

Allocation of Blocks by LF	
H & S Co, 1 MAF	0 to 500
1st FSSG	501 to 1200
NMCB	1200 to 1300
1st MARDIV	1301 to 2200
2nd MARDIV	2201 to 3100
1st MAW	3101 to 4000
Allocation of Blocks by Division	
HQBN	1301 to 1350
1st MAR	1401 to 1500
Allocation of Blocks by Wing	
MWHS	3101 to 3200
MAG-13	3201 to 3300
Allocation of Blocks by Regiment	
HQ CO 1st MAR	1401 to 1425
1st BN 1st MAR	1426 to 1475

Figure 3-21. Serial Number Allocation

3.4.2.8 Assault Schedule. The assault schedule provides the formation, composition, and timing of scheduled and on-call waves. The GCE commander considers subordinate commanders' recommendations regarding numbers of waves on to designated beaches and numbers and types of amphibious vehicles and landing craft in each wave when preparing this schedule. An example of an assault schedule is depicted in Figure 3-24.

3.4.2.9 Amphibious Vehicle Employment Plan. The amphibious vehicle employment plan shows the planned employment of AAVs and lighter, amphibious resupply, cargo-5 ton (LARC Vs) in the assault, including their employment after arrival at the beach. The GCE commander considers subordinate commanders' recommendations when preparing the plan in addition to information contained in the landing diagram and assault schedule. An example of an amphibious vehicle employment plan is depicted in Figure 3-25.

3.4.2.10 Helicopter Availability Table. The helicopter availability table shows the number of helicopters available for the helicopterborne ship-to-

shore movement. It lists helicopter units and their call sign, number of helicopters available for first and subsequent trips, helicopter model, parent helicopter transport, maximum deck launch spots available on each helicopter transport, and tentative helicopter load capacity. The table is prepared by a representative from the air combat element (ACE) and pertains only to D-day operations. An example of a helicopter availability table is depicted in Figure 3-26.

3.4.2.11 Heliteam Wave and Serial Assignment Table. The heliteam wave and serial assignment table specifies the troop units, supplies, and equipment that are to be loaded into each helicopter. It identifies each heliteam (analogous to a boat team) by serial number with the wave number and helicopter position in the wave. An example of a heliteam wave and serial assignment table is depicted in Figure 3-27. The weight column provides a check that maximum helicopter lift capability is not exceeded by the serial. A helicopter enplaning schedule (similar to the ship's diagram) is also prepared to show each enplaning station on the flight deck, the sequence and location for spotting helicopters, and the heliteam serials assigned to that enplaning station. This table and schedule is prepared on each helicopter transport by the helicopterborne unit commander, assisted by the helicopter unit commander, and it is coordinated with the ship's CO.

3.4.2.12 Helicopter Landing Diagram. The helicopter landing diagram graphically displays routes to and from HLZs. An example of the helicopter landing diagram is depicted in Figure 3-28. It shows the helicopter transport area, rendezvous point (RP), departure point (DP), approach and retirement routes, other control points, LZs, and remarks for clarity. The diagram is prepared by a representative from the ACE in coordination with the helicopter coordination section (HCS) and helicopter transport group/unit commander and is submitted to CATF for approval and coordination with the waterborne assault and supporting fire planning.

3.4.2.13 Helicopter Employment and Assault Landing Table (HEALT). The HEALT is a detailed plan for the movement of helicopterborne troops, equipment, and supplies. It is the landing timetable for the helicopterborne ship-to-shore movement and specifies the assignment of serials to helicopters for scheduled and on-call waves.

This document is the basis for preparing flight schedules and is used by the primary HDC to control helicopter movements. The HEALT is prepared by a representative from the ACE in coordination with the

LF Landing Sequence Table						
Unit	Element	Serial No.	Carrier No. Type	Ship	Beach	Remarks
1st & 2nd Plat ACo 2nd Tk Bn (FMF)		905	3 LCU	LSD	RED	
ACo(-) 2nd Tk Bn (FMF)		906	3 LCU	LSD	RED	
1st & 2nd Plat BCo 2nd Tk Bn		907	3 LCU	LSD	BLUE	
BCo(-) 2nd Tk Bn		908	3 LCU	LSD	BLUE	
1/10	ABtry	1013	7 LCM	LPD	RED	
1/10	BBtry	1014	7 LCM	LPD	RED	
	CBtry	1015	7 LCM	LPD	RED	
	HqBtry	1016	3 LCM	LPD	RED	
	DBtry	1023	8 LCM	LPD	BLUE	
Div TacCP		401	4 LCM	LHA	BLUE	
ACo(-) 2nd Eng.		105	4 LCM	LSD	RED	

Figure 3-23. Example of an LF Landing Sequence Table

3.4.2.14.3 LF Reserve. Reserve units prepare a landing plan in the same manner as an assault unit. However, if the entire LF reserve is a nonscheduled unit, its deployment is prescribed in the LF landing sequence table. Serial assignment tables are prepared for all units landing prior to general unloading.

