

Centurions For A New Century: Marine Forces In 2015

SAW 1998

Subject Area National Security

CENTURIONS FOR A NEW CENTURY: MARINE FORCES IN 2015

LTCOL J.M. LYNES USMC
SCHOOL OF ADVANCED
WARFIGHTING
QUANTICO, VA 22554

MAY 1998

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 1998		2. REPORT TYPE		3. DATES COVERED 00-00-1998 to 00-00-1998	
4. TITLE AND SUBTITLE Centurions For A New Century: Marine Forces In 2015				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Marine Corps War College, Marine Corps University, Marine Corps Combat Development Command, Quantico, VA, 22134-5067				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 53	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

CENTURIONS FOR A NEW CENTURY:

MARINE FORCES IN 2015

Incontrovertibly, the majority of the young Americans who will join the Marine Corps starting in 2015 are babies now or will be born in the next few years. Their future, the new century, rushes at us, and with it the Marine Corps of 2015. It is not too early to begin conceptualizing the proper structure of the Corps--more specifically its heart, the operating forces--that the next generation of Marines will find. 2015 is only seventeen years away.

The Marine Corps of 2015 will face challenges, opportunities, risks, and threats that no leadership can precisely define. Thus the Marine Corps must anticipate the fact that changes will be inherent in the coming century and prepare accordingly. Today, there is a crucial opportunity to think about and prepare for the future. Recognizing this fact, the 31st Commandant has characterized the Marine Corps as poised at a "strategic inflection point, every bit as profound as the one Pete Ellis saw."¹

If the question is: "What is the proper structure for Marine forces in 2015?" the answer hinges on the definition of the word proper. Its definition relates to two subordinate and linked questions. These questions are "For what missions" and "What does it take to be successful in those missions." This paper

¹ Gen. Charles C. Krulak USMC, "Operational Maneuver From the Sea," *Naval Institute Proceedings*, Vol. 123, No. 127 (January 1997) 31. General Krulak attributes the concept of a strategic inflection point--defined as a time in the life of an organization "...when its fundamentals are about to change"--to Andy Groves (CEO of Intel Corporation) as described in *Only the Paranoid Survive* (New York: Bantam Doubleday, 1996).

will first answer the strategic question "For what missions" and then turn to the issue of what force structures might lead to success.

WHAT MISSIONS?

The Marine Corps provides sea-based, versatile, combined arms, expeditionary forces-in-readiness to the nation. This core competency, fundamentally naval and amphibious, includes as subsets forward presence, crisis response, forcible entry, and enabling force missions for follow-on forces. The basis of this is public law: 10 U.S.C. § 5063 describes the composition and functions of the Marine Corps.³

The world view of 10 U.S.C. § 5063 is fundamentally one of the Cold War. In response to the unpreparedness of US forces prior to the Korean War, Public Law 416 (the Douglass-Mansfield Act of 1952) re-affirmed the tenets of the National Security Act of 1947 and amended that act to designate the Marine Corps as the Nation's force-in-readiness.

Today's "911 Force" springs from the vision of the 80th and 82nd Congresses. The Marine Corps would be: "A strong force in Readiness;" "Versatile, fast-moving, hard hitting...Prepared to prevent potential conflagrations by prompt and vigorous action during their incipient stages...Most ready when the nation is

² *United States Marine Corps Master Plan for the 21st Century*, (Washington DC: Headquarters United States Marine Corps, 1997), 7-10.

³ 10 U.S.C. § 5063. Marines well know that the foundation of 10 U.S.C. § 5063 is the landmark National Security Act of 1947, which first articulated the modern strategic concept of the Corps. See LtCol James D. Hittle USMC, "The Marine Corps and the National Security Act," *Marine Corps Gazette*, Vol. 31, no. 10 (October, 1947), 57-59 for a cogent analysis of the impact of the subject legislation.

⁴ Allan R. Millet, *Semper Fidelis: The History of the United States Marine Corps* (New York, NY: MacMillan Publishing Co., 1980), 498, 506-07, 518.

generally least ready... [and] Able to hold a full-scale aggressor at bay while the American nation mobilizes."⁵ But what about 2015?

Forecasting the emerging security and operational environments has become a major industry inside the Beltway. Studies and theories abound. Recently however, opinion essential to the future direction of the Marine Corps has begun to coalesce. Recent studies list power projection, complex contingencies, and urban operations as likely operational environments for US forces in the near-term and mid-term. Such missions will have a direct impact on any future Marine Corps force structure.

