



**UNITED STATES MARINE CORPS**  
**MARINE CORPS COMBAT DEVELOPMENT COMMAND**  
**QUANTICO, VIRGINIA 22134-5001**

3900  
C41  
14 Feb 2003

From: Deputy Commandant for Combat Development  
To: Chief of Naval Operations, Codes N00, N7, and N8  
Via: Deputy Commandant for Plans, Policies and Operations

Subj: EXPEDITIONARY COMMAND, CONTROL, COMMUNICATIONS,  
COMPUTERS, INTELLIGENCE, SURVEILLANCE, AND  
RECONNAISSANCE (C4ISR) REQUIREMENTS

Ref: (a) CG MCCDC ltr 3900 of 2 Dec 99  
(b) CINCPACFLT/CINCLANTFLT INST 4720.3A  
(c) OPNAVINST 3501.xx series

Encl: (1) USMC Expeditionary C4ISR Requirements  
(2) MAGTF Afloat Systems Requirements  
(3) Network & Telephony Matrix

1. Purpose. To convey the United States Marine Corps position on expeditionary C4ISR requirements. The requirements enable a coordinated Naval effort in establishing effective afloat C4ISR capabilities to embarked Marine warfighters.

2. This document replaces reference (a) as the baseline for expeditionary C4ISR requirements. The enclosures reflect only those requirements needed to support the embarked Marine Air Ground Task Force.

a. USMC Expeditionary C4ISR Requirements, enclosure (1), is the C4ISR capabilities required to support Marine Corps warfighting functions. The requirements identified in enclosure (1) for the LCC, AGF, and JCC(X) classes of command ships are specific only to those capabilities required when these ship types are designated for use in expeditionary operations. The incorporation of enclosure (1) into the appropriate Navy Required Operational Capabilities And Projected Operational Environment (ROC/POE) and Operational Requirements Documents (ORD) is strongly encouraged.

b. The MAGTF Afloat Systems Requirements (MASR) list, enclosure (2), lists Blue-In-Support-Of-Green (BISOG) current

Subj: EXPEDITIONARY COMMAND, CONTROL, COMMUNICATIONS,  
COMPUTERS, INTELLIGENCE, SURVEILLANCE, AND  
RECONNAISSANCE (C4ISR) REQUIREMENTS

and planned systems solutions to satisfy enclosure (1) requirements. The MASR should be used to support long range budgeting and planning for ship alterations and emerging acquisitions. Prioritization of C4ISR systems will be conducted in accordance with the Marine Corps Planning, Programming and Budgeting System (PPBS) and other forums as appropriate. The MASR will serve as the basis for the MAGTF Afloat Baseline (MAB). The MAB remains a Marine Corps Systems Command maintained and Marine Corps Combat Development Command approved document that supports the deployment minus 30 months process of reference (b). The MAB delineates systems to be employed by an afloat/embarked MAGTF.

c. The network and telephony matrix, enclosure (3), identifies LAN drops, workstations, telephony, and other devices required to be available to embarked Marines.

3. These requirements were derived through the analysis and assessment of the following:

a. Joint Vision 2010 and 2020 documents that highlight the growing application of information technologies in military operations.

b. The Navy and Marine Corps concepts for conducting littoral operations, i.e., From the Sea; Forward...From the Sea; Expeditionary Maneuver Warfare, Operational Maneuver From the Sea, and Ship to Objective Maneuver.

c. Joint, Navy, and Marine Corps doctrine supporting maritime operations.

d. Required Operational Capabilities (ROC) and Projected Operational Environment (POE) series documents for "L" class amphibious ships outlined in reference (c).

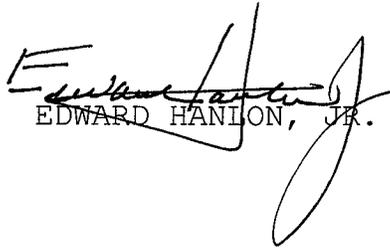
e. Results from participation with various C4ISR related forums and input from Navy and Marine Corps fleet operators.

f. Lessons learned from recent military operations and exercises (e.g. LANT/PAC MEU deployments, Enduring Freedom, KERNAL BLITZ, etc.).

4. We look forward to continuing the teamwork we have shared and encourage your feedback to this letter. Together we will continue the commitment towards fielding credible C4ISR

Subj: EXPEDITIONARY COMMAND, CONTROL, COMMUNICATIONS,  
COMPUTERS, INTELLIGENCE, SURVEILLANCE, AND  
RECONNAISSANCE (C4ISR) REQUIREMENTS

capabilities to meet the challenges of Expeditionary Warfare in  
the 21st century.



EDWARD HANLON, JR.

Copy to:

CMC (AVN, PP&O, C4, I, P&R, MITNOC)

CNO (N00, N4, N6, N7, N8)

CMDR NETWARCOM

CMDR MARCORSYSCOM

CMDR NAVSEASYSKOM

CMDR SPAWARYSKOM

CMDR NAVAIRSYSKOM

COMLANTFLT

COMPACFLT

COMMARFORLANT

COMMARFORPAC

COMMARFORRES

# **USMC EXPEDITIONARY C4ISR REQUIREMENTS**

**Enclosure (1)**

## USMC Amphibious C4ISR Requirements

Number	Requirements	LHD	LHA	LPD	LSD	LPD-17	LHA(R)	LCC/AGF/JCC(X)
<b>MAGTF COMMAND &amp; CONTROL OPERATIONS</b>								
<b>Command</b>								
R1	The ship shall have a <b>Command and Control</b> capability that supports the Marine Air Ground Task Force (MAGTF) <b>Command Element's</b> warfighting functions to operate as a <b>Combatant, Component, or Joint Command</b> . <b>Systems supporting the MAGTF will make use of joint C4ISR systems. Embarked forces will share Navy assets to the maximum extent possible.</b>	L	L	L		L	L	F
R 1.1	The ship shall have the capability to host and support a MAGTF Headquarters <b>Command Element</b> task organized for a Marine Expeditionary Unit.	T	T				T	
R 1.2	The ship shall have the capability to host and support a MAGTF Headquarters <b>Command Element</b> task organized for a Marine Expeditionary Brigade.	T	T				T	T
R 1.3	The ship shall have the capability to host and support a MAGTF Headquarters <b>Command Element</b> task organized for a Marine Expeditionary Force.							T
R 1.4	The ship shall have the capability to host and support a MAGTF <b>Ground Combat Element</b> task organized for a Marine Expeditionary Unit.	T	T			T	T	
R 1.5	The ship shall have the capability to host and support a MAGTF <b>Ground Combat Element</b> task organized for a Marine Expeditionary Brigade.	T	T			T	T	
R 1.6	The ship shall have the capability to host and support a MAGTF <b>Ground Combat Element</b> task organized for a Marine Expeditionary Force.	T	T				T	T
R 1.7	The ship shall have the capability to host and support a MAGTF <b>Aviation Combat Element</b> task organized for a Marine Expeditionary Unit.	T	T			O	T	
R 1.8	The ship shall have the capability to host and support a MAGTF <b>Aviation Combat Element</b> task organized for a Marine Expeditionary Brigade.	T	T				T	T
R 1.9	The ship shall have the capability to host and support a MAGTF <b>Aviation Combat Element</b> task organized for a Marine Expeditionary Force.	T	T				T	T
R 1.10	The ship shall have the capability to host and support a MAGTF <b>Combat Service Support Element</b> task organized for a Marine Expeditionary Unit.	T	T	O		T	T	