3.4.2.15 Regimental Landing Plan. The regimental landing team (RLT) commander considers the tactical recommendations of BLT commanders and submits his recommended landing plan to the GCE commander. After the GCE landing plan is published, the RLT commander extracts pertinent information and publishes it as the RLT landing plan. The documents comprising the RLT landing plan are the same as those for the GCE landing plan.

3.4.2.15.1 Other Regiments. Reserve RLTs prepare landing plans according to the landing category

they are assigned. Units to be landed prior to general unloading prepare serial assignment tables. Landing of nonscheduled units is prescribed in the LF landing sequence table. Elements of regiments and reserve RLTs to be landed in on-call waves appear in the assault schedule, landing diagram, or HEALT.

3.4.2.16 Battalion Landing Plan. BLT commanders prepare the following documents as appropriate:

1. HEALT
2. Heliteam wave and serial assignment table
3. Landing craft and amphibious vehicle assignment table
4. Landing diagram

Assault Schedule					
Wave	Time	Beach			
		RED		BLUE	
		1	2	1	2
		Craft/VEH Unit Serial	Craft/VEH Unit Serial	Craft/VEH Unit Serial	Craft/VEH Unit Serial
1	H-hour	8 AAVP Asit Plats E&F Cos (+), BLT 2/6 604/704	8 AAVP Asit Plats A&B Cos, BLT 1/6 203/303	8 AAVP Asit Plats A&B Cos, BLT 2/2 606/706	8 AAVP Asit Plats A&B Cos, BLT 1/2 1801/1802
2	H+3 min	6 AAVP E&F Cos (+) 605/705	6 AAVP A&B Cos (+) 204/304	6 AAVP E&F Cos (+) 607/707	6 AAVP A&B Cos (+) 1802/1803
3	H+7 min	4 AAVP Leading Plats G Co 803	4 AAVP Leading Plats C Co 405	4 AAVP Leading Plats G Co 804	4 AAVP Leading Plats C Co 406
Rept PCS at H+90 min		2 AAVP Recon Party 2/10 10 AAVP I&K Cos (+), BLT 3/6 1302/1502/2001		2 AAVP Recon Party 1/10 8 LCM I&K Cos (+), BLT 3/2 2201/2301/1602	
Rept PCS at H+50 min		10 AAVP Leading Plats L & Wpn Cos, BLT 3/6 1701/1803		10 LCM Leading Plats L & Wpn Cos, BLT 3/2 1703/1804	
Rept PCS at H+55 min		10 AAVP L & Wpn Cos (+) BLT 3/6 1702/1805		2 LCM L & Wpn Cos (+), BLT 3/2 2401/2501	
Rept PCS at H+60 min		6 AAVP BLT Hq 3/6 2101		6 LCM BLT Hq 3/2 2601	
Rept ACCS at H+90 min				10 LCM Division Adv CP 1901	
Rept ACCS at H+120 min				3 LST 2nd Tk Bn (+) rein 907	

Figure 3-24. Example of an Assault Schedule

Amphibious Vehicle Employment Plan							
Ship	Number and Type Amphibious Vehicles				Wave	Destination	Remarks
	AAVP7	AAVC7	AAVR7	LARC			
LST 1179	5		1		1	BEACH RED 1	Aslt Plats, Co B
LST 1180	5						Asit Plats, Co F
LSD 36	5		1		1	BEACH RED 2	Aslt Plats, Co A
LSD 37	5						Asit Plats, Co B
LST 1179	5				2	BEACH RED 1	Co E (-), BLT 2/6
LST 1180	5	1					Co F (-), BLT 2/6
LSD 36	5				2	BEACH RED 2	Co A (-), BLT 1/6
LSD 37	5						Co B (-), BLT 1/6
LST 1181	10	1			3	BEACH RED 1	Co G, BLT 2/6
LSD 38	10	1			3	BEACH RED 2	Co C, BLT 1/6
(etc. for the entire first trip of vehicles)							
LPD 4				2		Primary control ship RED beach	Land Beach Party Team
LSD 37				2		Primary control ship RED beach	Land Beach Party Team
(etc. for subsequent employment)							

