.
2. Pre-assault air operations conducted by carrier units of the advance force and/or land-based aviation units. Air operations conducted during this phase are a responsibility of the CATF. He may assign the task of planning such operations to the advance force commander. Details concerning these pre-assault air operations are described in an appendix to the ATF air plan.

**5.1.9 Assault Air Operations.** AAW and SAR operations affect the ATF as a whole. Accordingly, plans for them are prepared by the CATF.

Both the CATF and the CLF have continuing requirements for offensive air action. The CATF needs offensive air support for the protection of ships and small craft, the continuous neutralization of enemy airfields, and the elimination of enemy antiaircraft defenses. The CLF requires pre-H-hour beach neutralization as well as both deep and close air support. The LF must also consider requirements for observation, spotting, photography, air transport, smoke, psychological operations, and other special missions.

## **5.2 AVIATION PLANNING BY THE LANDING FORCE**

The initiating directive will designate the aviation forces available for the projected operation. An estimate as to how these forces may be employed will be necessary to determine the initial broad ATF course of action. This estimate will include whether LF aviation can be pre-positioned and the availability of airfields

that might be ATF objectives, and so forth. The CLF also will need an estimate of how aviation relates to his proposed courses of action. After the CLF has chosen a course of action and developed his concept of operations, a detailed estimate of air support requirements must be made. When coordinated and consolidated with a similar NGF estimate and compared with capabilities, the CLF can determine the overall requirement for pre-assault bombardment.

**5.2.1 Pre-D-Day Air Operations.** LF requests for pre-assault air operations will be based on all intelligence available relating to the enemy, including dispositions, defenses, terrain, lines of communication, and capabilities. The extent of such operations will depend upon an overall decision on limitations to be imposed in order to achieve surprise. The request submitted to the CATF will provide missions to accomplish.

**5.2.1.1 Destruction of Enemy Installations.** In destruction of located enemy installations, particular emphasis is given to targets that cannot be attacked effectively by NGF, as well as to targets in the critical beach area, the destruction of which is particularly important to early operations ashore. Additional considerations are the destruction of urban areas with consequent interruption of enemy communications and disruption of enemy morale. Requirements for pre-D-day air operations will be coordinated closely with those for NGF.

**5.2.1.2 Tactical Air Reconnaissance.** This is the acquisition of intelligence information using aerial vehicles in visual observation and/or the use of optical, infrared, and/or electronic sensory devices. The CLFs request may include the reconnoitering and/or identification of hostile forces, weapons locations, or terrain, weather, or damage assessment.

**5.2.1.3 Harassment.** The CLF will submit requests covering air attacks for the purpose of harassment, outlining the target areas and harassing effect desired.

**5.2.1.4 Psychological Warfare.** While the psychological warfare policy for any operation is normally established by the CATF or higher authority, the CLF may submit requests for propaganda leaflet drops, including the form that he desires the leaflets to follow.

**5.2.2 D-Day Air Operations.** LF requirements for assault air operations will include:

**5.2.2.1 Pre-H-Hour Attacks for Neutralization of the Beach Area Prior to and During the Ship-to-Shore Movement.** In planning these attacks, particular attention must be given to coordination with NGF

plans, since the neutralization task is executed by both aircraft and fire support ships. Air attacks will be scheduled to fill interruptions in NGF, and the direction of attacks planned to cause minimum interference with ship's bombardment.

**5.2.2.2 D-Day Air Alert Call Mission Flights.** In establishing the requirements for D-day air alert call mission flights, consideration will be given to airspace limitations, size of helicopter assault operations, capabilities of the control system, nature of the terrain in the beach area, and types of targets located or anticipated immediately after landing. In accordance with these factors the optimum armament combinations and support group compositions are requested.

**5.2.2.3 Pre-H-Hour and H-Hour Requirements for Helicopters.** Consideration will be given to pre-H-hour ship-to-ship transfer, pre-H-hour reconnaissance/landing, and the ship-to-shore movement.