## USMC Amphibious C4ISR Requirements

Number	Requirements	LHD	LHA	LPD	LSD	LPD-17	LHA(R)	LCC/AGF/JCC(X)
<b>MAGTF COMMAND &amp; CONTROL OPERATIONS</b>								
<b>Command</b>								
R 1.11	The ship shall have the capability to host and support a MAGTF <b>Combat Service Support Element</b> task organized for a Marine Expeditionary Brigade.	T	T				T	T
R 1.12	The ship shall have the capability to host and support a MAGTF <b>Combat Service Support Element</b> task organized for a Marine Expeditionary Force.	T	T				T	T
R 1.13	capable of supporting the MAGTF Command Element when designated to perform functions of the <b>Marine Forces Component Commander</b> .	O	O				O	T
R 1.14	capable of supporting the MAGTF Aviation Combat Element when designated to perform the functions of an <b>enabling Joint Force Air Component Commander (JFACC)</b> .	T	T				T	T
R 1.15	capable of supporting the MAGTF Aviation Combat Element when designated to perform the functions of a <b>JFACC</b> .	O	O				T	T
R 1.16	capable of supporting the MAGTF Ground Combat Element when designated to perform the functions of a <b>Joint Force Land Component Commander</b> .	O	O				O	T
R 1.17	capable of performing functions of a <b>Joint Force Maritime Component Commander</b> .	O	O				O	T
R 1.18	capable of supporting the MAGTF Command Element when designated to perform the functions of a <b>Joint Forces Commander</b> .	O	O				O	T
<b>Planning and Execution</b>								
R2	<b>The ship shall have a Command and Control capability that supports the Marine Air Ground Task Force (MAGTF) Command Element's warfighting functions (Command and Control, Maneuver, Fires, Intelligence, Logistics, and Force Protection) that is functionally consistent with Marine Corps systems and assets. Systems supporting the MAGTF will make use of joint C4ISR systems. Embarked forces will share Navy assets to the maximum extent possible.</b>	F	F	L	L	L	F	F
R 2.1	capability to simulate, rehearse, and train the mission plans.	T	T	T	T	T	T	T
R 2.2	capability to conduct collaborative education, both professional military and civilian.	T	T	O	O	T	T	T
R 2.3	capability to remotely control operations of unmanned vehicles.	T	T			T	T	T
R 2.4	capability to remotely configure and control unmanned vehicle payloads.	T	T			T	T	T
R 2.5	capability to monitor command and control of advance force operations.	T	T	T	T	T	T	T
R 2.6	capability to command and control the Landing Forces of the MAGTF or the Amphibious Task Force.	T	T	O	O	T	T	T
R 2.7	capability to accomplish operations and missions at ranges up to and over the horizon.	T	T	T	T	T	T	T

## USMC Amphibious C4ISR Requirements

Number	Requirements	LHD	LHA	LPD	LSD	LPD-17	LHA(R)	LCC/AGF/JCC(X)
<b>MAGTF COMMAND &amp; CONTROL OPERATIONS</b>								
<b>Planning and Execution</b>								
R 2.8	capability of employing decision support tools which support rapid decision making of a dispersed staff conducting mission planning and execution in high-tempo operations.	T	T	O	O	T	T	T
R 2.9	capability of employing distributed collaborative planning aids for dispersed staffs conducting integrated mission planning (e.g., chat, shared and/or interactive map planning and electronic white boarding - allowing simultaneous connections with multiple users both in and out of theater).	T	T	T	T	T	T	T
R 2.10	capability of employing video teleconferencing (VTC) in a "conference room environment" for dispersed staffs conducting integrated mission planning.	T	T	T	T	T	T	T
R 2.11	capability of employing VTC down to the desktop for dispersed staffs conducting integrated mission planning.	O	O	O	O	O	O	O
<b>MAGTF COMMAND &amp; CONTROL OPERATIONS</b>								
<b>Maneuver</b>								
R3	<b>The ship shall have a Command and Control capability that is functionally consistent with the MAGTF maneuver systems and assets. The afloat maneuver control systems supporting the MAGTF will make use of joint C4ISR systems. Embarked forces will share Navy assets to the maximum extent possible. (e.g. , Battle Management, Tactical Data Information, Surveillance Systems, and Communications).</b>	F	F	L	L	F	F	F
R 3.1	capability to transmit, receive and process friendly forces' position information.	T	T	T	T	T	T	T
R 3.2	capability to coordinate Supporting Arms in support of the maneuver.	T	T	T	T	T	T	T
R 3.3	capability to control Supporting Arms in support of the maneuver.	T	T	O	O	T	T	T
R 3.4	capability to coordinate and control logistic support and combat service support in support of the maneuver.	T	T	T	T	T	T	T
R 3.5	capability to coordinate intelligence operations in support of the maneuver.	T	T	T	T	T	T	T
R 3.6	capability to control intelligence operations in support of the maneuver.	T	T	O	O	T	T	T
R 3.7	capability to coordinate and control use of communications in support of the maneuver.	T	T	T	T	T	T	T
R 3.8	capability to coordinate use of electronic warfare in support of the maneuver.	T	T	T	T	T	T	T
R 3.9	capability to control use of electronic warfare in support of the maneuver.	T	T	O	O	T	T	T
R 3.10	capability to coordinate use of tactical air in support of the maneuver.	T	T	T	T	T	T	T
R 3.11	capability to control use of tactical air in support of the maneuver.	T	T	O	O	T	T	T
R 3.12	capability to coordinate ship-to-shore movement of assault vehicle and landing craft in support of the maneuver.	T	T	T	T	T	T	T
R 3.13	capability to coordinate protection of the amphibious and landing forces.	T	T	T	T	T	T	T

## USMC Amphibious C4ISR Requirements

Number	Requirements	LHD	LHA	LPD	LSD	LPD-17	LHA(R)	LCC/AGF/JCC(X)
<b>MAGTF COMMAND &amp; CONTROL OPERATIONS</b>								
<b>Fires</b>								
R4	The ship shall have a Command and Control capability that is functionally consistent with the MAGTF Force Fires Coordination Center/Fire Support Coordination Center's systems and assets. The afloat Fires Support systems supporting the MAGTF will make use of joint C4ISR systems. Embarked forces will share Navy assets to the maximum extent possible (e.g., Fires Management, Tactical Data Links, Tactical Data Information, Target Acquisition & Surveillance Systems, and Communications).	F	F	L	L	F	F	F
R 4.1	capability to plan for own unit fire support and coordinate with Higher Headquarters (HHQ) to request preplanned and immediate fires.	T	T	T	T	T	T	T
R 4.2	capability to plan, coordinate, and control organic and non-organic fires within the operational area in support of the amphibious force.	T	T	O		T	T	T
R 4.3	capability to perform planning, execution, and coordination functions equivalent to a subordinate Fire Support Coordination Center (FSCC).	T	T	T	O	T	T	T
R 4.4	capability to perform planning, execution, and coordination functions equivalent to the MAGTF Force Fires Coordination Center (FFCC).	T	T	O		T	T	T
R 4.5	capability to perform planning, execution, and coordination functions of the Supporting Arms Coordination Center (SACC).	T	T	O		T	T	T
R 4.6	capable of performing the functions of the Landing Force's Force Fires Coordinator and the Amphibious Task Force's Supporting Arms Coordinator.	T	T	O		T	T	T