Figure 3-25. Example of an Amphibious Vehicle Employment Plan

5. Consolidated landing and approach plan (prepared jointly by the BLT and PCO, in lieu of using separate employment plans and approach schedules). An example of a consolidated landing and approach plan is depicted in Figure 3-31.

6. Debarkation schedule (prepared jointly by ship's CO and CO of troops).

3.4.2.16.1 Battalions Other Than Infantry.

Combat support unit commanders prepare the same documents as the BLT for orderly debarkation and movement ashore.

3.4.2.17 Air Combat Element (ACE)/LF Aviation Landing Plan. The ACE/LF aviation landing plan outlines the ACE commander's plans for establishing aviation units ashore by air and surface means. It provides detailed plans for landing air elements embarked in assault shipping with scheduled or on-call waves or as nonscheduled units. This plan serves as the LF aviation landing plan when the wing is the ACE. An example of an ACE/LF aviation plan format is depicted in Figure 3-32.

3.4.2.17.1 Contents. The plan provides for the echelonment and landing sequence of aviation units established ashore. It contains:

Helicopter Availability Table									
Helicopter Unit and Call Sign	Number of Helicopters	Number of Helicopters Available		Model	Parent Helicopter Transport	Maximum Deck Launch Spots Available	Tentative Load Capacity		Remarks (as appropriate)
		First Trip 90% (Note 1)	Other Trips 75% (Note 1)				Troops	Cargo (lb)	
HMM-163 (ANVIL)	12	10	9	CH-46E	LHA 1	9	16	4,080	All external lift capable.
HMM-164 (RIPPER)	12	10	9	CH-46E	LPH 7	7	16	4,080	All external lift capable.
HMA-266 (SCARFACE)	12	10	9	AH-1W	LPH 2	7	NA	NA	Escort and CAS
HMA-267 (HOBO)	12	10	9	UH-1N	LHA 1	9	8	3,000 (Note 2)	Ten armed with 50-cal MG.
HMH-465 (HAULER)	16	14	12	CH-53E	LHA 3	9	32	32,000	Equipped with aircraft recovery sling.
HMH-466 (ELVIS)	16	14	12	CH-53D	LHA 2	9	32	14,000	All external lift capable.

Notes:

1. These percentages may vary from operation to operation.
2. The UH-1N has only 220 cubic feet of cargo space and would normally exceed available volume before exceeding weight limitations.
3. Sea level at 90°F.

Figure 3-26. Example of a Helicopter Availability Table

1. Detailed landing documents for air elements which move ashore prior to general unloading
2. Ship-to-shore control provisions
3. Confirmation on pontoon causeways, fuel handling systems, and landing naval construction regiment (NCR) elements to support aviation facilities ashore.

3.4.2.17.2 Composition of Echelons. Elements of air control support and fixed wing STOVL squadrons and helicopter groups comprise the first echelon and are

landed by helicopter and landing craft as part of the LFSP (see Appendix K). The second echelon of these units is landed across beaches normally as nonscheduled units and consists of heavy equipment and personnel required for sustained operations.

The initial echelon of the remainder of fixed wing aircraft groups is personnel and heavy equipment for base operations and maintenance. This echelon is surface-lifted into the AOA and landed across beaches. The second echelon comprising aircraft, pilots, and crews is flown into the AOA when facilities are ready.