Power Projection

The 1997 National Defense Panel states that "The cornerstone of America's military pre-eminence is our ability *to project* combat power rapidly and virtually unimpeded to widespread areas of the globe."⁶ The Panel sees this capability as a "central element of US defense strategy," one that will demand greater rapidity "with smaller units and footprint, and with greater lethality."⁷

The tyranny of trans-oceanic distance dictates that operational power projection is, and will remain in 2015, a sea or aviation based capability. In some instances, the delivery of long-range firepower (airstrikes, cruise missiles) may be enough. However, "distant punishment" through the long-range use of

⁵ *A Corps of Marines for the Future... Relevant, Ready, and Capable*, (Washington DC: Headquarters United States Marine Corps, 1993), 10.

⁶ National Defense Panel, *Transforming Defense: National Security in the 21st Century* (Arlington, VA: National Defense Panel, DEC 1997), 12. (Emphasis added.)

⁷ NDP, *Transforming Defense*, 33.

firepower rarely has produced strategic results as it rarely can address directly "the psychology of an opponent's will to resist."⁸ The power projection equation therefore changes with the requirement to introduce ground forces in order to be decisive.

The projection of ground forces necessary for decisive results in a strategic sense dictates that the operational requirements for any substantial power projection will remain primarily naval in character. Aviation delivered ground forces require a safe environment in which to deplane; aviation-delivered forcible entry units (e.g. the Army's 82nd Airborne Division) do not yet pack the punch or carry the sustainment to be long viable.⁹ The demographics of the world's littorals, the continuing dominance of the world's oceans by the US Navy, and the incontrovertible fact that strategic logistics move largely by sea,¹⁰ thrusts the issue of forcible entry firmly into the hands of its most experienced practitioners: the Marine Corps and its Navy partner.

US amphibious capability, developed in the interwar years between WWI and WWII, and brought to full flower subsequently, has been a core competency of the Marine Corps for over 50 years. It is the Marine Corps task to develop doctrine, capabilities and forces that enable both the successful projection of power from

⁸ LtGen Paul Van Riper USMC and MG Robert H. Scales USA, "Preparing for War in the 21st Century, *Strategic Review*, Vol. 25, no. 3. (Summer 1997), 18-19.

⁹ Yves J. Fontaine, "Strategic Logistics for Intervention Forces," *Parameters*, Vol. 27, no. 4 (Winter 1997-98), 42.

¹⁰ The Naval Service maintains that historically, sealift has accounted for 90-95% of cargo delivered in support of large-scale deployment, reinforcement, or resupply. Naval Doctrine Publication 1, *Naval Warfare* (Washington, DC: Office of the Chief of Naval Operations and the Commandant of the Marine Corps, March, 1994), 24.

the sea and defeat of the enemy ashore. Thus, the Marine Corps must adapt to meet the "more rapid, absent forward access, with smaller units and footprint, and with greater lethality" requirements of the 2015 operational environment. Smaller but more lethal is a well-documented historical trend and does not need repetition. Suffice it to say that the Marine Corps is already on the leading edge of this trend.

The ability to dominate a large piece of terrain with a smaller forces lies at the heart of the Marine Corps' Warfighting Laboratory's experimentation for the future. Advanced Warfighting Experiment (AWE) Hunter Warrior, the first step of a 5-year experimentation process known as "Sea Dragon," tested the ability of a "modest forward afloat expeditionary force" to extend significantly its area of influence and effectiveness within that area. The results of the March 1997 AWE conducted both at Marine Air-Ground Combat Center Twenty-nine Palms and Camp Pendleton, California validated the experimental hypothesis,¹² as described below:

"A light force, such as a Marine Expeditionary Unit, arriving early on scene in a conflict can seize the initiative from a superior enemy force when supported by long-range precision weapons. Furthermore, such a force appears capable of dominating the battle-space through integration of fires from organic and supporting weapons, and significantly reducing a foe's combat power, thereby increasing the likelihood that heavier follow-on friendly forces will be able to decisively defeat the threat."¹³

The Hunter Warrior AWE demonstrated that the historical trend to smaller units with increased lethality and dispersion is

¹¹ Dwight Lyons and others, *Advanced Warfighting Experiment Reconstruction and Operations/Training Analysis Report* (Quantico, VA: Marine Corps Warfighting Laboratory, 16 May 1997), 3.

¹² Lyons, *AWE Reconstruction and Operations/Training Analysis Report*, 23.

¹³ *Exploiting Hunter Warrior* (Quantico, VA: Marine Corps Warfighting Laboratory, Aug. 1997), inside backcover.

viable in the power projection operational environment--at least on an extended or open battlefield against a conventionally organized foe. It cannot help but be an important step in the design of US Marine Corps power projection forces for the year 2015. But there are more questions to explore and test.