## USMC Amphibious C4ISR Requirements

Number	Requirements	LHD	LHA	LPD	LSD	LPD-17	LHA(R)	LCC/AGF/JCC(X)
<b>MAGTF COMMAND &amp; CONTROL OPERATIONS</b>								
<b>Aviation</b>								
R5	The ship shall have a Command and Control capability that is functionally consistent with the MAGTF aviation systems and assets. The afloat aviation systems supporting the MAGTF will make use of joint C4ISR systems. Embarked forces will share Navy assets to the maximum extent possible.(e.g., Battle Management, Tactical Data Links, Tactical Data Information and Surveillance Systems, and Communications).	F	F	L	L	L	F	F
R 5.1	capability to receive and parse the air tasking order, air control order, and air defense plan.			T	T	T		
R 5.2	capability to create, transmit, receive, and parse the air tasking order, air control order, and air defense plan.	T	T	O	O	O	T	T
R 5.3	capability to plan assault support and offensive air support operations.	T	T	T	T	T	T	T
R 5.4	capability to plan electronic warfare operations.	T	T	T	O	T	T	T
R 5.5	capability to command & control assault support and offensive air support operations.	T	T	O	O	T	T	T
R 5.6	capability to command & control electronic warfare operations.	T	T	O	O	O	T	T
R 5.7	capability to plan and coordinate the use of missiles.	T	T			O	T	T
R 5.8	capability to plan and coordinate MAGTF air traffic control operations.	T	T			T	T	T
R 5.9	capability to plan and coordinate MAGTF air defense/anti-air warfare operations.	T	T			O	T	T
R 5.10	capability to coordinate shipboard rotary-wing operations.	T	T	T	T	T	T	T
R 5.11	capability to coordinate shipboard fixed-wing operations.	T	T			O	T	T
R 5.12	capable of performing functions of Air Defense Commander.	T	T			O	T	T
R 5.13	capable of performing functions of the Airspace Control Authority.	T	T			O	T	T
R 5.14	capable of performing functions of the Regional Area Air Defense Commander.	T	T				T	T
R 5.15	capable of performing functions of the Area Air Defense Commander.	O	O				O	T

## USMC Amphibious C4ISR Requirements

Number	Requirements	LHD	LHA	LPD	LSD	LPD-17	LHA(R)	LCC/AGF/JCC(X)
<b>MAGTF COMMAND &amp; CONTROL OPERATIONS</b>								
<b>Administrative and Combat Service Support</b>								
R6	The ship shall have an Administrative and Combat Service Support (supply, maintenance, transportation, engineering, and health services and other services) capability that is functionally consistent with the MAGTF systems and assets. The Administrative and Combat Service Support afloat systems supporting the MAGTF will make use of joint C4ISR systems. Embarked forces will share Navy assets to the maximum extent possible. (e.g., Asset Management and Visibility, Tactical Logistics Support, Supply and Maintenance, Health Services, Personnel Management).	F	F	L	L	L	F	F
R 6.1	capability to provide administrative and special staff support (e.g., personnel, financial, legal, medical and dental).	T	T	T	T	T	T	T
R 6.2	capability to provide collaborative medical services both intra- and inter- theater (e.g., chat, tele-med, VTC)	T	T	O	O	O	T	T
R 6.3	capability to plan and execute the embarkation, loading, debarkation, and unloading of the ship's embarked equipment and personnel.	T	T	T	T	T	T	T
R 6.4	capability to plan and execute the embarkation, loading, debarkation, and unloading of the embarked MAGTF's equipment and personnel.	T	T	O	O	O	T	T
R 6.5	capability to plan the logistical functions and activities of Combat Service Support for the ship's embarked personnel and equipment.	T	T	T	T	T	T	T
R 6.6	capable of performing logistical functions and activities of Combat Service Support for the ship's embarked personnel and equipment.	T	T	O	O	T	T	T
R 6.7	capable of performing logistical functions and activities of Combat Service Support for the amphibious force's and Maritime Pre-positioning Forces (MPF) personnel and equipment.	T	T	O	O	O	T	T

## USMC Amphibious C4ISR Requirements

Number	Requirements	LHD	LHA	LPD	LSD	LPD-17	LHA(R)	LCC/AGF/JCC(X)
<b>MAGTF COMMAND &amp; CONTROL OPERATIONS</b>								
<b>Infrastructure</b>								
R7	The ship shall provide the infrastructure to support and operate permanently installed core C4ISR equipment, and other carry-on operational C4ISR equipment as listed in the MAGTF AFLOAT BASELINE (MAB), enclosure (2).	F	F	F	F	F	F	F
R 7.1	provide operational spaces which are functionally consistent with MAGTF command and control facilities.	T	T	T	T	T	T	T
R 7.2	provide capability to operate specified permanently installed equipment and systems in designated operational spaces.	T	T	T	T	T	T	T
R 7.3	provide capability to operate specified equipment and systems in designated billeting spaces.	T	T	T	T	T	T	T
R 7.4	provide compatible power to operate specified equipment and systems.	T	T	T	T	T	T	T
R 7.5	provide compatible physical interfaces to operate specified equipment and systems.	T	T	T	T	T	T	T
R 7.6	provide environmental controls to operate specified equipment and systems.	T	T	T	T	T	T	T
R 7.7	provide security controls for protection of equipment and systems (e.g., secure network node spaces, access controls, anti-tamper, etc.)	T	T	T	T	T	T	T
R 7.8	provide a mission planning space that will not interfere with execution of current operations.	T	T	O	O	T	T	T

## USMC Amphibious C4ISR Requirements

Number	Requirements	LHD	LHA	LPD	LSD	LPD-17	LHA(R)	LCC/AGF/JCC(X)
<b>MAGTF COMMAND &amp; CONTROL OPERATIONS</b>								
<b>Intelligence</b>								
R8	The ship shall have a Command & Control, Intelligence, Surveillance, and Reconnaissance capability that is functionally consistent with the MAGTF Intelligence, Surveillance, and Reconnaissance (ISR) systems and assets. Afloat ISR systems supporting the MAGTF will make use of joint C4ISR systems. Embarked forces will share Navy assets to the maximum extent possible.	F	F	L	L	L	F	F
R 8.1	capability to develop and maintain an updated electronic view of the battlespace (i.e., friendly, enemy, and neutral - air, space, ground, surface and subsurface).	T	T	T	T	T	T	T
R 8.2	provide an electronic surveillance and signal exploitation capability functionally consistent with MAGTF signals exploitation capabilities.	T	T	O		T	T	T
R 8.3	capability to provide scanning (up to size D), storage and reproduction (up to size E) for mapping, charting, and geodesy products.	T	T	T	T	T	T	T
R 8.4	capability to disseminate intelligence, surveillance, and reconnaissance information to widely dispersed forces afloat and ashore.	T	T	O	O	O	T	T
R 8.5	capability to conduct meteorological and oceanographic analysis.	T	T	O	O	T	T	T
R 8.6	capability to conduct terrain and hydrographic analysis.	T	T	O	O	T	T	T
R 8.7	capability to provide for the receipt of intelligence products derived from an all-source intelligence fusion center.	T	T	O	O	T	T	T
R 8.8	capability to provide for the receipt of intelligence products derived from near-real time intelligence broadcast services.	T	T	O	O	T	T	T
R 8.9	capable of performing functions of an all-source intelligence fusion center.	T	T				T	T
R 8.10	capability to conduct OTH ISR collection.	T	T				T	T
R 8.11	capability to exploit information from organic and non-organic collection assets.	T	T	T	T	T	T	T
R 8.12	capability to send and receive information to/from/via manned and unmanned vehicles.	T	T	T	T	T	T	T
R 8.13	capability to coordinate the use of organic and non-organic collection assets.	T	T			O	T	T
R 8.14	capability to electronically support targeting, target acquisition, and target prioritization.	T	T			O	T	T