Heliteam Wave and Serial Assignment Table							
Wave	Heliteam Flight Serial (Note 1)	Personnel	Number	Supplies and Equipment	Lift Capacity XXXX (Note 2)		
		Troop Unit			Personnel	Equipment	Total Weight
	ANVIL 101 100-1	1st Sqd, 1st Plat, Co A Aslt Tm, 1st Aslt Sqd, Wpns Plat	13 <u>3</u> 16	1M Dragon (31 lb) 2 Dragon Rds (50 lb)	3,840	81	3,921
	ANVIL 102 100-2	2nd Sqd, 1st Plat, Co A Aslt Tm, Aslt Sqd, Wpns Plat	13 <u>3</u> 16	1M Dragon (31 lb) 2 Dragon Rds (50 lb)	3,840	81	3,921
	ANVIL 103 100-3	Plat Cdr, 1st Plat, Co A Msgr 3d Sqd (-) Corpsman Sqd Ldr, 1st MG Sqd MG Tm, 1st MG Sqd, Wpns Plat	1 1 9 1 1 <u>4</u> 17	1AN/PRC-77 (22 lb)	4,080	22	4,102
	ANVIL 110 100-10	Elms 3d Sqd, 1st Plat, Co A MG Tm, 1st MG Sqd, Wpns Plat LZ Cntl Tm (RED) Plat Sgt, 1st Plat, Co A Msgr Plat Guide, 1st Plat, Co A Corpsman Sqd Ldr, 1st Aslt Sqd, Wpns Plat	5 4 3 1 1 1 1 <u>1</u> 17	1 MG (24 lb)	4,080	24	4,104

Notes:

- The heliteam flight serial is: ANVIL Heliteam squadron radio call sign
1 Heliteam wave number
01 Heliteam position in the wave
100 Troop unit serial assignment
-1 Troop unit heliteam number
- Lift capability is computed by the ACE based on helicopter model and expected environmental conditions.

Figure 3-27. Example of a Heliteam Wave and Serial Assignment Table

The LF aviation organization for landing will differ greatly from their task organization for combat operations because of the division of air groups and squadrons into landing elements and the wide variation in time and method of landing these elements. The ACE/LF aviation landing plan provides for a regroupment of these elements into echelons which is described in the general paragraph of the OPORD.

3.4.2.17.3 Scheduled, On-Call, and Non-scheduled Elements. The ACE/LF aviation plan lists air elements landed in scheduled and on-call waves or as nonscheduled units. It also contains landing documents extracted from GCE landing plans to describe the method and sequence for landing. These documents are:

