Appendix A

References

A-1. Key Unit Telephone Numbers

Location	DSN Phone	Commercial Phone
MARFORLANT C/S	836-1533/1600	(751) 836-1533/1600
G1	836-1541	(751) 836-1541
G-2	836-1600	(751) 836-1600
G-3	836-1620	(751) 836-1620
G-4	836-1647	(751) 836-1647
G-5	836-1701	(751) 836-1701
G-6	444-6256	
MARFORPAC C/S	315-477-8616/1621	(808) 477-8616/1621
G-1	315-477-8515	(808) 477-8515
G-2	315-477-8445	(808) 477-8445
G-3	315-477-8628	(808) 477-8628
G-4	315-477-8324	(808) 477-8324
G-5	315-477-8567	(808) 477-8567
G-6	315-477-8494	(808) 477-8494
MARFORRES C/S	678-1581/1582	(504) 678-1581/1582
G-1	678-5627	(504) 678-5627
G-2	678-6950	(504) 678-6950
G-3	678-6067	(504) 678-6067
G-4	678-1348	(504) 678-1348
G-6	678-1364	(504) 678-1364
MARFORSOUTH C/S	567-2600	(305) 437-2600
G-1	567-2601	(305) 437-2601
G-2	567-1855	(305) 437-1855
G-3	567-2603	(305) 437-2603
G-4	567-2604	(305) 437-2604
G-5	567-2605	(305) 437-2605
G-6	567-2606	(305) 437-2606
I MEF C/S	365-9101/9209/9104	(760) 725-9101/9209
G-1	365-9206	(760) 725-9206
G-2	365-9223	(760) 725-9223
G-3	365-9145	(760) 725-9145
G-4	365-9162	(760) 725-9162
G-5	365-5715	(760) 725-5715
G-6	365-9179	(760) 725-9179
II MEF C/S	751-8952/8200/8956	(910) 451-8952/8200
G-1	751-8135	(910) 451-8135
G-2	751-8039	(910) 451-8039
G-3	751-8987	(910) 451-8987
G-4	751-8409	(910) 451-8409
G-5	751-8187	(910) 451-8187
G-6	751-8949	(910) 451-8949

Location	DSN Phone	Commercial Phone
III MEF C/S	315-622-7753	
G-1	315-622-7744	
G-2	315-622-7316	
G-3	315-622-7718	
G-4	315-622-7784	
G-5	315-622-7717	
G-6	315-622-7267	
1st FSSG C/S	365-5825/5966	(760) 725-2825/5966
G-1	365-5854	(760) 725-5854
G-2	365-5101	(760) 725-5101
G-3	365-6841	(760) 725-6841
G-4	365-1148	(760) 725-1148
G-6	365-5845	(760) 725-5845
2nd FSSG C/S	751-2702/2826	(910) 451-2702/2826
G-1	751-5739	(910) 451-5739
G-2	751-5708	(910) 451-5708
G-3	751-3914	(910) 451-3914
G-4	751-3342	(910) 451-3342
G-6	751-3838	(910) 451-3838
3rd FSSG C/S	315-637-3502/3522/3360	
G-1	315-637-2615	
G-2	315-637-1651	
G-3	315-637-1934	
G-4	315-637-2118	
G-6	315-637-1814	
4th FSSG C/S	678-0651	(504) 678-0651
G-1	678-6505	(504) 678-6505
G-3	678-6530	(504) 678-6530
G-4	678-6520	(504) 678-6520
G-6	678-4990	(504) 678-4990
1st MARDIV C/S	365-5423/6119	(760) 725-5423/6119
G-1	365-3847/3453	(760) 725-3847/3453
G-2	365-2883	(760) 725-2883
G-3	365-4439/3280	(760) 725-4439/3280
G-4	365-3505/2833	(760) 725-3505-2833
G-6	365-5059/2366	(760) 725-5059/2366
2nd MARDIV C/S	751-8470/8155	(910) 451-8470/8155
G-1	751-8159	(910) 451-8159
G-2	751-8249	(910) 451-8249
G-3	751-8152	(910) 451-8152
G-4	751-8064	(910) 451-8064
G-6	751-8053	(910) 451-8053
3rd MARDIV C/S	315-622-9574	
G-1	315-622-9422	
G-2	315-622-7336	
G-3	315-622-9592	
G-4	315-622-9050	
G-6	315-622-9489	
1st MAW C/S	315-645-7320/3285	
G-1	315-645-0742	
G-2	315-645-3840	
G-3	315-645-3161	
G-4	315-645-3198	
G-6	315-645-2301	

Location	DSN Phone	Commercial Phone
2nd MAW C/S	582-2341	(252) 582-2341
G-1	582-4134	(252) 582-4134
G-2	582-2883	(252) 582-2883
G-3	582-2341	(252) 582-2341
G-4	582-3400	(252) 582-3400
G-6	582-5058	(252) 582-5058
3rd MAW C/S	267-7291	(619) 577-7291
G-1	267-7403	(619) 577-7403
G-2	267-4752	(619) 577-4752
G-3	267-4504	(619) 577-4504
G-4	267-7472	(619) 577-7472
G-5	267-7353	(619) 577-7353
G-6	267-7416	(619) 577-7416
MAWTS-1		
S-1	951-6382	(520) 341-6382
S-2	951-2653	(520) 341-2653
S-3	951-2915	(520) 341-2915
S-4	951-2577	(520) 341-2577
S-5	951-3572	(520) 341-3572
S-6	951-5353	(520) 341-5353
MSTP	278-2818/2906	(703) 784-2818/2906
MEF Branch	278-6401/6450	(703) 784-6401/6450
BSTF	278-5156/5157	(703) 784-5156/5157
USSPACECOM Space Ops Center	692-5527	(719) 554-5527
Naval Space Ops Center	249-6500	(540) 653-6500
Naval Space Support Teams	249-6160	(540) 653-6160

A-2. Useful Web Pages

a. Department of Defense

Secretary of Defense	www.dtic.mil/defenselink
Joint Chiefs of Staff	www.dtic.mil/jcs
U. S. Marine Corps	www.usmc.mil
U. S. Navy	www.navy.mil
U. S. Air Force	www.af.mil
U. S. Army	www.army.mil
USJFCOM	www.jfcom.mil
USCENTCOM	www.centcom.mil
USEUCOM	www.eucom.mil
USPACOM	www.pacom.mil
USSOUTHCOM	www.southcom.mil
USSOCOM	www.socom.mil
USSTRATCOM	www.stratcom.mil
USTRANSCOM	www.transcom.mil
USSPACECOM	www.spacecom.af.mil/uspace
Def Fuel Sup Center	www.dfsc.dla.mil/main/dfschome.htm
DISA	www.disa.mil
DLA	www.dla.mil
DOD Terms & Dictionary	www.dtic.mil
DOD Information Center	www.dtic.mil

b. Doctrine

USMC Doctrine	www.doctrine.quantico.usmc.mil
MSTP	www.mstp.quantico.usmc.mil
Joint Doctrine	www.dtic.mil/doctrine
USA Doctrine	www-tradoc.army.mil
USN Doctrine	www.nwdc.navy.mil
USAF Doctrine	www.usafdoctrine.maxwell.af.mil
Center for Army Lessons Learned	call.army.mil

c. Government

White House	www.whitehouse.gov
DOS	www.state.gov
DOT	www.dot.gov
FAA	www.faa.gov
FEMA	www.fema.gov
FHWA	www.fhwa.dot.gov
GSA	www.gsa.gov
Maritime Administration	marad.dot.gov
U. S. Coast Guard	www.dot.gov/dotinfo/uscg

d. Marine Corps Bases

MCLB Barstow	www.bam.usmc.mil
MCAGCC	www.29palms.usmc.mil
MCB CP PEND	www.cpp.usmc.mil/jpao/home.htm
MCRD SD CA	www.mcrdsd-usmc.com
MCAS Miramar	www.miramar.usmc.mil
MCAS Yuma	www.yuma.usmc.mil
MARFORRES	www.marforres.usmc.mil
MCLB Albany	www.ala.usmc.mil
MCB Quantico	www.quantico.usmc.mil
MARFORLANT	www.marforlant.usmc.mil
MARFORPAC	www.mfp.usmc.mil
MCAS Cherry Point	www.cherrypt.usmc.mil
MCAS New River	www.lejeune.usmc.mil/mcasnr
MCB CP Lejeune	www.lejeune.usmc.mil
MCAS Beaufort	www.bft.usmc.mil
MCRD PI SC	www.parrisisland.com
MCB Hawaii	www.mcbh.usmc.mil
MCAS Iwakuni	www.iwakuni.usmc.mil
MCAS Futenma	www.futenma.usmc.mil
MCB CP Butler	www.okr.usmc.mil

e. Marine Corps Units

I MEF	www.cpp.usmc.mil/IMEF/imef%20home%20main.htm
II MEF	www.iimef.usmc.mil/
III MEF	www.iiimef.usmc.mil/
11th MEU	216.71.22.141/
13th MEU	www.usmc.mil/13meu
15th MEU	www.usmc.mil/15meu
22nd MEU	www.usmc.mil/22ndmeu
24th MEU	www.usmc.mil/24meu
26th MEU	www.usmc.mil/26meu
31st MEU	www.usmc.mil/31meu

f. U.S. Transportation Command

USTRANSCOM (PAO)	ustcweb.safb.af.mil
AMC	www.safb.af.mil/hqamc/pa
MSC	www.msc.navy.mil
MTMC	mtmc.army.mil

g. Miscellaneous

Aircraft Mission Tracking	www.trip.com
Aircraft Distance Calculator	jfast.prg.utk.edu/Port2PortAirDist/default.asp
Airfield Suitability	www.amc.af.mil/do/doa/doas.htm
AMOC Briefs	www.amwc.af.mil
Amphibious Ships	www.chinfo.navy.mil/navpalib/factfile
Blount Island Command	www.matcombic.usmc.mil
GTN	www.gtn.transcom.mil
GTN CLASSIFIED	www.gtn.transcom.smil.mil
MIT (MPF Info Tool)	http://mit.altservices.com
MAPS	http://maps.yahoo.com/yahoo
Per Diem Rates	www.dtic.mil/perdiem/
Ports	www.portguide.com
Systems	mcsd.ala.usmc.mil/homepage.html
TCAIMS II	www.tcaimsii.belvoir.army.mil
Travel Claim	www.psasd.navy.mil/travel.html

A-3. Planning Quick Reference Table

Marine Corps Planning Process: Mission Analysis, COA Development, COA War Game, COA Comparison and Decision, Orders Development, Transition.