The next phase of Sea Dragon experimentation will take place in an urban environment to discover whether the same type force as used in Hunter Warrior can significantly increase its abilities in a constrained battlespace. Cited as a motive for moving into an urban environment are recent military operations in littoral cities on three continents.¹⁴ These cities saw military operations that are best described as complex contingencies; accordingly, we will address that area before turning to urban operations.

Complex Contingencies

As a term, Complex Contingencies derives from Presidential Decision Directive-56 of May 1997. Linked to "peace operations," examples run the gamut from peace accord implementation (Bosnia 1995 to present), humanitarian intervention (1991's Operation Provide Comfort in Northern Iraq), to foreign humanitarian assistance operations such as Sea Angel (Bangladesh 1991) and Support Hope (Central Africa 1994).¹⁵ The precise term to describe this operational environment further varies from study to

¹⁴ *Exploiting Hunter Warrior*, 46.

¹⁵ Presidential White Paper, *The Clinton Administration's Policy on Managing Complex Contingency Operations: Presidential Decision Directive-56* (Washington DC: May 1997), 1.

study.¹⁶ Reflective of our history, many Marines view this as "Small Wars." In this paper, absent an authoritative doctrinal definition, let us use the designation of Presidential policy.

In the complex contingency environment, the military handles largely non-military problems because only the military has the organization, infrastructure, and capabilities to address the situation with any hope of success. Importantly, the use of force--implied or actual--is a factor in both the problem and the solution, thus distinguishing this environment from other less dangerous US international undertakings.

The requirement for force blurs the difference between the peace operations of PDD-56's complex contingencies and the military's concept of Military Operations Other Than War (MOOTW). The distinction is so faint as to be invisible at the operational and tactical levels. The 31st Commandant's "three-block war" analogy, wherein Marines move from humanitarian operations to peacekeeping, to house-to-house fighting (full-scale combat) all in the space of three city blocks, is a case in point.¹⁷ Peace and war are overlaid in the same small geographic area. The proximity of these challenges lies at the root of complex contingencies where chaos and entropy course unchecked in crowded, close urban settings.

¹⁶ "Lesser Military Threats": NDP, *Transforming Defense*, 36. "Smaller Scale Contingencies": Marine Corps Doctrinal Publication (MCDP) 3 (Final Draft) *Expeditionary Operations* (Quantico, VA: Marine Corps Combat Development Command, Jan 1998), 11-13. "Contingency Operations": *Report of the Active Duty Force Structure Review Group* (Washington, DC: Headquarters United States Marine Corps, 31 July 1997), 36.

¹⁷ *A Concept for Future Military Operations on Urbanized Terrain* (Quantico VA: Marine Corps Combat Development Command, 1997), 4. Charles C. Krulak, *Commandant's Planning Guidance Frag Order of 31 August 1997* (Quantico, VA: Marine Corps Association, Oct. 1997), A-7.

The concept of Complex Contingencies dovetails nicely into the Marine Corps' view of "Chaos in the Littorals." The Corps' organizational vision *Operational Maneuver from the Sea* (OMFTS) observes that a close association with the littorals will be one of the few unifying traits of future conflict. Today, the littorals are home to three-quarters of the world's population, 80 percent of the capital cities, and nearly all international marketplaces¹⁸

When linked with chaos in the littorals, the concept of Complex Contingencies gives rise to a "MOOTW from the Sea" construct. This type of operational environment, one where combatants and non-combatants are closely intermingled, implies manpower, not to mention doctrinal, requirements radically different than engagements traditionally resolved by firepower exchanges.¹⁹

Discussing the US Army's recent experience in Haiti, Robert Baumann of the Army's Combat Studies Institute cites an on-scene civil affairs officer's observation "That the only way to conduct an operation like this is to get out and see people, meet people, and gain their confidence."²⁰ "Getting out and seeing people" and likewise being seen, is manpower intensive. Manpower intensive requirements very often mean that infantry and the other combat arms formations are the force of choice. Less is not more

¹⁸ *Operational Maneuver from the Sea*, (Washington DC: Headquarters United States Marine Corps, 1996), 3-5.

¹⁹ For example, Joint doctrine for MOOTW lists "Restraint" as one of its fundamental principles. (Joint Publication 3-07, Joint Doctrine for Military Operations Other Than War (Washington, DC: Joint Chiefs of Staff, June, 1995), 11-4.)

²⁰ Robert J. Baumann, "Operation Uphold Democracy: Power Under Control," *Military Review*, (July-August 1997), 17. The officer quoted is LTC Edward J. Anderson USA, then assigned to JTF 180 as the J3 civil affairs officer.

in this environment, definitively contradicting the "less is more lethal" trend. This is, again, potentially a dilemma for force planners.