## USMC Amphibious C4ISR Requirements

Number	Requirements	LHD	LHA	LPD	LSD	LPD-17	LHA(R)	LCC/AGF/JCC(X)
<b>MAGTF COMMUNICATIONS and COMPUTERS</b>								
R9	The ship shall have a communications and computer capability that supports the Marine Air Ground Task Force's warfighting functions (Command and Control, Maneuver, Fires, Intelligence, Logistics, and Force Protection) that are functionally consistent with the MAGTF systems and assets. The afloat C4ISR systems supporting the MAGTF will make use of joint C4ISR systems. Embarked forces will share Navy assets to the maximum extent possible.	L	L	L	L	L	F	F
R 9.1	capable of supporting secure, analog and digital, individual voice and data communications.	T	T	T	T	T	T	T
R 9.2	capable of secure and non-secure joint interoperable voice and data communications with shore stations, teleports, other fleet ships, members of the landing force, and the MAGTF.	T	T	T	T	T	T	T
R 9.3	capable of implementing and maintaining communications and transmission security.	T	T	T	T	T	T	T
R 9.4	capable of manual and dynamic communications resource management (e.g., bandwidth, throughput, frequency, etc.).	T	T	T	T	T	T	T
R 9.5	capable of providing an integrated communication collection and distribution service for both internal and external communications passed to/from shipboard components, systems, departments, mobile facilities (e.g., maintenance), and tactical vehicles (e.g., AAV, aircraft) outfitted with C4I suites.	T	T	T	T	T	T	T
<b>Wireless</b>								
R 9.6	capable of a secure, <u>hands-free</u> , personal wireless <u>voice</u> communication system between and among the flight deck, well deck, hangar deck, cargo bays, and supporting spaces.	T	T	T	T	T	T	T
R 9.7	capable of a secure, <u>networked</u> , personal wireless <u>data</u> communication system between and among the flight deck, well deck, hangar deck, cargo bays, command spaces and supporting spaces.	O	O	O	O	O	T	T
R 9.8	capable of secure wireless <u>voice and data</u> services that are integrated to the intra- and inter-ship communication systems.	O	O	O	O	O	T	T
<b>Radio Communications</b>								
R 9.9	capable of propagating and receiving waveforms and frequencies that are compatible with MAGTF tactical radios (e.g. HaveQuick, HF ALE, JTRS-WNW, SINCGARS, etc.).	T	T	T	T	T	T	T
R 9.10	capable of supporting and providing various data rates (low, medium and high) for Beyond Line Of Sight (BLOS) / OTH communications - via national, commercial, and organic relay - to mobile units on the tactical shore.	T	T	T	T	T	T	T
R 9.11	capable of simultaneous transmit and receive of 5kHz and 25kHz UHF DAMA and Non-DAMA Satellite Communications (SATCOM) links.	T	T	T	T	T	T	T

## USMC Amphibious C4ISR Requirements

Number	Requirements	LHD	LHA	LPD	LSD	LPD-17	LHA(R)	LCC/AGF/JCC(X)
<b>MAGTF COMMUNICATIONS and COMPUTERS</b>								
<b>Network</b>								
R 9.12	capable of providing LAN access compatible with MAGTF Digital Terminal Equipment at the Physical Layer (OSI level 1).	T	T	T	T	T	T	T
R 9.13	capable of connecting the integrated communication collection and distribution services supporting the MAGTF to the shipboard intra- and inter-ship networks, radio communications suites, strategic and tactical shore communication networks.	T	T	T	T	T	T	T
R 9.14	provide the embarked MAGTF access to Nonsecure Internet Protocol Network (NIPRNET), Secret Internet Protocol Network (SIPRNET), Joint Worldwide Intelligence Communications System (JWICS), and Coalition Wide Area Network (COWAN-Z) information via a Local Area Network (LAN).	T	T	T	O	T	T	T
<b>Video</b>								
R 9.15	provide secure, interoperable VTC for intra-ship, ship-to-ship, ship-to-strategic shore, and ship-to-tactical shore compliant with Joint Technical Architecture (JTA) requirements.	T	T	T	T	T	T	T
<b>Messaging</b>								
R 9.16	provide capability to receive, transmit, and process messages in standard formats included in the JTA.	T	T	T	T	T	T	T
R 9.17	capability to receive, transmit, and process US Message Text Format (USMTF)	T	T	T	T	T	T	T
R 9.18	capability to receive, transmit, and process Variable Message Format (VMF)	T	T	T	T	T	T	T
R 9.19	capability to receive, transmit, and process Over-the-Horizon Gold (OTH-Gold)	T	T	T	T	T	T	T
R 9.20	capability to receive, transmit, and process Tactical Digital Information Link-11 (TADIL-A).	T	T	T	T	T	T	T
R 9.21	capability to receive, transmit, and process Tactical Digital Information Link-16 (TADIL-J).	T	T	O	O	T	T	T
R 9.22	provide record/organizational message (command) traffic services.	T	T	T	T	T	T	T
R 9.23	provide electronic messaging (e.g., e-mail, whiteboarding, chat, instant messages) services.	T	T	T	T	T	T	T
R 9.24	provide digital storage of record/organizational message and electronic messaging for all classification levels as authorized by ship class.	T	T	T	T	T	T	T
<b>STANDARDIZATION, INTEROPERABILITY and COMMONALITY</b>								
R10	<b>The ship's systems shall be in compliance with all applicable standards within the DoD JTA.</b>	L	L	L	L	L	L	L
R 10.1	provide an infrastructure based on joint standards and architectures and other applicable directives and instructions.	O	O	O	O	O	O	O

**USMC Amphibious C4ISR Requirements**

Number	Requirements	LHD	LHA	LPD	LSD	LPD-17	LHA(R)	LCC/AGF/JCC(X)
--------	--------------	-----	-----	-----	-----	--------	--------	----------------

**LEGEND**

- F = Overarching C4ISR capability to be Fully achieved on this ship class.
- L = Overarching C4ISR capability that may not be Fully achieved on this ship class.
- T = Threshold Requirement; minimum capability
- O = Objective Requirement; desired capability

# **MAGTF AFLOAT SYSTEMS REQUIREMENTS**

**Enclosure (2)**

# Afloat Systems Requirements

<p style="text-align: center;"><b><u>Systems</u></b> <b>Short and Long Names</b></p>	SHIP CLASS					
	LHD	LHA	LPD 4	LPD 4 (FLAG)	LSD	LPD 17
<b>Blue-In-Support-Of-Green (BISOG) Navy Systems that the Marine Corps requires installed in order to perform amphibious missions. These systems are permanently installed aboard ship, connected to the ship's IT/Communication infrastructure, and remain on the ship when the Landing Force transitions ashore.</b>						
<b>MAGTF Command and Control</b>						
<b>Planning &amp; Maneuver</b>						
GCCS (Global Command and Control System) {Track Database}	X	X	X	X	X	X
GCCS Clients {NT Clients}	X	X	X	X	X	X
JFRG-II (Joint Force Requirements Generator II)	X	X	X	X	X	X
JMPS (Joint Mission Planning System) of various versions	X	X	X	X	X	X
Large Format Printer/Plotters {local printing of maps and planning materials}	X	X	X	X	X	X
<b>Aviation</b>						
TBMCS (Theater Battle Management Core Systems) {Host}	X	X				
TBMCS (Theater Battle Management Core Systems) {Remote}				X		X
CEC (Cooperative Engagement Capability)	X	X				X
Link 16 (TADIL-J or MIDS)	X	X	X	X	X	X
Link 11(TADIL-A)	X	X	X	X	X	X
T-UAV (Tactical - Unmanned Aerial Vehicle)	X	X	X	X	X	X
TCS (Tactical Control Station)	Level 5	Level 5	Level 5	Level 5	Level 5	Level 5
<b>Logistics</b>						
GCSS (Global Combat Support Systems)	X	X	X	X	X	X
TC-AIMS II (Transportation Coordinators Automated Information For Movement System II)	X	X	X	X	X	X
ICODES (Integrated Computerized Deployment System)	X	X	X	X	X	X
TMP (Theater Medical Information Program)	X	X				X
NALCOMIS (Naval Aviation Logistics Command Management Information System)	X	X	X	X		X
AALPS (Automated Air Load Planning System)	X	X				
<b>Intelligence</b>						
DTAMS (Digital Terrain Analysis Mapping System) Topographic Production Capability	X	X				X
Radiant Mercury	X	X				X
MIDB (Modernized Intelligence Database)	X	X		X		X
JDISS (Joint Deployable Intelligence Support System) SCI	X	X				X
SSEE (Ships Signal Exploitation Equipment)	X	X		X		X
JSIPS-N (Joint Services Imagery Processing System-Navy) {with Common Imagery Processor (CIP)}	X	X				X
TES-N (Tactical Exploitation System - Navy) {with Common Imagery Processor (CIP)}	X	X				X
Combat DF (Combat Direction Finder)	X					
T-RDF (Transportable Radio Direction Finder)		X				X
IBR (Intelligence Broadcast Receiver)	X	X		X		X
IBS ( Integrated Broadcast Service)	X	X		X		X
SI ADNS (Special Intelligence Automated Digital Network System)	X	X		X		X