**5.2.2.4 Miscellaneous Requirements.** Miscellaneous requirements to provide the tactical air coordinators, tactical air observers, photography, artillery spot, and psychological operations will be developed.

**5.2.3 Post D-Day Air Operations.** Requirements for post-D-day air operations can be stated only in general terms. They include estimated requirements for CAS attacks, observation, photography, spotting, psychological operations, night harassment, transport and others.

## **5.3 AIR OPERATIONS ANNEX TO THE ATF OPERATION PLAN**

The TAO is assigned the overall responsibility for coordinating air planning and for preparing the air plan included as an annex to the operation plan of the CATF. The TAO is assisted by personnel of the tactical air control squadrons, personnel from LF aviation, and by the CIC officers at the various echelons of the ATF organization. Advance force commanders will be assigned tactical air control squadrons or components thereof as early as possible in order that they may serve as air planning staffs.

The basic air operation plan normally contains as many of the following as may be appropriate:

1. Task organization (list of air units in the command)
2. Information (intelligence, outline of all operations to be conducted in support of the attack by air units not a part of the amphibious task force)
3. Unit missions (task assignments of air units listed in the task organization)
4. Administrative and logistic details
5. Communications.

Appendix B contains a complete description of the format and contents of the Air Operations Annex.

## CHAPTER 7

# Concept and Planning

### 7.1 CONCEPT

The basic objective in coordinating supporting arms is to ensure the most effective fire support for all elements participating in an amphibious operation. This involves the coordination of air, NGF, and artillery to ensure their economical employment, maximum effectiveness, and the requisite safety to friendly forces. This is accomplished by:

1. Acquiring and analyzing targets
2. Developing plans for coordinated action by supporting arms, including plans for the attack of all targets capable of interfering with the mission of the ATF and its elements
3. Exercising direction of the fire of supporting arms in the objective area, including supporting arm and weapon selection, measures for coordination, and safety
4. Assessing damage on the basis of reports and intelligence.

From the beginning of the ship-to-shore movement until a short time after the first wave lands, coordination of supporting fire consists principally in supervising the execution of preplanned fire and instituting modifications to schedules where necessary. As the control agencies of the LF become operational ashore, all practicable close support call fire from all supporting arms is provided as requested by troop units. Coordination problems arising in the execution of call fire should be resolved at the lowest echelon able to effect complete coordination of the particular mission.

Agencies involved in the coordination of supporting arms are authorized direct liaison for planning and coordination purposes early in the planning phase of an operation. In the planning of supporting fire, coordination of planning is accomplished as required at each level in the LF before those fire support plans that af-

fect other units are transmitted to the next higher level for similar action. All LF fire support requests for artillery, NGF, and air support, including requests for the use of nuclear weapons, are coordinated by this process.

**7.1.1 Responsibility.** Initially, the CATF exercises the overall coordination responsibility for the delivery of NGF, air support, and LF artillery fire, including requests for the use of nuclear weapons. When the CLF is ashore and has established the necessary facilities, and when the tactical situation permits, the CATF normally passes this coordination responsibility to him. Thereafter, the CLF coordinates the fire of all three supporting arms with troop maneuvers. Seldom, however, is complete coordination authority passed at one time. Normally, the LF assumes responsibility for various functions of fire support as the necessary capability for that function is established ashore. For instance, as soon as one battalion's FSCC is established ashore, that battalion normally can assume the responsibility for coordinating all fires in its own zone. The responsibility for the control of NGF (fire control) may be passed to the CLF also. The CLF may then be authorized to assign fire missions directly to individual fire support ships. The CATF or his designated subordinate retains responsibility for the allocation, logistics support, and operational and fire control of support ships.

#### 7.1.1.1 Supporting Arms Command, Control, and Coordination

**7.1.1.1.1 Supporting Arms Command.** As the overall commander of amphibious operations, the CATF commands all elements of the ATF including the LF. As the CATF's representative agency, the SACC exercises control and coordination over the LF FFCC and, through the FFCC, its subordinate FSCCs.