This presents what has heretofore been regarded as a dilemma: the power projection portion of future missions demands greater firepower and follows the trend that projects less people as more lethal; the "MOOTW from the Sea" portion, on the other hand, demands more people. How are these two demands to be reconciled? One answer to this *apparent* dilemma is to deny that any dilemma exists at all. The seeming dilemma for force planners in fact does not occur, due to the likely urban setting of military operations in the next century.

Urban Operations

Certain demographic trends suggest that the site of the "three-block fight" will be a Third World megacity on the world's littorals. According to one study, the growth of megacities (population 8 million plus) will increase by one third by 2015--from 21 worldwide to 33. Of those 33, 27 will be found in the developing world, doubling the 1990 figure of 16. Cities of 1 million or more will almost double by 2015, from 270 to 516. Today, nearly 40 percent of world cities with population of 500,000 or more are located directly on the shoreline.²¹ There can be little doubt that Marines in 2015 will operate and fight in cities.

Marine Corps force planning will therefore have to include in its operating forces the manpower depth to handle the manpower

²¹ *World Resources 1996-97, A Guide to the Global Environment* (New York: Oxford University Press, 1996), 60-61.

intensive tasks of MOOTW as well as absorb the higher casualty rates historically associated with urban fighting.²² If the "three-block fight" analogy holds true, the size of the Marine tactical unit on all three blocks must be large enough to handle the worst case parameters of all three missions. As stated earlier, the next phase of experimentation of the Marine Corps War-fighting Laboratory, is already moving in this direction. However, the real answer lies not in denying the dilemma but in facing and overcoming it head on. This can be accomplished with appropriate force structuring--and that depends, decisively, upon a new evolution in combined arms. We will return to this point shortly, for while consensus exists on operational environments, we need first to nail down specific missions for the Marine Corps in 2015.

Marine Missions in 2015

In 2015, the design of Marine Corps force structure must begin with its traditional capability to project ground combat power into the world's chaotic littorals and fight conventional forces. Also required is force structure suited to complex contingencies. Both missions will entail urban operations, another factor for incorporation into force planning.

At this point it is appropriate to take a step back and ask if the Marine Corps can or should choose one mission over the other. Reduced resources will be common in the next century (more on this momentarily) and the Marine Corps runs the risk of

²² Dana Harmon, *Urban Warfare: Lessons Learned From Russian, Israeli, and British Experience* (Quantico, VA: Marine Corps Intelligence Activity, 1997), 7.

being "jack of all trades, master of none" if it overextends itself. This decision point is familiar ground for Marines. In the years before WWII the Marine Corps argued internally and externally about whether its primary mission was military intervention as "State Department Troops" in colonial or "banana war" situations or as an arm of the Fleet for the defense and seizure of advanced naval bases. It is no coincidence that two landmark Marine Corps doctrinal publications--the *Small Wars Manual* (1935) and the *Tentative Manual for Landing Operations* (1934)--were written near simultaneously at Quantico.²³

In the 1930s, the Marine Corps chose power projection as its *raison d'être*, presciently anticipating war with Japan in the Pacific. Small wars lessons were put aside to be revived sporadically during the Vietnam War.²⁴ Today, the element of *versatility* in the Marine Corps' core competency demands that the Corps be able to do both. To choose one over the other is to be inherently nonversatile, thus forfeiting an essential element of the Corps' strategic utility to the nation. Consequently, force structure of Marine operating forces in 2015 must reflect the ability to perform in both areas. This means that future force structure must retain manpower depth in tactical formations.

Two last issues remain before a force structure for 2015 can be proposed. These issues are both aspects of the likely scarcity of defense dollars for the foreseeable future.²⁵ One

²³ Millet, *Semper Fidelis*, 261–263, 329–331.

²⁴ Victor H. Krulak, *First to Fight: An Inside View of the US Marine Corps*, (Annapolis, MD: Naval Institute Press, 1984), 190.

²⁵ In the decade between FY 1987 to FY 1997, US spending on national defense fell from 6.9% of Gross Domestic Product (GDP) to 3.7%. The Clinton Administration's goal is to reduce that to 3.0% by 2002. That would entail

issue relates to the fiscal inefficiency of building redundant capabilities with the Army. The other provides another rationale for why change to current Marine Corps force structure is necessary.