# Afloat Systems Requirements

<p style="text-align: center;"><b>Systems</b> <b>Short and Long Names</b></p>	SHIP CLASS					
	LHD	LHA	LPD 4	LPD 4 (FLAG)	LSD	LPD 17
<b>MAGTF Command and Control</b>						
<b>Fires</b>						
AFATDS (Advanced Field Artillery Tactical Data System)	x	x	x	x		x
<b>MAGTF Communications and Computers</b>						
<b>Radio</b>						
JTRS-WNW (Joint Tactical Radio System - Wideband Network Waveform)	x	x	x	x	x	x
DWTS (Digital Wideband Transmission System)	x	x	x	x	x	x
CDL-N (Common Data Link - Navy)						
CHBDL-ST (Common High Bandwidth Data Link - Ship Terminal)	x	x				
TCDL (Tactical Common Data Link)			x	x	x	x
HYDRA (Hierarchical Yet Dynamically Reprogrammable Architecture)	x	x	x	x	x	x
SINGARS (Single Channel Ground to Air Radio System) - ASIP	x	x	x	x	x	x
EHF - Medium Data Rate Capable (MILSTAR Advanced Satellite Terminal)	x	x	x	x	x	x
<b>Advanced EHF</b>	x	x	x	x	x	x
UHF SATCOM (Mobile User Objective System (MUOS)) {5khz DAMA,DASA; 25khz DAMA,DASA }	x	x	x	x	x	x
UHF LOS (Ultra High Frequency Line of Sight) with Havequick II	x	x	x	x	x	x
HF with ALE (High Frequency with Automatic Link Establishment)	x	x	x	x	x	x
EPLRS (Enhanced Position and Location Reporting System)	x	x	x	x	x	x
ENM (EPLRS External Network Manager)	x	x	x	x	x	x
IRIDIUM	x	x				x
INMARSAT B	x	x				x
INMARSAT B HSD - Dual			x	x	x	
CWSP (Commercial Wideband Satellite-communication Program)	x	x				x
CAIII (Challenge Athena III)						
GBS (Global Broadcast Service)	x	x	x	x	x	x
SHF SATCOM (Defense Satellite Communications System/Wideband Gapfiller System)						
Single Channel (AN/WSC-6(V)9)			x		x	
Dual Channel (AN/WSC-6(V)5)	x	x		x		x
<b>Radio - Security</b>						
KG-84	x	x	x	x	x	x
KG-94/KG-94A	x	x	x	x	x	x
KG-194	x	x	x	x	x	x
KY-99A	x	x	x	x	x	x
KIV-7HSA	x	x	x	x	x	x
<b>MAGTF Communications and Computers</b>						
<b>Data Network</b>						
Network Storage (Mass Data Storage) {SIPR/NIPR }	x	x	x	x	x	x
DNS (Domain Name Service)						
NIPRNet	x	x	x	x	x	x
SIPRNet	x	x	x	x	x	x
COWAN	x	x				x
JWICS	x	x		x		x

# Afloat Systems Requirements

<p style="text-align: center;"><b>Systems</b> Short and Long Names</p>	SHIP CLASS					
	LHD	LHA	LPD 4	LPD 4 (FLAG)	LSD	LPD 17
<b>MAGTF Communications and Computers</b>						
<b>Data Network (continued)</b>						
<b>Proxy Server</b>						
NIPRNet	X	X	X	X	X	X
SIPRNet	X	X	X	X	X	X
COWAN	X	X	X	X	X	X
<b>Network Operating System (WIN NT/WIN2000)</b>						
NIPRNet	X	X	X	X	X	X
SIPRNet	X	X	X	X	X	X
COWAN	X	X	X	X	X	X
JWICS	X	X		X		X
<b>LAN Drops (Local Area Network drops)</b>						
NIPRNet	X	X	X	X	X	X
SIPRNet	X	X	X	X	X	X
COWAN	X	X	X	X	X	X
JWICS	X	X		X		X
<b>Mil-Std-188-220 Device (TCIM - Tactical Communications Interface Module)</b>						
	X	X	X	X	X	X
<b>Mil-Std-188-184 Device (VDC - Viasat Data Controller)</b>						
	X	X	X	X	X	X
<b>ADNS (Automated Digital Network System to include MAGTF Router)</b>						
	X	X	X	X	X	X
<b>FCC-100 (Broadband Voice and Data Multiplexer - Static)</b>						
	X	X	X	X	X	X
<b>PROMINA (Broadband Voice and Data Multiplexer - Dynamic)</b>						
	X	X				X
<b>FAX (Secure, Non-Secure)</b>						
	X	X	X	X	X	X
<b>Data Network - Security</b>						
<b>KG-175 TACLANE</b>						
	X	X	X	X	X	X
<b>PKI (Public Key Infrastructure)</b>						
	X	X	X	X	X	X
<b>Video</b>						
<b>VTC (Video Teleconferencing)</b>						
	X	X	X	X	X	X
<b>IDCP (Intra-ARG Distributed Collaborative Planning)</b>						
	X	X	X	X	X	X
<b>23 TV {Large Screen Command &amp; Control Displays}</b>						
	X	X	X	X	X	X
<b>27 TV {Shipboard Closed Circuit Command &amp; Control Television}</b>						
	X	X	X	X	X	X
<b>Messaging</b>						
<b>DMS (Defense Message System)</b>						
	X	X	X	X	X	X
<b>E-mail</b>						
NIPRNet	X	X	X	X	X	X
SIPRNet	X	X	X	X	X	X
COWAN	X	X	X	X	X	X
JWICS	X	X		X		X
<b>Voice Network</b>						
<b>TSS (Tactical Switch System)</b>						
	X	X	X	X	X	X
<b>SA-2112 (Single Channel Radio Switch)</b>						
	X	X	X	X	X	X
<b>PICT (Programable Integrated Communications Terminal)</b>						
	X	X	X	X	X	X
<b>PBX (analog/ISDN)</b>						
	X	X	X	X	X	X
<b>Voice Network - Security</b>						
<b>AKDC (Automatic Key Distribution Controller for TSS (Tactical Switch System))</b>						
	X	X	X	X	X	X
<b>DSVT (Digital Secure Voice Terminal)</b>						
	X	X	X	X	X	X
<b>STE (Secure Telephone Equipment)</b>						
	X	X	X	X	X	X