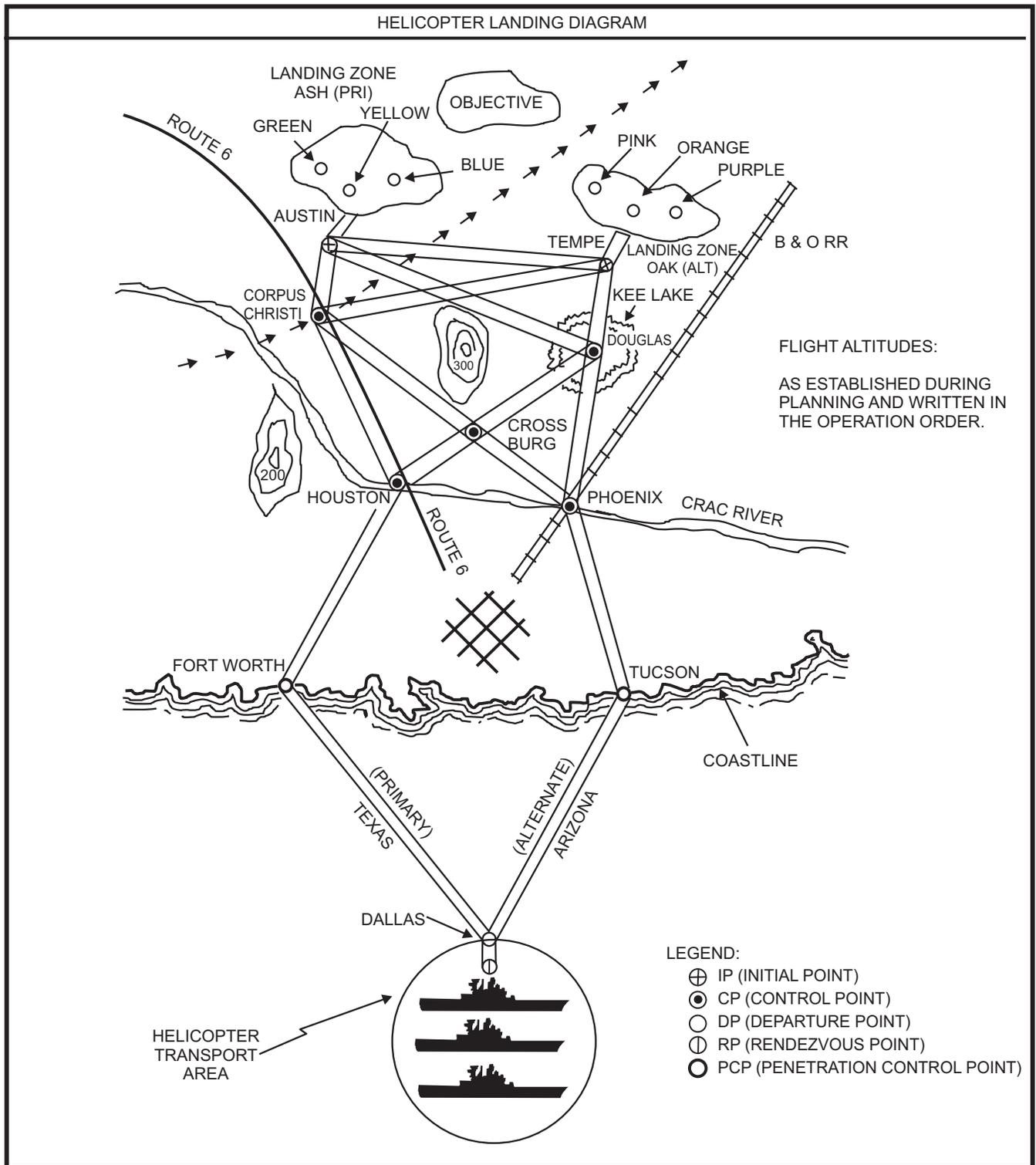


Figure 3-28. Example of a Helicopter Landing Diagram

Helicopter Employment and Assault Landing Table										
Wave	Helicopter Unit and Flight No.	Number and Model of Helicopter	From	To	Time			Destination		Troop Unit Serial Remarks
			Helicopter Transport	Helicopter Transport	Load	Launch	Land	LZ	LS	
1st	ANVIL-1	10 CH-46E	LHA 1	LHA 1	Preload	H - 21	H - Hr	Hawk	Blue	Co A (-) (Rein) Ser 101
	RIPPER-1	7 CH-46E	LPH 7	LPH 7	Preload	H - 21	H - Hr	Hawk	Green	Co B (-) (Rein) Ser 105
	SCARFACE-1	4 AH-1W	LPH 2	LPH 2	Preload	H - 21	NA	NA	NA	Escort
	HOBO-1	1 UH-1N	LHA 1	LHA 1	Preload	H - 21	NA	NA	NA	HCA (refuel as necessary)
2d	ANVIL-2	9 CH-46E	LHA 1	LHA 1	Preload	H - 11	H + 10	Eagle	Red	Elms Co "A" Ser 107
	RIPPER-2	7 CH-46E	LPH 7	LPH 7	Preload	H - 11	H + 10	Eagle	Green	Elms Co "B" Ser 103
	SCARFACE-2	4 AH-1W	LPH 2	LPH 2	Preload	H - 11	NA	NA	NA	Escort
3d	ANVIL-3	9 CH-46E	LHA 1	LPH 5	H + 39	H + 45	H + 71	Robin	Red	CO C (-) (Rein) Ser 211
	RIPPER-3	6 CH-46E	LPH 7	LPH 5	H + 39	H + 45	H + 71	Robin	Blue	Elms Co "C" Ser 212
	SCARFACE-3	4 AH-1W	LPH 2	LPH 5	NA	H + 45	NA	NA	NA	Escort
On-call	HAULER	16 CH-53E	LHA 3	LHA 3	TBA	On order	TBA	TBA	TBA	Resupply
	ELVIS	16 CH-53D	LHA 4	LHA 2	TBA	On order	TBA	TBA	TBA	Resupply

Figure 3-29. Example of a Helicopter Employment and Assault Landing Table (HEALT)

1. Extracts from assault schedules, HEALTs, and heliteam wave and serial assignment tables
2. Serial assignment table
3. Landing sequence table.

Serials, not part of the LFSP, to be landed in scheduled and on-call waves are submitted to CLF for coordination and approval. The GCE commander is then furnished the information to integrate air serials into the assault schedule. Nonscheduled units are serialized and incorporated into the LF landing sequence table.

Air control units, aviation headquarters squadrons, and base and logistics squadrons may be landed prior to commencement of general unloading to establish air facilities ashore. These units are normally landed as nonscheduled units.