Actions Upon Receipt of Mission	The CG and C/S consider the division of labor between the G-3 and the G-5:**Time:** Relative to what is being executed in current operations and what is future operation's planning horizon. **Purpose:** Is the purpose the same for future tasks, within the current or subsequent phases, such that G-3, Future Operations is the logical choice for planning. **Major Tactical Tasks:** Major tasks (Linkup, RIP, POL, JLOTS, etc.), of such complexity, that require long lead-time and coordination with forces external to the MEF. **Area of Operations:** Change in area of operations requiring a different set of considerations with respect to terrain and enemy. **Command Relationships:** Changes in command relationships requiring coordination beyond that of what is currently in place. **CG's guidance to C/S, G-3, and G-5 may include decisions on the following:** Assessment of division of labor between G-5 and G-3 in order to prevent duplication of effort. Where does the CG want the G-5 to focus his planning efforts. Does the CG want the G-5 to think beyond the next MEF mission? What are the CG's future concerns? What should the G-5 produce and hand off to G-3, FOPS. Planning Horizon based on Time Available: Is it better to have the G-5 coordinate and shape issues for the MEF or dedicate time to detailed planning that may be best planned by G-3 FOPS. Planning Horizon based on achieving the assigned purpose: While G-3 plans and executes towards one purpose, G-5 plans towards the next purpose.
Commander's Orientation:	The battle staff provides the necessary information for the CG to Review HHQ warning order or OPORD, intelligence estimate and IPB products (MCOO, doctrinal template). Commander issues Initial Guidance relative to **Commander's Battlespace Area Evaluation (CBAE)**: Battlespace, COG, CDR's Intent, and CCIRs.
Mission Analysis:	Establish Time Line. Review initial guidance, CBAE and update MCOO. Review HHQ Mission and Intent. Determine the enemy and friendly **PURPOSE** of the Operation. Identify specified and implied tasks (annotate reference/page number). Determine essential tasks. Draft mission statement. Determine Area of Interest (AOI) in relation to AO. Review restraints (cannot do) and constraints (must do) (annotate reference/ page number). Review significant assumptions required to continue planning. Determine requests for information (RFIs). Determine priority intelligence requirements, recommended CCIRs, and review resource shortfalls. Determine subject matter expert shortfall. Enemy and Friendly COG/CV analysis (Enemy COG prevents you from achieving your purpose). Throughout planning allow OPT members time to brief respective Cdrs and staff principals. G-2 develops HVTs.
Mission Analysis Brief:	Review commander's initial guidance. Situation update, AO/AOI, Intel estimate (Terrain, weather, threat COAs). HHQ Mission and Intent. Review purpose, specified, implied, and essential tasks (with references/page). Proposed mission statement. Review shortfalls. Have G2 present enemy COA models. Review Enemy and Friendly COG. Recommend CCIRs. Issues for the commander. Once the mission statement is approved, draft and issue warning order (mission, cdr's intent, task organization, earliest time of movement, etc.). Start incorporating planning products within the JOPES basic orders format. Begin staff estimates and convene the Red Cell.
COA Development:	Commander issues planning guidance with respect to COA development, and decisive (results beyond itself) and shaping actions. Review MCOO, doctrinal and situation template, and ENCOA models. Graphically array friendly and enemy forces. Develop the relative combat power assessment. **Develop initial COAs by working backward from the PURPOSE of the operation, the ENDSTATE conditions that achieve the purpose, EN COG/CV, to decisive (ME) and shaping (SE/Lethal and non-lethal) actions and Reserves. Consider Types of Offensive Operations and Forms of Maneuver that can lead you to a Decision.** Think Time and Space at the MEF level—deep, close, rear operations. Determine which forms of maneuver best exploit the combined arms of the MAGTF across the entire battlespace. Where do you want to force, accept, or refuse battle. Develop HVTs into HPTs. Review the commander's planning guidance against the COA. Ensure that the COA is **Suitable** (accomplishes the mission [purpose] and complies with the commander's guidance). **Feasible** (accomplish mission with available time, space and resources). **Distinguishable** (significant different from other COAs in forms of maneuver or attacking EN COG through CVs). **Acceptable** (accomplishes an advantage that justifies the cost in resources), **Complete** (accomplishes the all tasks in accordance with the commander's guidance**). Brief the initial COA** to the commander, ensure that reps from the Red Cell are present. Make necessary modifications. Refine graphics (boundaries, LD, phase lines, ground and air axis, assembly areas fire support measures, ME/SE/Res) and **write COA narratives** (write broad overview of the operation as a CONOPS (MSC – ACE,GCE, FSSG tasks) as conducted in phases or stages with end state for each. Tasks and Purpose of the ME/SE/Res). **Reserves** should be organized based on anticipated capabilities.
COA Development Brief:	Review Commander's Planning Guidance, Intel update, Mission, Intent, Updated facts and assumptions, Relative Combat Power Assessment, COA graphics and narratives (read the narrative and have a pointer work the map), recommended additions to CCIRs and PIRs. Pending Issues for the commander, Recommended war gaming analysis and evaluation criteria.

COA War Game:	Commander updates intent, guidance, CBAE, and CCIRs as part of the commander's war game guidance. Includes friendly and threat COAs to be war gamed against specific (most likely and dangerous) enemy COAs. List of critical events (decisive action, shaping, link up, passage of lines, enemy counter attack…) that need to be war gamed, and level of the war game (one or two levels down). The commander establishes the evaluation criteria based upon principles of war (MOOSE MUSS), main effort, EN COG, Purpose of the operation…. Red Cell and OPT prepare Synchronization Matrixes for their COAs. Review the commander's guidance and evaluation criteria with the OPT and Red Cell. Evaluate the friendly COAs against enemy COAs and not against other friendly COAs. Review war game rules and technique—post the designated enemy COA overlay on the map, post the friendly COA overlay on the map, determine if events are simultaneous or chronological, determine the affects of shaping (CINC and Enemy) on the forces. Begin the war game by establishing time of the event and weather conditions, conduct as many moves as necessary to achieve desired results. Record the time and results of the friendly and enemy moves, and collect data to satisfy the commander's evaluation criteria. Update synchronization matrix and decision support template and matrix (event template with projected enemy positions, NAIs, TAIs, and DPs). Identify and record, time, critical events, decision points, branches, and sequels. Validate HPTs. Identify resource shortfalls, and additional RFI, PIRs, and CCIRs. Identify and develop measures of effectiveness for assessment. **Validate Assessment Criteria's and MOEs for Tasks.** Brief respective staff sections to develop and refine staff estimates.
COA War Game Brief:	Mission, Intent, Cdr's evaluation criteria, war gamed COA, narrative and task organization, war gamed significant events and results (just the facts), decision points, any branches and sequels, validated assumptions, additional CCIRs and PIRs, resource shortfalls, commander's issues (track the ones resolved), commander's evaluation criteria as it pertains to each COA.
COA Comparison and Decision:	The commander, principle staff, and subordinate commanders examine and evaluate the COAs using the commander's evaluation criteria, staff estimates, and estimates of supportability. The commander may select a COA, modify a COA, develop a new COA by combining favorable elements of all the COAs, or discard and begin staff planning anew. Upon making a decision, the commander reviews the COA in detail (critical events and decision points) with subordinate commanders and principle staff. Issue Warning Order.
Orders Development:	The C/S coordinates the principle staff to assist the G-3 in developing the OPORDER. The mission statement (goes in para. 2 of the OPORDER), commander's intent (para. 3a), COA narrative (refined into a concept of operations [para. 3b]), CCIRs (para 3e), staff estimates (refined into appropriate annexes), specified and implied tasks (with a purpose assigned to subordinates in para 3c), synchronization matrix (refined into an execution matrix), and other products from the planning process become the basis of the OPORDER. Conduct an Orders Reconciliation to review the entire order to ensure that the basic order and all its annexes are properly linked and in agreement. Conduct an "orders crosswalk" to ensure that the order is also linked to higher and adjacent. Identified branches are further planned to become FRAGOs. Decision Support Template and Matrix along with other Intelligence and IPB products are provided to subordinate commands.
Transition:	Designed to shift from planning to execution. The commander or C/S provide transition guidance. During transition, the commander conducts a transition/execution drill to envision flow of events with subordinate commanders. The commander may require the subordinate commanders to give a confirmation brief of their understanding of the mission and intent and their CONOPS. In internal transition, the plan is transitioned by future ops to current ops. The OPT reviews the detailed plan or order with all the staff section current ops reps. This brief may consist of an orientation, intelligence update, IPB, HHQ mission and intent, mission, commander's intent, CCIRs, T/O, and concept of operations, subordinate tasks, coordinating instructions, identified branches and sequels, decision support tools, pending issues. Current Ops should conduct an execution drill.
Red Cell: Supports the CIC.	Convene the red cell as soon as possible. As the "thinking enemy," the red cell receives threat COAs (most dangerous/most likely) from the G-2 and prepares these COAs for the war game. Based on threat capabilities, the red cell should have the following representation: maneuver, fires, and intelligence. The red cell team leader is designated by the commander and does not necessarily have to be an intelligence officer. The red cell and the OPT must constantly exchange information during the planning process.
Warfighting Functions:	Maneuver, Intelligence, Logistics, Command and Control, Force Protection, Fires
Center of Gravity:	COG is a source of strength (MCDPs & 0-1) COGs may shift by phase or by COA. For example if the enemy is defending, his COG may be artillery; whereas, if the enemy is delaying, his COG maybe his counterattack force—armor. At the tactical level, if the EN COG does not prevent you from achieving your purpose, then it may not be a COG. **Remain focused on the purpose**, the attack of the EN COG is only important if it leads you to that purpose.
Cdr's Intent:	Purpose, Method, and End State