**7.1.1.1.2 Supporting Arms Control.** That commander or agency with the authority to assign missions to supporting arms units has control of the supporting arms units. Such mission assignment may either be a

tactical mission, such as direct or general support, or for the attack of a particular target. Control of supporting arms is not necessarily vested in the supporting arms commander, nor is it always in the hands of only one agency. For example, the commanding officer of a gunfire support ship, a battery commander, and an aircraft squadron commander unquestionably have command of their assets in assigning missions or in designating where, when, or how they would fire.

#### **a. Overall Control in Amphibious Operations.**

Overall control of supporting arms in an amphibious operation is vested in the CATF. In the event that advance force operations are to be executed, overall control could be vested in the advance force commander during that phase. Upon the arrival of the CATF in the AOA and the dissolving of the advance force, the CATF would reassume overall control of supporting arms. The CLF assumes overall control of supporting arms when control is passed ashore. See Chapter 8 for a discussion of passage of control.

#### **b. Control at Subordinate Echelons.**

In an amphibious operation, control of artillery, except when employed in pre-D-day operations, is accomplished by the CLF. Air and NGF control relative to tactical mission assignment normally remains with the CATF until control of supporting arms is passed ashore. Once the first elements of the LF reach the shore, that portion of control that relates to the firing of specific missions shifts to those elements. Until this point, CATF, as the publisher of the ATF air and NGF plans, exercises all control over those weapons systems. With the commencement of on-call fires, the control of supporting arms in the attack of specific targets and target areas becomes a LF responsibility when that target affects the LF.

#### **c. Control.**

Control is addressed separately for each supporting arm.

##### **7.1.1.1.3 Supporting Arms Coordination.**

Responsibility for coordination is always vested in the commander. During the several phases of the amphibious operation, the commander during that phase will have the overall responsibility for supporting arms coordination. Most coordination, however, will be done at subordinate echelons. Coordination is done at the lowest capable echelon. Effective coordination of supporting arms can be enhanced if senior commands encourage and permit subordinate commands to coordinate without undue interference from above, if the principles of fire support coordination are adhered to, and if fire support coordination measures are used judiciously. Coordination encompasses all supporting arms collectively. See Chapter 8 for a discussion of passage of coordination responsibility.

##### **7.1.2 Supporting Arms Coordination Center.**

Upon the initiation of planning, the CATF (and attack group and/or advance force commander as appropriate) establishes a SACC. Through this agency the CATF exercises overall coordination of supporting arms planning. Upon arrival in the objective area, the SACC on the flagship of the naval commander concerned coordinates the delivery of all supporting fire. For larger operations, SACC should be on the LCC Class ship. C<sup>3</sup>I and CATF/CLF staffing requirements necessitate use of this platform. For smaller operations, the LHA, LPH, LHD, and flag-configured LPD Class may be used.

The SACC is under the supervision of the SAC, who is the direct representative of the naval commander charged with supporting arms coordination at the time. The SAC, with the advice of the LF FFC, integrates the fire plans of the supporting arms to ensure their most effective employment in support of naval operations and of the LF scheme of maneuver. The CATF may designate the LF FFC as the SAC.

##### **7.1.3 Force Fires Coordination Center/Fire Support Coordination Center.**

A FFCC exists at the MAGTF level, and FSCCs exist at all levels of the GCE down to the battalion level. Through these agencies, the commanders plan and coordinate the fire of supporting arms with the scheme of maneuver. The FFC is in charge of the FFCC, and the FSC is in charge of the FSCC. The FFC/FSC is the direct representative of the commander under whom the agency is functioning. In amphibious operations, the MAGTF FFCC is designated the LF FFCC. The LF FFCC and GCE FSCC provide representatives to work in the SACC during the period before the passage of coordination responsibility to the CLF. The representatives include the LF FFC (who may serve as the SAC), the GCE FSC, the LF air officer, the LF NGFO, and the LF TIO.

As the LF FFCC, the MAGTF FFCC is a task-organized facility that includes the personnel, equipment and communications links appropriate to the fire support functions to be performed, and the tactical situation. The MAGTF FFCC is staffed using the supporting arms representatives on the MAGTF CE staff as a nucleus, with augmentation from other USMC sources and representatives or liaison personnel/teams from joint and allied forces.