Helicopter support teams (HSTs) are landed in scheduled waves. Air support radar teams usually are landed in on-call waves and are shown in the GCE's assault schedule or HEALT. Other air elements landed early in the ship-to-shore movement are serialized and shown in the GCE and LF landing sequence tables as nonscheduled units.

3.4.2.17.4 Airfields, Pontoon Causeways, Fuel Handling Systems, and Engineering Operations. The status of fixed-wing aviation facilities ashore determines when air elements will land. Information on when facilities will be ready is provided in the ACE/LF aviation landing plan and includes:

1. Time NCR elements will land and commence work on airfields
2. Estimated time installation of pontoon causeways for landing heavy aviation equipment will be completed

control of all en route air traffic and air defense operations, to include manned interceptors and surface-to-air weapons, in an assigned area. It is under the operational control of the TACC ashore and provides sector antiair warfare (AAW) coordination.

5.4.15.5 Tactical Air Command Center Ashore (TACC Ashore). When air control is passed ashore, CLF exercises control of air operations through the ACE commander and the TACC ashore. When the TACC ashore is established and CLF accepts responsibility for all aircraft and air warning functions of tactical air operations in the AOA, the TACC afloat becomes a TADC.

5.5 EXECUTION

The helicopterborne ship-to-shore movement of scheduled waves to helicopter landing zones (HLZs) is conducted in accordance with the HEALT and helicopter landing diagram. After launching, helicopters proceed to the HLZ via specific control points (CPs) and routes as described in paragraph 5.5.4.2. After discharging their loads, helicopter waves rendezvous and proceed via specific CPs and routes to a breakup point. At the breakup point, individual flights return to their respective ships or proceed as directed by the primary HDC.

On return trips helicopters may be used for MEDEVAC. In such cases, they proceed from the HLZ via the retirement route directly to the CRTS, unless otherwise directed by the primary HDC acting on advice from the ATF MRCO.

5.5.1 Enplanement. LF enplanement in helicopters is conducted by shipboard debarkation control personnel assisted by LF personnel.

Troops in the helicopterborne ship-to-shore movement are organized into heliteams in accordance with the heliteam wave and serial assignment table. Passenger manifests are prepared, life preservers are provided by the helicopter squadron, and troops are mustered in an assembly area.

Heliteams are moved, under the control of heliteam leaders, from the assembly area to the flight deck staging area. At the proper time, heliteams are led by guides to helicopter loading points where they enplane under the direction of the helicopter loading supervisor. The guide collects the manifests, marks them with the helicopter's identification number, and passes them to the debarkation control representative.

5.5.2 Troop and Equipment Categories. Helicopterborne troops and supplies are arranged in the

same categories as for the waterborne ship-to-shore movement. These categories are discussed in paragraph 3.3.2.

5.5.2.1 Scheduled Waves. Scheduled waves land in accordance with the HEALT. The scheduled time for the first helicopterborne wave to land is L-hour, which may be concurrent with H-hour or another time may be designated depending on the scheme of maneuver ashore.

5.5.2.2 On-Call Waves. On-call waves are listed in the HEALT and held in readiness aboard ship. They land when requested by tactical commanders through the helicopterborne RLT TACLOG detachment.

5.5.2.3 Nonscheduled Units. Nonscheduled units land in accordance with the LF landing sequence table upon completion of scheduled waves or as requested by tactical commanders through the helicopterborne RLT TACLOG detachment.

Once started, the landing of nonscheduled units may be interrupted to permit the landing of on-call waves or other selected serials, or it may be temporarily suspended because of unforeseen conditions, such as a high-priority mission.

5.5.2.4 Prestaged Helicopter-Lifted Supplies. Paragraph 3.3.2.4.2 covers prestaged helicopter-lifted supplies.

5.5.3 Helicopter Areas, Routes, and Points. The following areas, routes, and points are used to direct and control the movement of helicopters during the ship-to-shore movement. Figure 3-28 depicts an example of a helicopter landing diagram and shows the areas, routes, and points discussed in paragraphs 5.5.3.1 to 5.5.3.11.

5.5.3.1 Landing Zone (LZ). An LZ is a specific area for landing VTOL aircraft or helicopters. LZs are designated by code names.

5.5.3.2 Helicopter Landing Zone (HLZ). An HLZ is a specified ground area for landing helicopters to embark or disembark troops/cargo. An HLZ may contain one or more landing sites and is designated by a code name. The operation and organization of HLZs is discussed in detail in Appendix L.