CCIRS	Information required by the Cdr that directly affects his decisions and dictates the successful execution of operational or tactical operations. CCIRs normally result in the generation of three types of information requirements: **Priority Intelligence Requirements** (PIR), **Essential Elements Of Friendly Info** (EEFI), **Friendly Force Information Requirements** (FFIR). CCIRs should be linked to decisions, assessment criteria's and branch plans.
On-order; Be Prepared Missions	An **On-order** mission is a mission **to be executed**, except that the **exact time and place may not be known**. The force assigned the mission is a committed force, it will develop plans, allocate resources, task organize, and position forces for execution. It must be mentioned in the CONOPS. A **Be-prepared** mission is a mission assigned that **might be executed**. It will be executed **only if something else has or has not been successful; linked to an event**. No resources are allocated for a BPT mission. In the priority of planning, it will be planned after any other assigned on-order missions.
Forms of Maneuver and Types of Operations:	**Forms of Maneuver**: Frontal Attack--Flank Attack – Envelopment (single/double)—Turning Movement—Penetration—Infiltration. **Types of Offense:** Movement to Contact, Attack (Hasty, Deliberate, Spoiling, Counterattack, Raid, Feint, Demonstration), Exploitation, Pursuit. **Types of Defense:** Mobile (orients on the destruction of the enemy through offensive action) and Position Defense (deny enemy access to critical terrain for a specified period of time). **Forms of Defensive Maneuver:** defend and retrograde. **Forms of Retrograde:** Delay, Withdrawal (under pressure and not under pressure), Retirement. **Forms of Reconnaissance:** Zone, Area, Point, Route, Recon in Force. **Forms of Security:** Screen (observe and report), Guard (T/O to operate apart and protect the main force), Cover (prevent surprise and deceive the enemy).
Defense Operations:	Security area (FLOT[no screening or guard forces forward of—should have a BHL for these forces]—FEBA [area where ground combat units are deployed, excluding screening and covering forces]). Main Battle Area (FEBA—Rear Boundary of forward subordinate units). Rear Area (area forward from the assigned rear boundary to the rear boundary of the main battle area). **Position Defense**: Denies the enemy access to terrain. **Mobile Defense**: Orients on the enemy force. **Defend in sector or battle position**. Task Organized **Counterattack Force and Reserves.**
Phases—Stages— Parts	Name each in sequence---- Pre-Hostilities, Lodgment, Shaping, Combat Operations, Decisive Ops, Exploitation, Stabilization, Follow Through, Post Hostilities, Redeployment. Each state should have an end state or conditions that determine transition to the next.
Amphibious Operations:	**Types:** Assault, Demonstration, Raid, Withdrawal. Assault Forces and Assault Follow on Echelon. **PERMA;** Planning, Embarkation, Rehearsal, Movement, Assault. **Considerations:** Mission (Purpose of amphibious assault – fix, deceive, or fight in depth, are operations sequenced or simultaneous), Objectives, who is the CATF and does he have the ability to control the AOA, if established. If no AOA how and who controls the battlespace. AOA (immature theater) / AO (mature theater), Command Relations, Air Control, Supporting Ops, Boundaries, Linkup, Deception, Pre-Assault Ops, Advance Force Ops, MPF, Logistics (AFLOAT or JLOTS). What are the conditions for transfer of authority ashore. Is NAVFOR the supported or supporting commander during execution of the amphibious operation? **Advance Force Operations** (Org within the ATF that precedes to prepare the obj area—recon, mines…), **Pre-Assault Operations** (conducted in obj area before the assault phase begins by the ATF forces), Supporting Operations (Coordinated by the CATF to shape the enemy by joint forces—deception, battlespace dominance, mines outside the AOA, MIO, special operations). **SHIPS**: **LPD1**: (700 Marines, 1 LCAC, 2 Helo spot—2 CH46s), **LPD4**: (650 Marines, 1LCAC, 2 Helo spot—4 CH 46s), **LSD36**: (350 Marines, 2/3 LCAC, 1 Helo spot 1—0 CH 46s), **LSD41**: (400 Marines, 4 LCAC, 2 Helo spot—0 CH 46s), **LSD49**: (400 Marines, 2 LCAC, 2 Helo spot—0 CH 46s), **LHD1**: (1800 Marines, 3 LCAC, 9 Helo spot —42 CH 46s), **LHA**: (1800 Marines, 1 LCAC, 9 Helo spot—43 CH46s), **LCC-19**, Blue Ridge Command Ship (200 Marines, 1 Helo spot). **5-inch Guns:** 22,000k HE, WP, illum.
MOOTW:	**Principles:** Objective, Unity of Effort, Security, Restraint, Perseverance, and Legitimacy. **Types:** Arms Control, Combating Terrorism, DOD Support to Counterdrug Operations, Enforcement of Sanctions/Maritime Intercept Operations, Enforcing Exclusion Zones, Ensuring Freedom of Navigation and Overflight Humanitarian Assistance, Military Support to Civil Authorities, Nation Assistance/Support to Counterinsurgency, NEOs, Peace Operations (Peace Enforcement, Peace Keeping Operations, Operations in Support of Diplomatic Efforts), Protection of Shipping, Recovery Operations, Show of Force Operations, Strikes and Raids, Support to Insurgency.
Linkup Operations:	Conducted during an amphibious operation by forces landed by surface or aviation means, relief of an isolated unit, join other US or allied forces. May be conducted to complete an encirclement of envelopment of an enemy force, join an attacking force with a force inserted in the enemy rear. Assist in the breakout of an encircled friendly force, Forces may be moving towards each other, or may be stationary. May be part of an offensive or defensive operation. HQ directing the linkup must establish the command relationships and responsibilities of the forces involved. Liaison is established through planning and continues throughout the operation. Coordinate the scheme of maneuver and control measures. Location of primary and alternate linkup points. Fire support measures increase or decrease as the forces converge. Actions following the linkup. G2 must employ R/S assets near linkup points. Axis of advance of the moving force must intersect the security element of the stationary force. Stationary force removes obstacles, provides guides, and establishes assembly areas for the reorganization of the linkup forces. A restrictive fire line (RFL) may be required to preclude fires from the convergence of forces affecting each other. As the linkup become imminent, the RFL is moved as close to the stationary force as possible to allow maximum freedom of action for the linkup force (moving force should control fires). Both FSCC should clear fires not observed or under terminal control. Upon linkup, responsibility for fire support is transferred to the designated commander. If the linkup force is to continue operations with the stationary force, then a single commander for the overall force must be designated. FM 71-100 Div Ops

Obstacle Crossing:	Natural or Manmade**. Hasty or Deliberate**. **Suppress**, **Obscure**, **Secure**, and **Reduce**. Support Force to isolate the obj, Breach force creates lanes within the obstacle belt. Assault force dislodges the enemy. **M-155 MICLIC**: 100m x 16m. Expect 50% equipment loss for the breach force. Mechanical Reduction 10 minutes per 100m minefield.
Passage of Lines:	Must facilitate another tactical operation. Conducted to continue and attack, envelop an enemy force, pursue a fleeing enemy, or withdraw a security or main battle force area. Use multiple passage lanes. Should be rapid to minimize vulnerability. Stationary unit conducts aggressive counter recon. Engineer support from stationary unit to guide the passing force through obstacles along the FLOT. Control measure (Battle Handover Line, Axis of Advance, Rearward Assembly Areas). Passing unit FSC coordinates the fires. Stationary unit assists in CASEVAC, EPWs, civilian control, route priority and traffic control. Higher command coordinates responsibility of control of zone or sector or mutually agreed by stationary and passing commanders. Deception and smoke are planned. Combat support is integrated into the plan to support the movement of the passing unit. Route priority is given to the passing unit. Exchange intelligence, tactical plans, SOPs, security measure during passage, priorities of route and facilities and provisions for movement control, exchange of LNOs, and obstacle plan.
Relief in Place	Can be conducted simultaneously over the entire sector or staggered over time. Executed from front to back or back to front, given METT-T and the amount of forces employed along the FLOT (minimum forces along the FLOT, relief rear to front and vice versa). Time of relief, sequence of units, advance parties, fire support coordination, air defense, passage control (initially unit being relieved has TACON upon relieving unit, exchange of equipment…).
Maritime Prepostioning:	Secure area with adequate ports (drafts, overhead clearance, and throughput [roads…]), and adequate strategic airlift. One MPSRON supports a brigade size MAGTF force of approx. 18,800 Marines and sailors for 30 days. All classes of supplies except IV, VI and X. **MPSRON-1** Mediterranean Sea, **MSPRON-2** Indian Ocean (Diego Garcia), **MSPRON-3** Pacific Ocean (Guam). **M1A1**: 58; **LAVs: 25**; AAVs:109; **HMMWVs**:129 (72 w/TOW), **Stingers**:45; **ROWPUs**:41; Trucks (5 ton): 489, **MHE**: 121; 30 days sustainment. **Sorties** for MEF (Fwd) Fly in Echelon: CMD (CE) 12; GCE 35; CSSE 30; ACE 151. Naval Support Element (NSE) 6. Offload 7-9 days dependent on ship type. Backload 9-10 days.
Rear Operations:	**Functions**: **Communications, Intelligence, Movement, Area Management, Security, Sustainment, Infrastructure Development, HN Support**. Dedicate intell assets to rear area.. Today's deep fight may be tomorrow's rear area. MACE CG generally assigned as the RAC (rear area commander/coordinator). Reserve Regt assigned as the TCF. **Levels: 1.** (Agents, terrorists, saboteurs….) Threat can be defeated by base/base cluster self-defense. **2.** (Small tactical units, unconventional forces….) Beyond base self-defense capability but can be defeated by response forces (MP) with supporting arms. **3.** (Large tactical units—air/heliborne, amphibious….) Requires commitment of combined arms tactical combat forces (TCF). **Active and Passive Defensive Measures**. SROE and LNO to FOPS. If FSSG is the RAC than they must have assets assigned for fire coordination and security
IPB	**Doctrinal Template**: En Order of Battle. **Situation Template**: Enemy based on terrain and environment. **Event Template**: NAI with EN COA for developing a collection plan. **Combined Event Template**: Red and Blue Forces COA. **Decision Support Template**: A product of war gaming, projected EN COA with DPs/NAI/TAI. **MCOO**: Modified Combined Obstacles Overlay: mobility corridors, objectives avenues of approach, likely location of EN obstacle system, defensible terrain, likely engagement area, key terrain, built up areas & civil infrastructure, etc. **HVT**: Essential for the enemy to accomplish the mission. Developed by the G-2. **HPT**: Enemy targets, when destroyed, help us accomplish the mission. Developed by the G-3.
IO/IW/C2W:	Integrated plans to degrade enemy decision making capabilities while protecting ones own IO/IW/C2W includes: **Deception, Psychological Operations, Physical Destruction, Electronic Warfare, Operational Security, Civil Affairs. Defensive IO/IW/C2W methods include: OPSEC, Information Assurance, CI, Counter PSYOPS, and Counter Deception**. C2W implies tactical measures while IW is operational information operations
MOPP Conditions:	**1**: Over garment worn, carry the rest of the protective gear. **2**: Wear boots. **3**: Protective mask and hood. **4**: Gloves and liners, over garment is closed and hood pulled down. Joint Service Lightweight Integrated Suit Technology MOPP suit lasts 30 days and 24 hrs contaminated. Account for a factor of 1.5 longer to accomplish this under MOPP conditions. FM 3-4, NBC Protection.
Air Defense Weapons Control Status:	**Weapons Free**: Weapons fired at any target not positively recognized as friendly. **Weapons Tight**: Fired at targets recognized as hostile. **Weapons Hold**: Fired in self-defense.
Levels of Authority:	**COCOM**: non-transferable command authority established by law. **OPCON**: transferable authority to accomplish assigned missions; does not include authority for logistics, administration, discipline, internal organization, or unit training. **TACON**: local direction to accomplish assigned tasks. **ADCON**: administrative and logistics. **DS**: Support another force and to answer directly to the supported force's request for assistance. **GS**: Support given to the supported force as a whole and not any subdivision thereof. **GSR**: Arty mission, support the force as whole while providing reinforcing fires for another arty unit. **Attached**: Temporary placement of units or personnel in an organization. **Mutual Support and Close Support**
LNOs: **REPs:** **Augments:**	**Liaisons:** represent the sending unit's capabilities, plans, and concerns. He must be able to understand how his commander thinks, and convey his commander's intent, mission, concept of operations, and concerns. LNOs should have the requisite rank, authority, clearances and communication connectivity to function properly. LNOs should have the depth in personnel to conduct sustained operations. **REPs:** Work for the sending unit and provide short term, as required input into the planning process. They are expected to be the SME for the function they represent. **Augments:** Work for the receiving commander or staff and usually fill an MOS/TE shortfall requirement for the gaining unit.