# **NETWORK & TELEPHONY MATRIX**

**Enclosure (3)**

14 FEB 2003

Network and Telephony Matrix Summary

	LAN DROPS					WORKSTATIONS					PRINTERS					DEVICES			TELEPHONY				
	NIPRNET	SIPRNET	JWICS	COWAN		NIPRNET	SIPRNET	JWICS	COWAN		NIPRNET	SIPRNET	Color SIPRNET	COPIER		23TV	27TV		DSVT	OFFICE	PICT	STU/STE	FAX
LHD	286	176	12	9		56	31	2	9		41	12	0	4		15	15		37	238	42	16	3
LHA	249	152	12	9		52	25	2	9		30	11	0	4		16	16		35	208	38	16	3
LPD (NF)	67	29	0	2		6	9	0	2		2	2	0	1		4	4		11	84	12	6	2
LPD (Flag)	91	48	5	4		8	11	1	4		3	4	0	1		8	8		17	99	20	10	3
LPD-17	133	83	5	3		25	20	1	3		8	9	4	2		10	10		21	90	34	16	3
LSD	55	27	0	3		7	7	0	3		4	2	0	1		3	3		9	69	10	5	2
Totals	881	515	34	30		154	103	6	30		88	40	4	13		56	56		130	788	156	69	16

## LHD Network and Telephony Matrix

LHD Space Designation	LAN DROPS				WORKSTATIONS				PRINTERS			DEVICES		TELEPHONY				
	NIPRNET	SIPRNET	JWICS	COWAN	NIPRNET	SIPRNET	JWICS	COWAN	NIPRNET	SIPRNET	COPIER	23TV	27TV	DSVT	OFFICE	PICT	STU/STE	FAX
<b>Operational Spaces</b>																		
LFOC	6	25		2		10		2		1	1		1	1	5	8	13	2
TACLOG	8	4			3	1				1	1		1	1	2	7	3	1
SACC	8	7		1		3		1		1	1		1	1	4	6	4	
SACC Admin Office	3	2								1	1					3		1
TACC	3	3								1	1		1	1	2	6		1
JIC	4	20	4	2		5	1	2		1			1	1	2		2	1
SESS	6	3	8	1			1	1					1	1	1	1	4	1
Brief/War Room (aka JPC)	1	1		1				1					1	1	1			1
JMC	6	6			1	2				1	1				2	4		1
Debark Control	1	3				2				1			1	1	1	10	2	
Squadron Ready Room	2	3				1						1	1		2	1	1	
Pri-Fly																1	1	
Well Deck Control	1												1			1		
Troop Disbursing Office	5	1			1					1		1				4		
Marine Embark Work Center	2														1	1		
MEU Medical Office	1				1											1		
BLT Medical	1															1		
ACE Medical	1															1		
MTACCS RPR	2	2								1	1					1		
MTACCS EDP	5	5			1	2				1	1				1	2		
L.F. Registered Publications	1	1																1
<b>Cmd and LNO Offices</b>																		
L.F. CMDR Cabin	2	2		1		1		1		1			1	1	1	1	1	1
L.F. C.O. Stateroom																1		
L.F. X.O. Stateroom	1	1														1		
L.F. S-4 Stateroom	1	1														1		
L.F. OpsO Stateroom	1	1													1	1		
SgtMaj Stateroom	1	1														1		
Bn CMDR Cabin	2	1				1				1			1	1	1	1	1	1
Bn C.O. Stateroom																1		
Bn X.O. Stateroom																1		
Bn Opn officer S.R.	1	1													1	1		
GCE S-3 SR	1	1														1		
SQN CMDR Cabin	2	1				1				1			1	1	1	1	1	1
ACE C.O. Stateroom																1		
ACE X.O. Stateroom																1		
SQN OPN officer S.R.	1	1														1		
<b>Supporting Offices</b>																		
L.F. Staff Admin Office	11	1			2					1		1			1	5		1
L.F. C4I Office (S-6)	4	2			1										1	3	1	1
Troop Armory	1															1		
SQDN Armory	1															1		
Troop Guard Office	3	1			2	1				1						1		
Troop Chaplain Office	2	1														1		
Bn Staff Admin Office	7	1			1					2		1			1	5		
Bn Log Office	5	1			4					1						4	1	
BN Staff Operations Office	6	3				1				1	1		1		1	5	1	1
Bn Staff Plans Office	5	2								1			1		1	5		
Bn Comms Office (S-6)	4	2																
CO & FSM OFF H&S CO	5	1			1					1						5		
CO & FSM OFF "A" CO	5	1			1					1						5	1	
CO & FSM OFF "B" CO	5	1			1					1						4	1	
CO & FSM OFF "C" CO	5	1			1					1						4	1	
CO & FSM OFF "D" CO	5	1			1					1						4	1	
CO & FSM OFF "E" CO	5	1			1					1						4	1	
SQDN Admin Office	5															1	4	
SQDN Operations	4	2		1	1			1		1	1		1	1	1	4	1	1



### LHD Network and Telephony Matrix

LHD Space Designation	LAN DROPS				WORKSTATIONS				PRINTERS			DEVICES		TELEPHONY								
	NIPRNET	SIPRNET	JWICS	COWAN	NIPRNET	SIPRNET	JWICS	COWAN	NIPRNET	SIPRNET	COPIER	23TV	27TV	DSVT	OFFICE	PICT	STU/STE	FAX				
Four Man Trp Off Staterooms	1	1																1				
Four Man Trp Off Staterooms	1	1																1				
Four Man Trp Off Staterooms	1	1																1				
Four Man Trp Off Staterooms	1	1																1				
Four Man Trp Off Staterooms	1	1																1				
Four Man Trp Off Staterooms	1	1																1				
Four Man Trp Off Staterooms	1	1																1				
Four Man Trp Off Staterooms	1	1																1				
Four Man Trp Off Staterooms	1	1																1				
Four Man Trp Off Staterooms	1	1																1				
Four Man Trp Off Staterooms	1	1																1				
Four Man Trp Off Staterooms	1	1																1				
Four Man Trp Off Staterooms	1	1																1				
Four Man Trp Off Staterooms	1	1																1				
Four Man Trp Off Staterooms	1	1																1				
SR SNCO 1-Bunk Stateroom	1	1																1				
Staff NCO Berthing	1																	2				
Staff NCO Berthing	1																	2				
Troop Berthing	1																	2				
Troop Berthing	1																	2				
Troop Berthing	1																	2				
Troop Berthing	1																	2				
Troop Berthing	1																	2				
Troop Berthing	1																	2				
Troop Berthing	1																	2				
Troop Berthing	1																	2				
Troop Berthing	1																	2				
<b>Workspace Sub-Total</b>	220	121	12	9		56	31	2	9		41	12	4		15	15		37	161	42	16	3
<b>Berthing Sub-Total</b>	66	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	77	0	0	0
<b>Totals</b>	286	176	12	9	0	56	31	2	9	0	41	12	4	0	15	15		37	238	42	16	3
	NIPRNET	SIPRNET	JWICS	COWAN		NIPRNET	SIPRNET	JWICS	COWAN		NIPRNET	SIPRNET	COPIER		23TV	27TV		DSVT	AT&T	PICT	STU/STE	FAX
Marine Requirements	LAN DROPS					WORKSTATIONS					PRINTERS				DEVICES			TELEPHONY				

\* Denotes secure, wireless access points.  
Quantities dependent on coverage area.