Supporting arms representatives on the MEF staffs consist of artillery, air, and NFGOs. A target information officer is normally designated at the MEF levels. At the MEU level, this staffing may not include all of the above officers.

While afloat, the LF FFC receives requests from subordinate troop echelons for supporting arms not otherwise available to them or for which complete coordination cannot be effected. He coordinates these requests and advises the SAC of troop requirements for air and NGFS and the manner in which these arms should be employed to render the most effective troop support. He also keeps the SAC advised of the activities of artillery units ashore.

Coordination of LF requests for supporting fire is the responsibility of the CLF during all phases of the operation.

**7.1.4 Relationships.** While afloat, the FFCC and SACC function in close cooperation with each other during initial planning, pre-assault operations with the advance force, and assault operations. The SAC, with the advice of the FFC, integrates the fire plans of the supporting arms to ensure their most effective employment in support of naval operations and the LF scheme of maneuver ashore. Appropriate personnel are stationed within the SACC to provide rapid exchange of information and expedite the processing and coordination of troop fire support requests.

Some personnel of the ATF SACC and the LF FFCC normally accompany the advance force to advise its commander concerning the attack on targets of potential threat to operations and to ascertain target status at the objective. They keep abreast of the current situation and brief members of the ATF after dissolution of the advance force.

With the establishment of the FFCC ashore and assignment of responsibility for coordination of artillery, naval gunfire, and air support to the CLF, the SACC assumes a standby and monitoring status in accordance with paragraph 7.4.3.1.5.

The SACC and FFCC are not vested with command functions. They are formed by personnel assigned to their respective commanders and function as staff agencies of those commanders.

**7.1.5 Types of Fire Support.** Fire support delivered by supporting arms includes field artillery, naval gunfire and tactical air support.

#### **7.1.5.1 Artillery and Naval Gunfire Support**

**7.1.5.1.1 Direct Support.** Direct support NGF may be provided as soon as communications are established between assigned direct support ships and either shore fire control parties or other troop observers authorized as spotters. Direct support artillery fire may be provided

after the direct support artillery battalion or any one of its batteries is ashore, emplaced, ready to fire, and has established communications with artillery forward observers accompanying the supported unit.

Requests for direct support fire originating and approved within an infantry battalion are transmitted directly to the assigned direct support ship, or direct support artillery fire direction center, as appropriate. These requests normally will not be received in the SACC.

**7.1.5.1.2 General Support.** Requests for NGF general support are usually initiated by maneuver regimental or lower echelons of the LF when they require fire support beyond the capabilities of the ship or ships previously assigned in direct or general support.

Requests for general support naval gunfire ships are received and coordinated in the SACC. Requests for general support artillery are not normally received in the SACC. After control and coordination responsibilities have been passed ashore to the CLF, these requests are received and coordinated by the LF FFCC. Alternate means of accomplishing the task must be employed if the requested support is not available.

When artillery fire is to be employed in addition to NGF and/or air support at LF level, prior to the passage of control ashore, its coordination and integration will be effected by the LF FFC with the approval of the SAC.

#### **7.1.5.2 Aviation Fire Support**

**7.1.5.2.1 Close Air Support.** This may be provided as soon as communications are established between the TACPs and the Navy TACC. Forward air controllers of TACPs are in the early waves so they can be in position to assure ground control of CAS missions as early in the operation as possible. However, until the FAC is established ashore, beach preparation and other fires can be controlled by a FAC(A). With the FAC established ashore, requests for CAS will be received by the Navy TACC and must be referred to the FFC and the SAC for coordination and approval before the mission can be carried out.

**7.1.5.2.2 Deep Air Support.** The CATF/CLF uses DAS to shape the battlefield. DAS is employed to determine enemy operational intentions, delay enemy reinforcements, degrade critical enemy functions and capabilities, and manipulate enemy perceptions. The CLF may reduce the number of aircraft available for CAS to conduct DAS. DAS is conducted on both sides