Fire Support	**FSCL**: Established by the land or amphibious commander to coordinate fires of air, ground, or sea weapons systems. Must be coordinated with appropriate air commander (keep in mind the ATO cycle its impact to rapidly change FSCLs). Supporting elements may fire beyond without coordination but should inform appropriate ground commander. Coordination required behind the line. **CFL**: A line beyond which conventional fire support means may fire at any time without additional coordination. **RFL**: Established between two converging forces, established by the next higher common commander. **RFA**: Fires that exceed imposed restrictions may not be delivered without approval.
Days: **Hours:**	**C-day**: deployment to commence; **D-day**: commencement of hostilities; **R-day**: redeployment; **S-day**: 200,000 selected reserve to active duty for 90 days; **T-day**: National Emergency 1,000,000 reserve call up for 24 months; **W-day**: hostile government may commence operations. **Hours: H**: commencement of operation on D-day; **L**: hour at which deployment commences on C-day. (ref: JP1-02, under Time)
DEFCON 1-5:	**DEFCON 5** being normal while **DEFCON 1** being maximum readiness of military forces.
Collaborative Planning Systems:	**GCCS:** Global Command and Control System. **JDISS:** Joint Deployable Intelligence System (fed by GCCS requires SIPRNET). **JMCIS/UB:** Joint Maritime Command Information System/Unified Build. **IAS:** Intelligence Analysis System. **TCO:** Tactical Combat Operations. **C2PC:** Command and Control Personal Computer. **CTAPS:** Contingency Theatre Automated Planning System. **TBMCS:** Theater Battle Management Core Systems (Replacing CTAPS). **AFTADS:** Advanced Field Artillery Tactical Systems. **TMS:** Target Management System. **JOTS:** Joint Operational Tactical System. **JOTS 1 (TDBM):** Track Database Manager. **COP:** Common Operating Picture (CINC). **CTP:** Common Tactical Picture (Component and Below). **DII COE:** Defense Information Infrastructure Common Operating Environment.
Classes of Supply:	**I** Rations, **II** Individual Equipment, **III** POL, **IV** Construction, **V** Ammunition, **VI** Sundry Items, **VII** Major End Items, **VIII** Medical/Dental, **IX** Repair parts, **X** Materials for Non-Military Programs.
Weapons Systems:	**MIAI**: 300 miles (505 gal: 300 miles), weight 70 tons, range 120mm--3,000m, 14 per company; **T-72**: max range 2000m; **M2 BFV**: 300 miles (175 gal) 25mm chain gun 14 per company; **TOW**: 3750, **Hellfire**: 7000; **Longbow** 20K; **Javelin**: 2,000; **60mm Mortar** 3,500; **81mm Mortar** 5,800; **105mm Arty** 14,000; **155mm Arty** 18,000 Rap 30,000; **MLRS** 32K –100K(ATACMS);**Stinger missile**: 15000m; **Patriot**: 160 km; **Hawk**: 80 km; **JSTARS:** approx. 200miles by 200miles coverage. **TLAM:** 1,000 lb warhead; **JDAM:** Joint Direct Attack Munitions – Satellite Guided.
Armor Division	Total Vehicles 5,314. If the Div moves without DISCOM it requires 662 Km on one route. With DISCOM 729 km. (Ref CGSC ST 100-3).
Armored Cavalry Regt	**2d ACR -- Light UH-60:** 10; **OH-58**: 33; **HMMWV TOWS:** 108; **HMMWV SCOUT:** 180; **155mm Towed:** 24; **120mm Mortar:** 18; **3rd ACR – Heavy M1A1:** 123; **CFV M3:** 125; **CEV:** 3; **Javelin:** 24; **Mortar 120mm:** 18; **OH-58:** 24; **AH64:** 16; **EH60:** 3; **UH60: 18**; **Avenger:** 6; **Stinger:** 10; **155mm SP:** 24
USMC Tank Battalion	**Bn: M1A1:** 58 (66-72 tons). Co 14 x 4 (12 M88AI Rs & 6 AVLBs, 4 M60A1 Bridge Armored vehicle). 5-Tons: 38; TOW HMMWV: 26
LAR Bn	**LAV 25:** 60; **LAVC2**: 8; **LAV-AT:** 16**; LAV-M**: 8; **LAV-L:** 16; **LAV-R:** 6; TOTAL 114. **5-Ton**: 13; **LVS:** 3**; Wrecker:** 2**; HMMWV**: 24 **LAR CO: LAV 25:** 14; **LAV-M:** 2; **LAV-T:** 4; **LAVC2:** 1; **LAV-R:** 1; **LAV-L:** 3 CO 25 x 4 Weight 28,000lbs empty; CH53E carries 30,000lbs 50 miles.
AAV Bn	**AAVP7s:** 213, **AAVC7s:** 14; **AAVR7s:** 6. **Bn** = 4 AAV Cos. **CO**: 44Ps; 3Cs; 1R. CO D in 29 Palms. Combat Assault Bn in Okinawa has 1 AAV CO
Air Defense	**Patriot**: 160 km**. Patriot Radar** Alt 80K**, Acquisition Range** 160K**. Engagement Range** 60K**.** Should be employed no more than 20K from unit. Mutual Support 15K. BN: 5 Btry; 8 Launchers per Btry; 32 Missiles per Btry. **AVENGER** Acquisition Range 10K; Engagement Range 5K. Mutual Support Distance 3K. 8 Missiles per vehicle. **Stinger Missile**: 15000m. **Hawk**: 80 km.
Intelligence Collection Platforms	**Rivet Joint:** Communications Intelligence and Electronic Intelligence. **Quickfix: EH 60 –** Tactical Communication Intelligence and Electronic Intelligence; DF and Electronic attack in low frequency spectrums. **Compass Call: Jammer. Commando Solo: C-130 –** Psychological operations and broadcaster.
Tactical Ballistic Missiles	**SCUD B:** Range:300K, Payload:2,200lbs, CEP: 400 to 1000m, Warhead: Conv/Chem. **SCUD C:** Range:500K, Payload:1,500 lbs, CEP: 400 to 1000m, Warhead: Conv/Chem. **Nodong 1:** Range:1000K, Payload:2,200lbs, Warhead: Conv/Chem. **Nodong 2:** Range:1500 - 2000K, Payload:2,200lbs, Warhead: Conv/Chem. **M18:** Range:1000K, Payload:880lbs. **M9:** Range: 600K, Payload:1100lbs, CEP: 300m, Warhead: Conv. **CSS-2/DF-3**: Range:3000K, Payload:3000lbs, CEP: 1000m, Warhead: Conv/Nuc. **Jericho 1 (**Israel**):** Range:500K, Payload:1,100lbs, Warhead: Conv/Chem. **Frog 7:** Range:70K, Payload:960lbs, CEP: 400m, Warhead: Conv/Chem. **Sakr-80** (Egypt)**:** Range:80K, Payload:440lbs, Warhead: Conv. **Vector** (Egypt)**:** Range: 600K, Payload:1000lbs, Warhead: Conv. **BGM – 109 TOMAHAWK:** Range:1300K, Payload:1000lbs, CEP: 10m, Warhead: Conv/Nuc. (Ref CGSC ST 100-3).
Attack Helicopters	**AH1:** Missiles: 8/ 20mm, Range: 480k; **AH64:** Missiles: 16/30mm, Range: 480k—aux tanks 800k; **OH58:** Missiles: 4/.50cal, Range:413k. (Ref CGSC ST 100-3).
Utility Helicopter	**UH60:** Troop: 13 (20 without seats), Range: 592K, Internal:2,600lbs, External: 8000lbs. **CH47:** Troop: 33 (100 without seats), Range: 717K, Internal:20,200lbs, External: 30,000lbs. **CH53E:** Troop: 35 (55 with center seats), Range: 620m, refueling – Indefinite, Internal:31,000lbs, External: 33,000lbs. **CH53D:** Troop: 35 (55 with center seats), Range: 690m, takeoff weight: 19,000lbs. **CH46:** Troop: 14 (24 combat), Range: 190K, Internal:2,600lbs, External: 8000lbs. **UH1:** Troop: 9, Range: 200K, Internal:1,500lbs. (Ref CGSC ST 100-3).
Functions of Marine Aviation	**Offensive Air Support** (CAS & DAS)**; Antiair Warfare** (Offensive AAW and Air Defense**); Assault Support; Air Reconnaissance; Electronic Warfare; Control of Aircraft and Missiles**

A-4. Combat Service Support Considerations in Intelligence Preparation of the Battlespace

a. Terrain Implications

Can the terrain support CSS operations?

- Are host nation (HN) assets available for logistics operations?
- Any existing structures/built-up areas present?
- Any usable medical facilities
- Is there any overhead storage/work areas?

What are the ground avenues of approach (AA) that could interfere with CSS operations? Offensive operations could produce by-passed or stay behind enemy elements that must be recognized and averted by CSS assets to be able to maintain continuous support.

Where are the infiltration lanes that could be used by the enemy?

- Identify and locate the routes the enemy could use to move insurgents, light infantry, and/or unconventional warfare units into the CSS AOR.
- Is there any area in the CSS AOR that could provide concealed positioned to these enemy units

Identify possible AAs, LZs, DZs, and MSR ambush locations in the CSS AO.

b. Weather Implications

What will be the effect on the entire road network (hard surfaced and unimproved road surfaces) as a result of different types of precipitation (rain, snow, fog/mist, ice) and temperature?

- Will a rain soaked unimproved dirt road support the weight of fuel
- LVSs or 5K tankers? How about a HET loaded with a M1A1 weighing 135 tons?
- How will an iced over hard surface MSR effect LOGPAC operations?
- Will an unplowed, snowed over MSR affect CSS travel time?