**LHA Network and Telephony Matrix**

LHA Space Designation	LAN DROPS				WORKSTATIONS				PRINTERS			DEVICES		TELEPHONY					
	NIPRNET	SIPRNET	JWICS	COWAN	NIPRNET	SIPRNET	JWICS	COWAN	NIPRNET	SIPRNET	COPIER	23TV	27TV	DSVT	OFFICE	PICT	STU/STE	FAX	
<b>Operational Spaces</b>																			
LFOC	5	20		2		10		2		1	2		1	1		5	5	10	2
TACLOG	8	4			3	1				1	1		1	1		2	6	3	1
SACC	8	10		1		1		1		1	1		1	1		4	6	4	1
TACC	3	3								1	1		1	1		2	6		1
JIC	2	20	4	2		4	1	2			1		1	1		2		2	1
SESS	4	3	8	1			1	1					1	1		1	1	4	1
Brief/War Room (aka JPC)	1	1		1				1					1	1		2			1
JMC	6	2			1	1				1	1					2	4		1
Debarck Control	1	3				2					1		1	1		1	8	2	
Squadron Ready Room	2	3				1						1	1			2	1	1	
Pri-Fly																1	1		
Well Deck Control	1															1			
Troop Disbursing Office	5	1			1					1		1				4			
Marine Embarkation Office	2															1	1		
Landing Force Classified Documents S&C	1	1																	1
<b>Cmd and LNO Offices</b>																			
L.F. C.O. Stateroom/Cabin	2	2		1		1		1					1	1		1	1	1	1
L.F. X.O. Stateroom	1	1				1							1	1		1	1	1	1
GCE C.O. Stateroom	1	1				1							1	1		1			
SQDN C.O. Stateroom	1	1				1							1	1		1			
<b>Supporting Offices</b>																			
L.F. Admin Office (S-1)	10	1								1		1				1	5		1
GCCS Room / L.F. Cdr BC	2	2																	
L.F. C4I Office (S-6)	4	3														1	3	1	1
Troop Armory	1																1		
SQDN Armory	1																1		
Troop Guard Office	3	1			2	1				1							1		
Troop Chaplain Office	2	1															1		
Bn Admin Office	6	1			1					1		1				1	4		
Bn Logistics Office	5	1			3					1							4		
Bn Staff Planning Office	5	2								1	1		1			1	5	1	
Bn Operations Office	5	3			1					1	1		1	1		2	5	1	1
MARCOMDET Office	2	2														2			1
H&S Co Office	4	1			1					1							4		
A Co. Office	5	1			1					1							4	1	
B Co. Office	5	1			1					1							4	1	
C Co. Office	5	1			1					1							4	1	
D Co. Office	5	1			1					1							4	1	
E Co. Office	5	1			1					1							4	1	
SQDN Admin Office	5	1														1	4		
SQDN Operations Office (S-3)	4	3		1	1			1		1	1		1	1		1	4	1	1
SQDN Maint Q&A Office	10				5					1							5		
SQDN MAINT Control	12				8					1							4		
SQDN Line Shack	4				3					1			1				2		
SQDN Tool Issue	2				1					1							1		
SQDN Hydraulics Office	3				1					1							1		
SQDN Corrosion Control	2				1					1							1		
SQDN Power Plant	2				1					1							1		
SQDN Air Frame	2				1					1							1		
Aviation ORD Gun Systems Shop	2				1					1							1		
SQDN Missile Equipment	1																1		
SQDN Elect Repair	2				1												1		
Mobile Facility (multiple facilities)*	*	*															1		
Well Deck (multiple vehicles)*	*	*															1		

\* Denotes secure, wireless access points.  
Quantities dependent on coverage area.



**LHA Network and Telephony Matrix**

LHA Space Designation	LAN DROPS				WORKSTATIONS				PRINTERS			DEVICES		TELEPHONY								
	NIPRNET	SIPRNET	JWICS	COWAN	NIPRNET	SIPRNET	JWICS	COWAN	NIPRNET	SIPRNET	COPIER	23TV	27TV	DSVT	OFFICE	PICT	STU/STE	FAX				
Staff NCO Berthing	1														2							
Staff NCO Berthing	1														2							
Troop Berthing	1														2							
Troop Berthing	1														2							
Troop Berthing	1														2							
Troop Berthing	1														2							
Troop Berthing	1														2							
Troop Berthing	1														2							
Troop Berthing	1														2							
Troop Berthing	1														2							
Troop Berthing	1														2							
Troop Berthing	1														2							
Troop Berthing	1														2							
Troop Berthing	1														2							
<b>Workspace Sub-Totals</b>	188	104	12	9		52	25	2	9		30	11	4		16	16		35	134	38	16	3
<b>Berthing Sub-Totals</b>	61	48	0	0		0	0	0	0		0	0	0		0	0		0	74	0	0	0
<b>Totals</b>	249	152	12	9		52	25	2	9		30	11	4		16	16		35	208	38	16	3
	NIPRNET	SIPRNET	JWICS	COWAN		NIPRNET	SIPRNET	JWICS	COWAN		NIPRNET	SIPRNET	COPIER		23TV	27TV		DSVT	OFFICE	PICT	STU/STE	FAX
Marine Requirements	LAN DROPS					WORKSTATIONS					PRINTERS				DEVICES			TELEPHONY				

\* Denotes secure, wireless access points.  
Quantities dependent on coverage area.



**LPD (Non-Flag)**

**Network and Telephony Matrix**

LPD Space Designation (Non-Flag Configured)	LAN DROPS				WORKSTATIONS				PRINTERS			DEVICES		TELEPHONY				
	NIPRNET	SIPRNET	JWICS	COWAN	NIPRNET	SIPRNET	JWICS	COWAN	NIPRNET	SIPRNET	Copier	23TV	27TV	DSVT	OFFICE	PICT	STU / STE	FAX
Troop Berthing	1														2			
Troop Berthing	1														2			
Troop Berthing	1														2			
Troop Berthing	1														2			
Troop Berthing	1														2			
Troop Berthing	1														2			
Troop Berthing	1														2			
Troop Berthing	1														2			
<b>Workspace Sub-Totals</b>	25	18	0	2	6	9	0	2	2	2	1	4	4	11	11	12	6	2
<b>Berthing Sub-Totals</b>	42	11	0	0	0	0	0	0	0	0	0	0	0	0	73	0	0	0
<b>Totals</b>	67	29	0	2	6	9	0	2	2	2	1	4	4	11	84	12	6	2
Marine Requirements	LAN DROPS				WORKSTATIONS				PRINTERS			DEVICES		TELEPHONY				

\* Denotes secure, wireless access points.  
Quantities dependent on coverage area.