5.5.3.3 Landing Site. A landing site is an area within an HLZ containing one or more landing points for a single flight or wave of helicopters to land and embark or disembark troops/cargo. Landing sites do not have to be geographically contiguous and are designated by a color.

5.5.3.4 Landing Point. A landing point is an area within a landing site where one helicopter or VTOL aircraft can land. Landing points are designated by the use of two-digit numbers.

5.5.3.5 Helicopter Approach and Retirement Route. Helicopter approach and retirement routes are a track or series of tracks along which helicopters move to and from a departure point (DP) to a specified HLZ. Planned routes facilitate coordinating helicopter movement with fire support plans and are designated by the names of states.

5.5.3.6 Penetration Control Point (PCP). The PCP is the point along a helicopter approach route at which helicopter waves penetrate a coastline. PCPs are designated by names of cities.

5.5.3.7 Initial Point (IP). The IP is an air control point in the vicinity of the HLZ from which individual flights of helicopters are directed to landing sites. IPs are designated by names of cities.

5.5.3.8 Rendezvous Point (RP). The RP is at a given altitude and position relative to the departure point (DP) for assembling helicopters. RPs are not named.

5.5.3.9 Departure Point (DP). The DP is an air control point at the seaward end of the helicopter approach route from which helicopter waves are dispatched to the IP. DPs are designated by names of cities.

5.5.3.10 Control Point (CP). A CP is a position marked by a buoy, ship or craft, electronic device, or conspicuous terrain feature that is used as an aid to navigation or for timing. CPs are designated by names of cities.

5.5.3.11 Breakup Point. The breakup point is where helicopters returning from an HLZ break formation and are released to return to individual ships or dispatched for other employment. The breakup point may be the same as the DP.

5.5.4 Helicopter Operations With Control Afloat. Helicopters are launched at the times and in the order prescribed in the HEALT. Control procedures and requests for on-call waves and non-scheduled units are described in paragraphs 5.5.4.1 to 5.5.4.6.

5.5.4.1 Helicopter Platform Landing/Launch Control. Helicopter air traffic control is maintained by primary flight (PriFly) control on the land/launch net for takeoff, landing, and operations in the ship's

control area (normally a five nm radius). Under instrument flight rules (IFR) conditions, the LHD, LHA, or LPH's HDC controls approaches and departures within the ship's control area. Under visual flight rules (VFR) conditions, air traffic control of aircraft departing the ship's control area is passed from PriFly to HDC. Air traffic control of returning aircraft is passed in the reverse order. The shift of air traffic control is coordinated between HDC and PriFly and aircraft are directed to shift radio frequencies.

5.5.4.1.1 Helicopter Carrier Air Traffic Control Procedures. Helicopter carrier air traffic control procedures are contained in the LHA/LPH/LHD naval air training and operating procedures standardization program (NATOPS) manual.

5.5.4.1.2 Rescue Helicopter Procedures. Rescue helicopter procedures are contained in NWP 42, "Shipboard Helicopter Operating Procedures" and the LHA/LPH/LHD NATOPS manual.

5.5.4.1.3 Helicopter Safety Boat (HSB). For HSB requirements, refer to NWP 42. Appendix H lists special purpose equipment carried in the HSB.

5.5.4.2 En Route Control. An HDC takes control of each flight on the HD net before they arrive at the RP and controls the flight to the RP where air traffic control is shifted to the primary HDC. The HSC Det reports the status of assault waves to the HCS as they proceed inbound on approach routes on the helicopter command (HC) net. The flight leader checks in with the ASC(A) for air traffic control at the PCP. When the ASC(A) determines that terminal guidance is operational in the HLZ, terminal control is passed to the ITG team or helicopter control element (HCE) of the HST.

On leaving the LZ, the flight leader checks in with the primary HDC or ASC(A) for air traffic control to the breakup point where flights are cleared for individual ship's control for landing and reloading.

Shipboard and airborne (if available) radar is used to maintain continuous radar surveillance of all flights/waves, particularly at night or during marginal weather.

5.5.4.3 Terminal Information. When helicopters report to the ASC(A), or TAC(A), for air traffic control, they are briefed on any changes to the prebriefed HLZ situation, including:

1. Wind direction and velocity
2. Physical obstructions in the HLZ