Will the temperature have any effect on—

- Friendly forces CL II (Clothing)
- Classes of supply
- Storage of CL I and VIII
- Consumption of CL III (Bulk & Packaged) or IX (filters, tire chains, batteries, starters)?
- Production of potable water (frozen pipes, iced over ponds, creeks, etc)?

How would poor visibility/illumination affect—

- Enemy infiltration.
- Force protection.
- Driving/resupply activities (slower convoy speeds, accidents).

c. Other Implications

Security—

- Does the area offer adequate cover/concealment?
- Do we have observation/overwatch positions along possible AAs/LZs?
- Can we disperse our assets to reduce possible collateral damage?
- Can we minimize our unit's signature

General—

- Does the area afford good communications?
- Is the road network adequate and trafficable? Can the terrain support movement within the AO for the vehicles that will occupy it?
- Is the AO in proximity to the MSR, not on the MSR but near it? By doing so it reduces unit signature and might take the unit off an AA.
- Potable water/raw water source location (available, frozen over).
- Access to MEDEVAC LZ?
- Existing bridges capable of handling fully loaded LVSs, 5K tankers and HETS evacuating M1s?
- What is the height clearance for overhead bridges?
- Any water/rail capability.

d. Considerations in Developing the Modified Combined Obstacle Overlay

- Does the terrain offer an area suitable for logistics operations?
- Is it away from possible AAs and mobility corridors?
- Is this area close to a useable road network?
- Does the MSR travel through primary or secondary engagement areas?
- Are there any obstacles that could restrict/divert CSS operations such as bridge restrictions, choke points, road surface/trafficability concerns?

A-5. Combat Service Support Considerations in the Mission Analysis

The questions logistics planners and operators should always be able to answer are—

- Where are we on the battlefield?
- Why are we here?
- How do we support from here?
- How do we get support from here?
- How long do we need to provide support for?
- When, to where, and in what sequence do we displace to ensure continuous operations?

The following is a type of methodology for logistics planners at all levels. It is based on a requirement, capability, shortfall, analysis, and solution model. This methodology can be used in logistics course of action (COA) development when the unit is developing its concept of support. This process is meant to complement the Marine Corps Planning Process.

a. Requirements

- What method is used to determine logistics requirements? [For example, personnel density, equipment density, planning factors, operating tempo, combination, etc.]
- What is the source of the requirements determination calculations? [For example, Marine Corps Orders, casualty estimator historical data, etc.]
- What units are you supporting for this mission? Will it change during the operation?
- Identify implied logistics tasks based on the tactical plan. What are the ramifications of river crossings, pauses, deep attacks, etc.?
- Is there an NBC threat?
- What do you need?
- How long will you need it?
- Where do you need it?
- What do you need to put it there? (For example, fuel bladders/bags, materiel handling equipment, etc.)
- How will you get it there?
- When do you need it there?
- How long will it take to get it there?
- How soon will it be available to move there?
- Where is it coming from?
- What do you need to do with it before moving it where you need it? (For example, does it have to be containerized, broken down, segregated, separated, disassembled, configured, or reconfigured before movement?)
  - How long will that take?
  - What are the requirements for that?
- Does it have to move again after it gets there? Who will move it from there?
- What are the competing demands for this requirement?
- What is required to offload it when it gets there?
- Does anything need to be done with it once it gets there? (For example, does it have to be unpacked, assembled, etc.?)
- What has to be done to move it once it is there?
- Does this requirement have special employment considerations? (For example, require a large, level area of land or a fresh water source; be located near an MSR; need refrigeration; require dedicated transportation; etc.)
- How often will the commodity, supply, or service be required? How often must it be replenished?
- Does the requirement have preparatory activities? [For example, engineers to make berms for a fuel bags, airfield matting for forward arming and refueling points (FARPs), road and pad construction for a CSSA]

  - What is the expected duration of the required preparation?
  - How do you request the preparation and who approves it? (For example, engineer work has to be approved through channels.)
  - What support is required for the preparatory activities?

b. Capabilities

- What are the units available that have the capability to fulfill the requirement?
- Is more than one unit required to provide the capability?
- What are the overall receipt, storage, and issue requirements for my area of support for this particular commodity, supply, or service?
- Will this capability be used to weight the battle logistically?

- What is the total short ton (STON)/gallon/other distribution capability by mode? Line haul? Local haul? Other? What distribution planning factors were used?
- How many locations require this capability?
- Are any units with this capability already committed?
- Are any units with this capability due in? When?
- Can a unit deploy elements (sections or detachments) to place the capability where it is required?
- Does the unit have unique management/employment considerations?

c. Comparison/Shortfall

- If there is no shortfall, go to the *analysis* portion of this methodology.
- Which requirements exceed capabilities?
- For requirements that exceed capabilities, is it overall or in a particular area, region, or time?
- How much is the shortfall in terms of units of measurement (STONs, gallons, square feet)?
- What does the shortfall equate to in terms of days of supply?
- At what point in the battle is the requirement expected to exceed the capability?
- What is the type of shortfall? Is it a supply availability shortfall, a resource [equipment, materials handling equipment (MHE), personnel, facilities, man-hours, etc.] shortfall, or a distribution shortfall?

d. Analysis

The analysis process has to occur for all support operations even if there is no shortfall. The logistic planner has to determine how to support the operation.

- What is the earliest the support operation can begin?
- What is the latest the support operation can begin?
- Is it better to be early or late?
- What is the purpose of the support? (For example, is the purpose to build stocks at GS, to sustain a force for a given period of time at DS, or to resupply a user?)
- Will support be provided from a fixed location or from a forward logistics detachment?
- What is the significance of the shortfall?
- What is the potential impact of the shortfall?
- What is the expected duration of the shortfall?
- What is the cause of the shortfall (battle loss, time-phased force deployment sequence, etc.)?
- If the shortfall is a *supply availability* shortfall, consider the following:

    - Is the shortfall only at this level or is at higher levels as well?
    - Is it a result of higher commands' efforts and support priorities?
    - Is the supply available at other echelons and, if so, where?
    - How long will it take to get here?
    - Is there an acceptable alternative, a substitute, or an alternative source of supply?

- If the shortfall is a *resource shortfall* (equipment, MHE, personnel, facilities, man-hours, etc.), consider the following:
    - Can similar resources be diverted or obtained from somewhere else?
    - Is HNS a viable alternative?
    - How specialized is the shortfall resource?

- Can a secondary military occupational specialty (MOS) be used?
- Does a sister service or coalition partner have the capability?

- If the shortfall is a *distribution shortfall*, consider the following:

  - Is the shortfall due to a lack of assets or to a time-distance problem?
  - Does the shortfall capability require special handling or any special distribution requirements?
  - Are there any alternative distribution modes?
  - Are host nation distribution assets available?
  - Are sister service/coalition assets available? Are they compatible? (For example, European and SWA host nation fuel tankers are metric and require a coupler adapter to interface fuel bags or US tankers.)
  - Are there any airfields, field landing strips, or helipads near the requirement?

- How will logistics capability be echeloned forward? Which units will be tasked to establish forward logistics bases?

e. Solutions

- Determine the most workable solutions based on analysis.
- Ensure support plan is fully integrated into concept of operations.

A-6. Combat Service Support Considerations in Course of Action Development

Focus on logistical factors that constrain the tactical operations—

- Key is to identify and eliminate any COA that is not supportable.
- Identify limitations that planners must be concerned with
- (CL IV availability for barrier plans or CL V CSR Vs RSR)
- Identify the cost or risk in terms of resources for each COA
- Update logistics, personnel, and casualty estimates as additional information becomes available
- Key questions for the CSS planners are:
- Will CSS support be required to relocate during the operation?
- Are the line haul or local haul distance factors exceeded?

Specific items to focus on for COA development—

- CSSA, BSA locations
- MSR plan for resupply of the units
- Barrier plan and its effect on resupply; location of the CL IV point
- Will the CSSA need to move to support the COA
- Are any Mobile Detachments required

A-7. Combat Service Support Considerations in Course of Action Wargaming

Focus on ensuring critical CSS items are included on the synchronization matrix—

- Update logistics, personnel, and casualty estimates as additional information is obtained.
- The war game will validate, change, or invalidate parts of or the entire logistics, personnel, and casualty estimate.
- The logistics estimate is validated and completed as part of the COA war game process.
- Estimates applied during wargaming help to ensure COAs are supportable and feasible.
- Wargaming helps CSS planners synchronize tactical logistics functions to support a tactical operation.
- It determines the timeframe support must be provided to enable the combat forces to accomplish their mission.
- During the war game, the CSS planner can prepare the logistics portion by function of the synchronization matrix. This ensures all critical CSS actions are addressed.
- Wargaming helps determine specific events that are critical before the battle and provides estimates of peak consumption, times and distances supply convoys must travel, battle losses and casualties.
- Wargaming also helps to deconflict terrain.
- Determine adjustments to consumption factors based on war game results.

A-8. Combat Service Support Considerations in Course of Action Comparison and Decision

Develop meaningful and descriptive criteria for comparing COAs—

- Which COA has higher/lower casualty estimates and subsequent need for replacements?
- Which COA has higher/lower consumption rates of CL V?
- Which COA has higher/lower consumption rates of CL III (Bulk)?
- Which COA has higher/lower battle damage estimates requiring increased recovery and evaluation of combat/CS/CSS systems?
- Which COA has longer LOCs requiring possibly more transportation assets?
- Which COA has increased sustainment requirements (CL IV, Combat Health Spt)
- Which COA presents higher degree of risk in the potential loss or destruction of CSS assets and resources?

When determining decision criteria, CSS planners must—

- Provide the commander information to properly weigh all issues before making a decision.
- Ensure the commander fully understands the costs and risks that exist in a COA.

A-9. Comparison of Marine Corps Planning Process to Other Planning Processes

Marine Corps Planning Process	MDMP	Joint Task Force	JOPES Crisis Action Planning	NATO
MISSION ANALYSIS	RECEIPT OF MISSION	MISSION ANALYSIS	SITUATION DEVELOPMENT	INITIATION
	MISSION ANALYSIS	PLANNING GUIDANCE	CRISIS ASSESSMENT	ORIENTATION
COA DEVELOPMENT	COA DEVELOPMENT	COA DEVELOPMENT	COA DEVELOPMENT	CONCEPT DEVELOPMENT
COA WAR GAME	COA ANALYSIS	COA ANALYSIS		
COA COMPARISON AND DECISION	COA COMPARISON	COA COMPARISON	COA SELECTION	PLAN DEVELOPMENT
	COA APPROVAL	COA SELECTION		
ORDERS DEVELOPMENT	ORDERS PRODUCTION		EXECUTION PLANNING	
TRANSITION		EXECUTION		PLAN REVIEW

Note: Like steps of each planning process are shaded in the same manner.