**LPD [Flag]**  
**Network and Telephony Matrix**

LPD Space Designation (Flag Configured)	LAN DROPS				WORKSTATIONS				PRINTERS			TELEPHONY						
	NIPRNET	SIPRNET	JWICS	COWAN	NIPRNET	SIPRNET	JWICS	COWAN	NIPRNET	SIPRNET	Copier	23TV	27TV	DSVT	OFFICE	PICT	STU / STE	FAX
<b>Operational Spaces</b>																		
SACC	5	9		2	3	6		2	1	1		1	1	3	2	10	2	
TACLOG	5	3		1	1	1		1	1	1		1	1	2	2	2	1	
JIO	2	5	2	1	1	1	1	1		1		1	1	2	1	2	1	
SSES	1	2	3									1	1	1		1	1	1
Brief/War Room	2	2										1	1	1	1	1	1	
JMC	2	2			1	1			1	1				2	1	2	1	1
Debark Control	2	2										1	1	1	1	1		
Marine Embarkation Work Center	1													1	1			
<b>Cmd and LNO Offices</b>																		
Troop C.O. Stateroom	1	1				1						1	1	1	1	1	1	
Troop X.O. Stateroom	1	1				1						1	1	1	1		1	
<b>Supporting Offices</b>																		
Troop Admin Office (S-1)	2	1									1			1	3		1	1
Mobile Facilities (multiple facilities)*	*	*																
Well Deck (multiple vehicles)*	*	*																
CSSE Supply	1																	
Chaplain Office	1				1													
Medical & Dental Records Office	1				1									1	2			
Wardroom	1	1																
Library	4																	
<b>Workspace Sub-Totals</b>	<b>32</b>	<b>29</b>	<b>5</b>	<b>4</b>	<b>8</b>	<b>11</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>8</b>	<b>8</b>	<b>17</b>	<b>16</b>	<b>20</b>	<b>10</b>	<b>3</b>
<b>Berthing Spaces</b>																		
Single Staterooms (Abv 0-5)	1	1																
Single Staterooms (Abv 0-5)	1	1																
Two Man Trp Off Staterooms	1	1																
Two Man Trp Off Staterooms	1	1																
Two Man Trp Off Staterooms	1	1																
Three Man Trp Off Staterooms	1	1																
Four Man Trp Off Staterooms	1	1																
Four Man Trp Off Staterooms	1	1																
Four Man Trp Off Staterooms	1	1																
Four Man Trp Off Staterooms	1	1																
Four Man Trp Off Staterooms	1	1																
Four Man Trp Off Staterooms	1	1																
Six Man Trp Off Staterooms	2	1																
Six Man Trp Off Staterooms	2	1																
Six Man Trp Off Staterooms	2	1																
Six Man Trp Off Staterooms	2	1																
Six Man Trp Off Staterooms	2	1																
Six Man Trp Off Staterooms	2	1																
Eight Man Trp Off Staterooms	3	1																
Staff NCO Berthing	1																	
Staff NCO Berthing	1																	
Troop Berthing	1																	
Troop Berthing	1																	
Troop Berthing	1																	
Troop Berthing	1																	
Troop Berthing	1																	
Troop Berthing	1																	
Troop Berthing	1																	
Troop Berthing	1																	
Troop Berthing	1																	
Troop Berthing	1																	

\* Denotes secure, wireless access points.  
Quantities dependent on coverage area.





**LPD-17 NETWORK AND TELEPHONY MATRIX**

LPD-17 Space Designation	LAN DROPS				WORKSTATION				PRINTERS				DEVICES		TELEPHONY					
	NIPRNET	SIPRNET	JWICS	COWAN	NIPRNET	SIPRNET	JWICS	COWAN	NIPRNET	SIPRNET	Color SIPRNET	Copier	23TV	27TV	STU/STE	DSVT	PICT	OFFICE	FAX	
<b>Operational Spaces</b>																				
COC - Troop Operations Area	3	16		1		5		1		1	1	1		1	1		4	5	13	1
COC - TACLOG	6	7			4	3				1	1			1	1		2	2	5	1
JIC	4	14	2	1	2	3		1		1	1			1	1		1	2	3	1
SSES	1	2	3			1	1			1				1	1		1	1	2	1
Joint Mission Planning Room	2	4		1	1	1		1		1	1	1		1	1		2	2	2	1
Communications Center	3	3			1	1				1	1						1	2	2	1
Debark Control Center	2	3												1	1		1	1		1
Mission Briefing Room	2	3			1	1				1				1	1		1	1		1
Helo Control Station	2	2																2		1
Landing Force Work Center	2	2				1				1										
Supply Dept Office (Disbursing)	5				2					2		1								
Marine Medical & Dental Records Office	5				2					1							1	2		1
<b>Cmd and LNO Offices</b>																				
Troop C.O. Stateroom	1	1				1								1	1		1	1	1	1
Troop X.O. Stateroom	1	1				1								1	1		1	1		1
<b>Supporting Offices</b>																				
Troop Armory #1	1																			1
Troop Armory #2	1																			1
Troop Armory #3	1																			1
Troop Armory #4	1																			1
Troop Armory #5	1																			1
Troop Admin Office (S-1)	5	3			1	1				1	1	1	1	1			1	1	1	3
Aviation Maintenance Office	1																			2
Aviation Office	3	1			1	1											1			2
EOD/Embarked Force Workcenter	1													1			1			2
Mobile Facilities (multiple facilities)*	*	*																		
Well Deck (for multiple vehicles)*	*	*																		
CSSE Supply	1																			
Marine Chaplain Office	2				1															1
Wardroom	1	1																		
Library	10				9															
<b>Workspace Sub-Totals</b>																				
	68	63	5	3	25	20	1	3		8	9	4	2	10	10		16	21	34	26
<b>Berthing Spaces</b>																				
Two Man Trp Off Staterooms	1	1																		1
Two Man Trp Off Staterooms	1	1																		1
Two Man Trp Off Staterooms	1	1																		1
Two Man Trp Off Staterooms	1	1																		1
Two Man Trp Off Staterooms	1	1																		1
Two Man Trp Off Staterooms	1	1																		1
Two Man Trp Off Staterooms	1	1																		1
Two Man Trp Off Staterooms	1	1																		1
Four Man Trp Off Staterooms	2	1																		1
Four Man Trp Off Staterooms	2	1																		1
Four Man Trp Off Staterooms	2	1																		1
Four Man Trp Off Staterooms	2	1																		1
Four Man Trp Off Staterooms	2	1																		1
Four Man Trp Off Staterooms	2	1																		1
Four Man Trp Off Staterooms	2	1																		1
Four Man Trp Off Staterooms	2	1																		1
Four Man Trp Off Staterooms	2	1																		1
Two Man SNCO Stateroom	1																			1
Four Man SNCO Stateroom	2																			1
Six Man SNCO Stateroom	2																			1
Six Man SNCO Stateroom	2																			1
Six Man SNCO Stateroom	2																			1
Six Man SNCO Stateroom	2																			1

\* Denotes secure, wireless access points.  
Quantities dependent on coverage area.

**LPD-17 NETWORK AND TELEPHONY MATRIX**

LPD-17 Space Designation	LAN DROPS				WORKSTATION				PRINTERS				DEVICES		TELEPHONY								
	NIPRNET	SIPRNET	JWICS	COWAN	NIPRNET	SIPRNET	JWICS	COWAN	NIPRNET	SIPRNET	Color SIPRNET	Copier	23TV	27TV	STU/STE	DSVT	PICT	OFFICE	FAX				
Six Man SNCO Stateroom	2																		1				
Six Man SNCO Stateroom	2																		1				
Troop Berthing	1																		2				
Troop Berthing	1																		2				
Troop Berthing	1																		2				
Troop Berthing	1																		2				
Troop Berthing	1																		2				
Troop Berthing	1																		2				
Troop Berthing	1																		2				
Troop Berthing	1																		2				
Troop Berthing	1																		2				
Troop Berthing	1																		2				
Troop Berthing	1																		2				
Troop Berthing	1																		2				
Troop Berthing	1																		2				
Troop Berthing	1																		2				
Troop Berthing	1																		2				
Troop Berthing	1																		2				
Troop Berthing	1																		2				
Troop Berthing	1																		2				
<b>Workspace Sub-Totals</b>	68	63	5	3		25	20	1	3		8	9	4	2		10	10		16	21	34	26	3
<b>Berthing Sub-Totals</b>	65	20	0	0		0	0	0	0		0	0	0	0		0	0		0	0	0	64	0
<b>Totals</b>	133	83	5	3		25	20	1	3		8	9	4	2		10	10		16	21	34	90	3
	NIPRNET	SIPRNET	JWICS	COWAN		NIPRNET	SIPRNET	JWICS	COWAN		NIPRNET	SIPRNET	Color SIPRNET	Copier		23TV	27TV		STU/STE	DSVT	PICT	OFFICE	FAX
Marine Requirements	LAN DROPS					WORKSTATIONS					PRINTERS					DEVICES			TELEPHONY				

\* Denotes secure, wireless access points.  
Quantities dependent on coverage area.