Figure A-1. Comparison of the Marine Corps Planning Process to other planning processes.

A-10. Frequency Bands

Abbreviation	Band	Frequency Range
ELF	Extremely Low Frequency	Below 3 KHz
VLF	Very Low Frequency	3 KHz – 30 KHz
LF	Low Frequency	30 KHz – 300 KHz
MF	Medium Frequency	300 KHz – 3 MHz
HF	High Frequency	3 MHz – 30 MHz
VHF	Very High Frequency	30 MHz – 300 MHz
UHF	Ultra High Frequency	300 MHz – 3 GHz
SHF	Super High Frequency	3 GHz – 30 GHz
EHF	Extremely High Frequency	Above 30 GHz

NOTES: KHz = Kilohertz = one thousand cycles per second
MHz = Megahertz = one million cycles per second
GHz = Gigahertz = one billion cycles per second

Table A-1. Frequency bands.

A-11. Customary/Metric Conversion Factors

Linear Measure		
English System		**Metric System**
1 inch	=	2.54 centimeters
1 foot	=	0.3048 meters
1 yard	=	0.9144 meters
1 mile	=	1.6093 kilometers
0.3937 inch	=	1 centimeter
1.0936 yards	=	1 meter
0.6137 miles	=	1 kilometer
Liquid Measure		
English System		**Metric System**
1 fluid ounce	=	29.573 milliliters
1 quart	=	0.94635 liters
1 gallon	=	3.7854 liters
0.033814 fluid ounce	=	1 milliliter
0.26417 gallon	=	1 liter
Weight Measure		
English System		**Metric System**
1 troy pound	=	0.37324 kilograms
1 avoirdupois pound	=	0.45359 kilograms
1 short ton (0.8929 long tom)	=	907.18 kilograms 0.90718 metric ton
1 long ton (1.1200 short tons)	=	1016.0 kilograms 1.0160 metric tons
2.2046 avoirdupois pounds	=	1 kilogram
1.1023 short tons 0.98421 long tons	=	1 metric ton
Square Measure		
English System		**Metric System**
1 square foot	=	9.2903 square decimeters
1 square yard	=	0.83613 square meter
1 square mile	=	2.5900 square kilometers
1.1960 square yards	=	1 square meter
0.38608 square miles	=	1 square kilometer
Cubic Measure		
English System		**Metric System**
1 cubic foot	=	0.28317 cubic meter
1 cubic yard	=	0.76455 cubic meter
1 cubic mile	=	4.16818 cubic kilometers
1.3079 cubic yards 35.315 cubic feet	=	1 cubic meter
0.23990 cubic mile	=	1 cubic kilometer

Table A-2. Conversion factors.

Appendix B

Abbreviations

B-1. National Distinguishing Letters

The following letters are used in unit titles wherever it is necessary to identify a NATO nation (e.g., 1 (UK) Armd Div):

- BE Belgium
- CA Canada [1]
- DA Denmark
- FR France
- GE Germany
- GR Greece
- IC Iceland
- IT Italy
- LU Luxembourg
- NL Netherlands
- NO Norway
- PO Portugal
- SP Spain
- TU Turkey
- UK United Kingdom
- US United States

Note: The national distinguishing letters for Canada are not used to identify Canadian Army units which have the words ‘Canada’ or ‘Canadian’ in their official title.

B-2. Abbreviations

AAAV	advanced amphibious assault vehicle
AAFS	amphibious assault fuel system
AAV	assault amphibious vehicle
AAW	antiair warfare
ABCCC	airborne battlefield command and control center
ABT	air breathing threat
ACE	aviation combat element; armored combat earthmover
ACP	Allied Communications Publication
ADA	air defense artillery
ADA TOC	air defense artillery tactical operations center
ADAM	area denial artillery munitions
ADCON	administrative control
ADCP	air defense command post

ADNS	automated digital network system
ADP	automated data processing
AFATDS	Advanced Field Artillery Tactical Data System
AIS	automated information system
AL	administrative loss
AM	amplitude modulation
ANDVT	advanced narrow band digital voice terminal
AO	area of operations
AOC	air operations center
AOI	area of interest
APOD	aerial port of debarkation
ASC(A)	assault support coordinator (airborne)
ASLT	air support liaison team
ASOC	air support operations center
ASUW	antisurface warfare
ASW	antisubmarine warfare
ATARS	advanced tactical airborne reconnaissance system
ATC	air traffic control
ATDL	Army tactical data link
ATF	amphibious task force
ATLASS	Asset Tracking Logistics and Supply System
ATM	asynchronous transfer mode
ATO	air tasking order
AUTODIN	Automatic Digital Network
AVLB	armored vehicle launched bridge
AWACS	airborne warning and control system
BDA	battle damage assessment
BDZ	base defense zone
BFV	Bradley fighting vehicle
BPSK	binary phase shift key
BVR	beyond visual range
C2W	command and control warfare
CAP	combat air patrol
CAS	close air support
CBAE	commander's battlespace area evaluation
CBIRF	Chemical/Biological Incident Response Force
CCIR	commander's critical information requirements
CEC	cooperative engagement capability
CEOI	communications-electronics operating instructions
CFV	cavalry fighting vehicle
CGS	common ground station
CI	counterintelligence
CID	combat identification
CIWS	close in weapons system
CJCSI	Chairman of the Joint Chiefs of Staff Instruction
CJCSM	Chairman of the Joint Chiefs of Staff Manual
CMS	communications security material system
COA	course of action
COC	combat operations center

COCOM	combatant command
COE	common operating environment
COG	center of gravity
COP	common operational picture
COTS	commercial off the shelf
CPOG	chemical protective overgarment
CPU	central processing unit
CRC	control and reporting center
CRE	control and reporting element
CSNP	causeway section nonpowered
CSP	causeway section powered
CSSE	combat service support element
CTAPS	contingency theater automated planning system
CTT	commander's tactical terminal
CV	critical vulnerability
CWAR	continuous wave acquisition radar
DACT	data automated communications terminal
DAMA	demand assigned multiple access
DASC	direct air support center
DASC(A)	direct air support center (airborne)
DEERS	Defense Eligibility Enrollment Reporting System
DII	defense information infrastructure
DIRLAUTH	direct liaison authorized
DISA	Defense Information Systems Agency
DISN	Defense Information Systems Network
DMS	Defense Message System
DNS	Domain Name System
DNVT	digital nonsecure voice terminal
DOCC	deep operations coordination cell
DOW	died of wounds
DP	decision point
DSCS	Defense Satellite Communications System
DSN	Defense Switched Network
DSVT	digital subscriber voice terminal
DTC	digital technical control
DWTS	Digital Wideband Transmission System
EAF	expeditionary airfield
EEFI	essential elements of friendly information
EFST	essential fire support task
EMCON	emission control
EPLRS	enhanced position location reporting system
EPW	enemy prisoners of war
EW/C	early warning/control
FAC(A)	forward air controller (airborne)
FACP	forward air control post
FARP	forward arming and refueling point
FASCAM	family of scatterable mines
FFCC	force fires coordination center

FFIR	friendly force information requirement
FH	frequency hopping
FIE	fly in echelon
FIST	fire support team
FIWC	Fleet Information Warfare Center
FLIR	forward looking infrared
FLTSAT	fleet satellite
FLTSATCOM	fleet satellite communications
FM	frequency modulation
FMC	full mission capable
FO	forward observer
FSCC	fire support coordination center
FSCL	fire support coordination line
FSE	fire support element
FSK	Frequency shift key
FSSG	force service support group
GBAD	ground based air defense
GBDL	ground based data link
GBS	Global Broadcast System
GCCS	Global Command and Control System
GCE	ground combat element
GCI	ground controlled intercept
GCSS	Global Combat Support System
GENSER	general service (message)
GMF	ground mobile forces
GOTS	government off the shelf
GPS	global positioning system
GTN	Global Transportation Network
HEMTT	heavy expanded mobile tactical truck
HERS	helicopter expeditionary refueling system
HPT	high payoff target
HST	helicopter support team
HVT	high value target
IAS	Intelligence Analysis System
IFF	identification friend or foe
IFSAS	interim fire support automated system
INMARSAT	International maritime satellite
IO	information operations
IOS	Intelligence Operations System
IP	internet protocol
IW	information warfare
JANAP	Joint Army, Navy, Air Force publication
JCATS	Joint Conflict and Tactical Simulation
JCCC	joint communications control center
JCS	Joint chiefs of staff
JCSE	Joint Communications Support Element
JDISS	Joint Deployable Intelligence Support System

JIC	Joint Intelligence Center
JMCIS	Joint Maritime Command Information System
JOPES	Joint Operation Planning and Execution System
JSTARS	Joint Surveillance Target Attack Radar System
JTF	joint task force
JTIDS	Joint Tactical Information Distribution System
JWICS	Joint Worldwide Intelligence Communications System
KIA	killed in action
LAAD	low altitude air defense
LCAC	landing craft air cushioned
LCC	amphibious command ship
LCM	landing craft, mechanized
LCU	landing craft, utility
LHA	general purpose amphibious assault ship
LOS	line-of-sight
LPD	amphibious transport dock
LPH	amphibious assault ship
LSD	landing ship dock
LST	landing ship, tank
LVS	logistics vehicle system
MACCS	Marine air command and control system
MACG	Marine air control group
MAFC	MAGTF all-source fusion center
MAGTF	Marine air-ground task force
MANPAD	man-portable air defense
MARFORLANT	Marine Corps Forces, Atlantic
MARFORPAC	Marine Corps Forces, Pacific
MATCD	Marine air traffic control detachment
MCPP	Marine Corps planning process
MDMP	military decision making process
MEF	Marine expeditionary force
MEWSS	mobile electronic warfare support system
MIAG	modular integrated avionics group
MLG	Marine Liaison Group
MMT	Marine air traffic control mobile team
MOE	measures of effectiveness
MOOTW	military operations other than war
MOPP	mission-oriented protective posture
MOS	military occupational specialty
MOU	memorandum of understanding
MP	military police
MPF	maritime pre-positioning force
MPF(E)	maritime pre-positioning force (enhanced)
MPS	maritime prepositioning ships
MPSRON	maritime pre-positioning squadron
MRAC	Marine rear area coordinator
MRACOM	Marine rear area commander
MRC	mobile radio communications

MSC	major subordinate command
MSCS	multiple source correlation system
MSE	mobile subscriber equipment
MSR	main supply route
MTACCS	Marine tactical command and control sections
MTBF	mean time before failure
MTWS	MAGTF Tactical Warfare Simulation
MWCS	Marine wing communications squadron
MWSG	Marine wing support group
MWSS	Marine wing support squadron
NAI	named area of interest
NAVMACS	Naval Modular Automated Communications
NBI	non-battle injury
NCC	naval component commander
NEA	northeast Asia
NEMSS	naval expeditionary medical support system
NIIRS	National imagery interpretation ratings scale
NIPRNET	Unclassified but Sensitive Internet Protocol Router Network
NOC	network operations center
NSSMS	NATO Sea Sparrow Missile System
OIR	other information requirements
OPCON	operational control
OPSEC	operations security
OPT	operational planning team
OSCC	operational systems control center
OTH	over the horizon
PCS	portable control station
PEI	principle end item
PGM	precision guided munitions
PIR	priority information requirement
PLA	plain language address
PLAD	plain language address directory
PLGR	precise lightweight GPS receiver
PLRS	Position Location Reporting System
PMD	pounds per man per day
POTS	plain old telephone system
PPDL	point to point data link
PSK	phase shift key
PTM	personnel transport module
RAAMS	remote anti-armor mines system
RCS	radar cross section
RFI	request for information
ROC	rehearsal of concept
ROWPU	reverse osmosis water purification unit
RRDF	roll-on/roll-off discharge facility
RRS	remote receive station
RRT	radio relay team

RT	receiver-transmitter
RTD	returned to duty
SAAWC	sector anti-air warfare facility
SAR	search and rescue
SAR/FTI	synthetic aperture radar/fixed target indicator
SATCOM	satellite communications
SCI	sensitive compartmented information
SCR	single channel radio
SIDS	secondary imagery dissemination system
SINCGARS	single-channel ground and airborne radio system
SIPRNET	SECRET Internet Protocol Router Network
SLCP	ship's loading characteristics pamphlet
SLRP	survey, liaison, and reconnaissance party
SLWT	side loadable warping tug
SMART-T	Secure Mobile Anti-Jam Reliable Tactical Terminal
SPIRIT	special purpose integrated remote intelligence terminal
SPOD	seaport of debarkation
SSM	surface to surface missile
SWA	southwest Asia
SYSCON	systems control
T/E	table of equipment
T/O	table of organization
TAC(A)	tactical air coordinator (airborne)
TACC	tactical air command center
TACON	tactical control
TACP	tactical air control party
TADC	tactical air direction center
TADIL	tactical digital information link
TAFDS	tactical airfield fuel dispense system
TAI	target area of interest
TAOC	tactical air operations center
TARGET	Theater Analysis and Replanning Graphical Execution Toolkit
TASS	tactical automated switching system
TBM	theater ballistic missile
TBMCS	theater battle corps management system
TCO	tactical combat operations
TCP	tactical control party
TEG	tactical exploitation group
TERPES	Tactical Electronic Reconnaissance Processing and Evaluation System
TTY	teletype
UAV	unmanned aerial vehicle
ULCS	unit-level circuit switch
URL	uniform resource locator
VLS	vertical launch system
WAS/MTI	wide area surveillance/moving target indicator
WIA	wounded in action

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Appendix C

Operations Orders Formats (Pull-Out Pages)

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OPERATION PLAN/ORDER FORMAT

CLASSIFICATION. As appropriate, centered at page top and bottom.

CLASSIFICATION
(No change from oral orders)

HEADING

Changes from Oral Orders. Used when oral orders regarding this operation previously issued. Enclosed in parentheses. Example: "(No change from oral orders except paragraphs 3b and 3f.)" Omitted in plans. Omitted in orders when no oral orders issued.

Title. Numbered consecutively for a calendar year. Two or more issued on same day are given consecutive numbers. Joint operation plan or order is so designated. Code name if any, as shown.

References. Documents (maps, charts, photomaps, SOPs, etc.) necessary for understanding must be available to recipients. Entry always included (use "References: None" when applicable). Map entries include series number, country, sheet names or numbers, edition, and scale.

Copy no.__ of __ copies
I MEF
GREENTOWN, BLUELAND
17 Apr 2001
ABD-1

OPERATION ORDER 0002-01 (OPERATION SHARP SWORD) (U)
BASIC ORDER (U)

(U) REFERENCES:

(a) Maps and Charts: Series ONC, sheet G-2 (ORANGELAND, BLUELAND), edition 12

(b) USCINCPAC Planning Directive, 27 March 2001

(U) TIME ZONE: Zulu

(U) TASK ORGANIZATION. Annex A

1. (U) Situation

a. (U) General. With the failure of deterrence, Blueland forces crossed the Orangeland border and have been successful in their initial battles.

b. (U) Battlespace. See Appendix 18 to Annex C.

c. (U) Enemy Forces. See Annex B and current INTSUMs.

d. (U) Friendly Forces.

2. (U) Mission. On order, I MEF, as the main effort, conducts offensive operations to defeat enemy forces in zone in order to restore the Blueland border. Be prepared to continue offensive operations into Orangeland to destroy remaining Orangeland offensive military capabilities.

3. (U) Execution

a. (U) Commander's Intent

b. (U) Concept of Operations. This operation will be conducted in three phases.

c. (U) Tasks

(1) (U) 1st Marine Division (REIN)

(2) (U) 3d Marine Division (-) (REIN)

(3) (U) 3d Marine Aircraft Wing

(4) (U) 1st Force Service Support Group (-) (REIN)

(5) (U) Special Purpose MAGTF-B

(6) (U) Rear Area Commander

d. (U) MEF Reserve

e. (U) Commander's Critical Information Requirements

f. (U) Coordinating Instructions

4. (U) Administration and Logistics

5. (U) Command and Signal

a. (U) Command Relationships. See Annex J (COMMAND RELATIONSHIPS).

b. (U) Command Posts and Headquarters

c. (U) Succession to Command

d. (U) Signal. See Annex K (COMMAND, CONTROL, AND COMMUNICATIONS SYSTEMS)

ACKNOWLEDGE RECEIPT

GERALD C. THOMAS
Lieutenant General, USMC
Commanding

Annexes:

A - Task Organization
B - Intelligence
C - Operations
D - Logistics
E - Personnel
F - Public Affairs
G - Civil Affairs
H - Meteorological and Oceanographic Operations
J - Command Relationships
K - Command, Control, and Communications Systems
L - Environmental Considerations
M - Geospatial Information and Services
N - Space Operations
P - Host Nation Support
Q - Medical Services
S - Special Technical Operations
U - Information Management
W Aviation Operations
X - Execution Checklist
Z - Distribution

OFFICIAL:
s/
M.B. TWINING
Colonel, USMC
AC/S G-3

CLASSIFICATION

BODY

Time Zone. If same for the place of issue and execution, and will be same throughout execution, entry may be omitted. If time zone is different in area of execution (frequently occurs in amphibious or air-transported operations), state when indicated time zone becomes effective.

Task Organization. May be shown in the following ways:
1. As an unnumbered entry before paragraph 1, Situation. Used when entire command of issuing headquarters is organized into task organizations for a particular operation, and task organizations are too complicated to be shown using other methods.
2. If there is no change to previous task organization, show "No

3. Under the proper subparagraph of paragraph 3; simplest, and therefore preferred, method in continuing ground combat situation. Show "No Change except paragraph 3b... "
4. As an annex when lengthy; e.g., division or higher. Used in amphibious operations (permits early dissemination and assists concurrent planning). Also used where planning precedes operation by a considerable period of time.
(In 1 and 4 above, the organization of the issuing headquarters, including service and administrative groupings which will perform normal functions, is the first entry. Following that, each task groupment which is to receive a tactical mission is shown in the sequence in which the missions are assigned in paragraph 3).

General. For plans only; describe the general politico-military environment which would establish the probable preconditions for execution of the plan.

Battlespace. The higher commander's AO and the command's areas of interest, influence, and operations described by physical area and forces of concern.

Enemy Forces. Enemy information vital to entire command or likely to affect accomplishment of mission is shown. May refer to intelligence annex, operation overlay (if enemy information shown), intelligence summaries, etc. Contains disposition, intent, objectives, vulnerabilities, COGs, and COAs.

Friendly Forces. Information on own forces having bearing on operation (higher, adjacent, and supporting). Artillery listed as first supporting unit and then others alphabetically. May reference annex or operation overlay.

Paragraph 4. Logistics and personnel information, and instructions for the operation. Usually refers to appropriate annexes.

Paragraph 5. Instructions to establish and maintain command and signal procedures.
1. Command Relationships. Used when a large operation, or relationships are unusual. Otherwise omitted.
2. Command Posts and Headquarters. May reference operations overlay for locations.
3. Succession to Command. Designates the succession of command for the operation.
4. Signal. Usually references Annex K and other communication publications such as SOP or CEOI. Includes instructions or restrictions about comm-elec such as radio restrictions or pyrotechnic signals.
5. Use additional subparagraphs to show location and time of opening comm centers, recognition and identification instructions, code words and names, and liaison.

Annexes. Appended to and form a portion of the completed plan/order. Pertain to particular concept, subject, or coordination aspect too voluminous, of insufficient general interest, or in irregular form (overlays, graphs, or tables) for body of plan/order. Contributes to brevity and clarity of parent document. The form for annexes is provided. Sequence and lettering must not be changed. Annexes may be omitted when not required. Annexes are designated by capital letter, amplified where necessary by appendices to annexes, tabs to appendices, and enclosures to tabs.

To satisfy JOPS format requirements, titles of paragraphs and subparagraphs must remain as shown in this example.

HEADING

Copy Number. Assigned by issuing headquarters to each copy. Log maintained of specific copies issued to addressees.

Official Designation of Command. Use code name if required for security.

Place of Issue. May be code name, postal designator, or geographic location (including map coordinates). Always capitalized.

Date/Time. Day, month, and year order is signed, issued, and becomes effective, unless specified otherwise in Coordinating Instructions paragraph.

Message Reference Number. Allows acknowledgement in the clear. Assigned by originator. Consists of letters, numbers, or combination. Has no connection with message center numbering system. Annexes issued separately are assigned different numbers.

BODY

Paragraph 2. Clear concise statement of tasks and purpose of the operation. State the who, what, when, where, why, and as much of the how as necessary. No subparagraphs. Always stated here even if shown on operation overlay or map.

Commander's Intent. Commander's personal statement of the purpose of the operation.

Concept of Operations. A summary statement of how the operation will be accomplished. Amplifies paragraph 2. May be shown graphically or published as an appendix to Annex C. Specific unit designations are not used.

Tasks to Subordinate Elements
1. Each unit, organic or attached, or tactical grouping that is executing a tactical task is assigned a separate numbered subparagraph. All tactical tasks must be listed in the body of basic orders.
2. List tasks for major subordinate elements as follows:
- Offensive order: Ground combat units (infantry first followed by artillery and combat support units numerically or alphabetically); aviation combat units or elements (aircraft units, combat support, combat service support); combat service support units or elements.
- Defensive order: Units or elements closest to the enemy are listed first. Ground and aviation combat units in the forward defense area are then listed in numerical order followed by other units alphabetically.

3. Each tactical task assignment may show first the assets (attached or in support) available to the unit or element for the operation. Then tasks are enumerated.
4. Priority must be stated if missions are multiple and priority of accomplishment is desired.
5. If all instructions to unit are shown on operations overlay, list unit after proper subparagraph number and reference Operation Overlay Appendix.

CCIRs. Identify information commander has deemed critical to maintaining his situational awareness, planning future activities, and assisting in timely and informed decisionmaking.

Coordinating Instructions. Final subparagraph in 3. Contains instructions common to two or more units, coordinating details and control measures applicable to the command as a whole, and time or conditions when plan is to be executed. Refers to annexes or references for coordinating details when appropriate. Communications instructions shown in paragraph 5 only.

ENDING

Acknowledgement Instructions. Included in every order and separately issued portions. Ensures that recipients receive and understand the order.

Signature. Original signed by the commander or chief of staff/executive officer.

1. Original signed by Commander.

Name
Rank, USMC
Commander

2. Original signed by chief of staff/executive officer

BY COMMAND OF COLONEL X

Name
Rank, USMC
Title

Authenticated by G/S-3 when commander's or executive officer's signature is on original only; G/S-3 authentication appears on all other copies.

Organization for Combat is a commander's visualization of how he will group organic and attached combat, combat support, and combat service support elements for employment with other supporting forces to support his scheme of maneuver, and the command relationships to most effectively control his organization. It is determined after consideration of the unit's mission, missions assigned to subordinate units, terrain and enemy strength in each subordinate unit area, and the amount of combat power, including maneuver and fire support units, available to the unit commander. The organization for combat and the scheme of maneuver are developed concurrently.
The task organization graphically portrays the command relationships and the assignment of means for the accomplishment of the mission. The G/S-3 prepares the task organization after considering the recommendation of appropriate unit commanders. Its purpose is to establish groupings into which the command will be divided to accomplish its mission and to establish command relationships. These groupings may be shown, if simple, in paragraph 3 of the Basic Order. If complex, the task organization will be shown in a separate annex or just before paragraph 1 of the Basic Order.

BODY

The task organization is always Annex A. The capital letter designation is followed by the title of the Basic Order, and then by the annex title.

References. Documents (SOPs, etc) necessary for understanding, must be available to recipients. Entry always included (use "References: None" when applicable).

Time Zone. If same for the place of issue and execution, and will be same throughout execution, entry may be omitted. If time zone is different in area of execution (frequently occurs in amphibious or air-transported operations), entry must state when indicated time zone becomes effective.

Time attachment and detachment effective shown here and in subparagraph 3f (Coordinating Instructions) of Basic Order.

The first entry is the organization of the issuing headquarters (underlined). Unless indicated by BLT, etc., the normal unit designator should be used with (REIN) and/or (-) to indicated attachments and/or detachment.

Those units to which no specific tactical mission is to be assigned, and which are not assigned to any other tactical groupings are shown at the beginning of the task organization indented under the issuing headquarters.

Units attached to a task group are indented under task group heading.

The task organization can include major weapon systems. This information may be useful to other Services and nations.

Artillery units are similarly listed. Terms such as DS and GS, however, have additional meaning to these units. (See MCWP 3-16, Marine Artillery Support.

Common commander for reserve is listed opposite Reserve group heading.

Reserve variations:
1. If there is no common commander and units have separate missions:
MEF Reserve
1st Bn, 6th Mar — LtCol Jones
3d Bn, 25th Mar — LtCol Roberts
2. If a unit is going to be in reserve in some foreseeable time, it will be listed under the Reserve as well as being listed in its normal sequence.
3. If task organization of unit were to remain the same:
MEF Reserve
1st Bn, 6th Mar (Eff on relief) — LtCol Jones
4. If task organization of unit were to change:
MEF Reserve
1st Bn (REIN), 6th Mar (Eff on relief) — LtCol Jones
1st Plt, 2d Tank Bn
1st Plt, 2d LAR Bn

Acknowledgement Instructions. Included in every order and separately issued portions. Ensures that recipients receive and understand the order.

Signature. Original signed by the commander or chief of staff/executive officer.

1. Original signed by Commander.

Name
Rank, USMC
Commander

2. Original signed by chief of staff/executive officer

BY COMMAND OF COLONEL X

Name
Rank, USMC
Title

Authenticated by G/S-3 when commander's or executive officer's signature is on original only; G/S-3 authentication appears on all other copies.

GUIDE FOR TASK ORGANIZATION ANNEX

CLASSIFICATION

Copy no. __ of __ copies
I MEF
GREENTOWN, BLUELAND
17 Apr 2001
ABD-1

ANNEX A TO OPERATION ORDER 0002-01(OPERATION SHARP SWORD) (U)
TASK ORGANIZATION (U)

(U) REFERENCES: None

(U) TIME ZONE: Zulu

(All attachments effective 170001Z Apr 2001)

I Marine Expeditionary Force (MEF) — LtGen Thomas
HqSvc Bn, I MEF
9th Comm Bn (-), I MEF
1st Intel and EW Bn (-), I MEF

1st Marine Division (REIN) — MajGen Vandegrift
1st Marine Regiment
5th Marine Regiment
7th Marine Regiment
11th Marine Regiment (REIN)
1st Tank Battalion
4th Tank Battalion (-)
1st Light Armored Reconnaissance Battalion
4th Light Armored Reconnaissance Battalion (-)
1st Assault Amphibian Battalion (-)
4th Assault Amphibian Battalion
1st Combat Engineer Battalion (-)

3rd Marine Division (-) (REIN) — BGen Henderson
3d Marine Regiment
4th Marine Regiment
24th Marine Regiment
12th Marine Regiment (-)
3d Tank Battalion (-)
3d Light Armored Reconnaissance Battalion (-)
3d Assault Amphibian Battalion (-)
3d Combat Engineer Battalion (-)

3rd Marine Aircraft Wing — MajGen Geiger
MWHS 3
MAG 11
MALS 11
VMFA 232
VMFA 314
VMFA 323
VMGR 352
VMFA(AW) 121
VMFA(AW) 242
VMFA(AW) 225
MAG 12
MAG 13
MAG 16
MAG 39
MACG 38
MWSG 37

1st Force Service Support Group (-) (REIN) — BGen Pate
H&S Battalion (-)
1st Support Battalion (-)
1st Maintenance Battalion (-)
1st Medical Services Battalion (-)
1st Supply Battalion (-)
9th Engineer Support Battalion (-) (REIN)
3rd Naval Construction Regiment (OPCON)

MEF Reserve — TBD

ACKNOWLEDGE RECEIPT

BY COMMAND OF LIEUTENANT GENERAL THOMAS

EDWARD SNEDECKER
Brigadier General, USMC
Deputy Commander

OFFICIAL:
s/
M.B. TWINING
Colonel, USMC
AC/S G-3

CLASSIFICATION

HEADING

Copy Number. Assigned by issuing headquarters to each copy. Log maintained of specific copies issued to addressees.

Official Designation of Command. Use code name if required for security.

Place of Issue. May be code name, postal designator, or geographic location (including map coordinates). Always capitalized.

Date/Time. Day, month, and year order is signed, issued, and becomes effective, unless specified otherwise in Coordinating Instructions paragraph.

Message Reference Number. Allows acknowledgement in the clear. Assigned by originator. Consists of letters, numbers, or combination. Has no connection with message center numbering system. Annexes issued separately are assigned different numbers.

BODY

Indicate names of commanders of the parent organization and principal units included in paragraph 3 of the Basic Order.

Terms such as RLT, MEU, and MEF (Fwd) are task organizations. If no such term is used, a unit that has been task organized is indicated by the addition of (-) (Rein), as appropriate, to its normal unit designator, such as "1st Marine Division (-) (REIN)." The (-) indicates that a substantial part of an organic unit (or units) has been detached. The (Rein) indicates that a substantial part of a nonorganic unit (or units) has been attached.

Notice that units are depicted in different forms in this task organization:
1. In this particular task organization, the 7th Marine Regiment has no attachments or detachments; thus, it appears simply as "7th Marine Regiment."
2. Whenever a unit detaches any part of itself to another for attachment, a parenthetical minus is inserted after its title. In this example, 4th Light Armored Reconnaissance Bn has detached a platoon to the reserve, thus, the designation "4th Light Armored Reconnaissance Bn (-)."
3. Conversely, several units have been attached to 12th Marine Regiment; thus, it appears in the task organization as "12th Marine Regiment (REIN)." The parenthetical note is place immediately after the title of the specific unit receiving reinforcement. Whenever an organization attaches another, the augmented unit is reinforced.
4. An organization can be both minus and reinforced. In this example, 9th Engineer Support Bn deployed without all of its organic units, but it has also been reinforced with reserve units, thus its complete designation becomes "9th Engineer Support Bn (-) (REIN)."
5. A unit may be assigned operational or tactical control over another unit. This relationship is indicated by the use of OPCON or TACON following the title of the subordinate unit.
6. A tactical mission of general support (GS) or direct support (DS) may also be assigned.

Careful cross-checking is mandatory in task organizing to ensure that no unit is lost in the shuffle. As a rule, insert a minus whenever a detachment is made, and IMMEDIATELY record the corresponding attachment assignment to the unit receiving the attachment.

For units with no table of organization (e.g., task groups, aircraft wings and groups) list all subordinate units.

Each unit tasked with a tactical mission in the Basic Order is listed and underlined. The commander of each underlined unit is indicated by name. Successive subordinate echelons of particular tactical groupings are indicated by indentations beneath the underlined unit.

Subordinate units which are assigned tactical missions are underlined and listed in appropriate sequence. This sequence will depend on tow factors: the type of units being assigned missions and the type of mission (offensive or defensive). This sequence should parallel the sequence of mission assignments in paragraph 3 of the Basic Order. The sequence of listing major subordinate elements of a command is as follows:
1. Offensive Order. Ground combat units (infantry first followed by artillery and combat support units numerically or alphabetically); aviation combat units or elements (aircraft units, combat support, combat service support); combat service support units or elements.
2. Defensive Order. Units or elements closest to the enemy are listed first. Ground and aviation combat units in the forward defense area are then listed in numerical order followed by other units alphabetically.
3. Reserve. Always listed last.