The underlying concept prominent in the rhetorical artillery of anti-Marine Corps factions through US history has been: "The US doesn't need a second land army."²⁶ When resources get tight, redundancy is a bad word. Army and Air Force efforts to build CONUS-based force projection capabilities (as exemplified by the Army's "Force XXI" and "The Army After-Next" projects and the current USAF concept of the "Air Expeditionary Force") offer competition in the realm of expeditionary operations.²⁷ The Marine Corps must consider its own force structure in light of what the other Services bring to the table. Fiscal reality further reinforces this requirement.

Resource dilution through capabilities overload (*i.e.*, force structure for every potentiality) is a serious danger. Following from this is the requirement to focus in, like a laser, on

defense spending reaching its lowest percentage of GDP since the 1930s. (Hans A. Binnendijk and Patrick Clawson, eds., *Strategic Assessment 1997: Flash-points and Force Structure* (Washington, DC: Institute for National Strategic Studies, National Defense University, GPO, 1997), 3-5.

²⁶ Gordon W. Keiser, *The US Marine Corps and Defense Unification 1944-47* (Baltimore, MD: The Nautical & Aviation Publishing Co. of America, 1996) offers a good history of this type of thinking.

²⁷ See TRADOC Pamphlet 525-5 *Force XXI Operations: A Concept for the Evolution of Full-Dimension Operations for the Strategic Army of the Early Twenty-First Century* (Fort Monroe VA: United States Army Training and Doctrine Command, 1994) for the Army's concept of a force-projection Army. For Army Chief of Staff Dennis Reimer's vision of "The Army After Next" see Dennis J. Reimer, "Challenges and Change: A Legacy for the Future," *Military Review*, Vol. LXXVII, No. 4, (July-August 1997), 114-116. As for the Air Force, the Air Expeditionary Force is a "CONUS-based... flexible, tailored quick-response force to fill theater needs across the spectrum of conflict." (*Air Force Issues* 97 at <http://www.af.mil/lib/issues/1997/issuespl.html>, 12. The AEF is being implemented now by the USAF.

Service core competency. The immediate impact on Marine Corps force structure planning is deciding whether the Marine Corps should possess the capability to wage *sustained* ground operations.

Given the scarcity of resources, the Marine Corps must consciously elect not to be another land army. The Marine Corps' soul is expeditionary, and as the final draft of MCDP 3 *Expeditionary Operations* points out, to be expeditionary "implies austere conditions and support." Expeditionary forces should be "no larger or heavier than necessary."²⁸ This allows the elimination of some combat service support structure.

The lack of a Marine Corps capability to conduct sustained land operations ashore is not a limiting characteristic in the Joint Warfighting construct of the future. The US will use all elements of its national military capability to wage war, and service lines will blur in the Joint effort to accomplish the mission. The Marine Corps wisely should not invest its precious dollars in support capabilities that rightly belong in the arsenal of another service, thereby freeing up resources for concentration on its core competency.

Too few dollars to buy every capability ideally desired is the principal reason for redesigning Marine Corps operating forces in the next century. Although this is not the place to lay out the Marine Corps' fiscal status for the next decade, let us accept the recent words of the Commandant:

²⁸ MCDP 3 (Final Draft) *Expeditionary Operations*, 32.

"Reality is as follows: we cannot afford the Corps we have now nor the Corps we want in the future... accept it! It is true."²⁹

The Marine Corps can gain both operational and fiscal efficiencies by redesigning the Corps into an organization tailored to the challenges of 2015. We can and must put aside our Cold War construct, capture the improvements offered by the dawning information age, and focus the Corps on the realities of the operational environments of 2015. The golden opportunity of our strategic inflection point is the ability to decide our own future.

MARINE FORCES IN 2015

The proper structure of Marine Corps operating forces in 2015 is our larger question. Up to now, we have considered the Marine Corps' projected missions in that year. The force structure implications of the pertinent operational environments of 2015 are the concurrent need for both firepower *and* manpower depth in ground combat tactical formations. Further, the anti-growth rationale for changing current force structure limits what we can do to what we have now or have already inputted into the acquisition system. Now we will turn our attention to the force structure necessary to accomplish these missions.

Marine Corps operating forces in 2015 will be "Marine Forces" instead of the traditional, but now obsolete, "Fleet Marine Forces."³⁰ This change in terminology derives from the

²⁹ *Report of the Active Duty Force Structure Review Group, 1.*

³⁰ One of the differences between 1989's Fleet Marine Force Manual (FMFM) 1 *Warfighting* and the 1997 edition (the re-nomenclatured MCDP 1) is the substitution of the term "operating forces" for "Fleet Marine Force" in the newer version. This substitution occurs in chapter 3 (Preparing for War) in the section entitled "Organization"; otherwise the entire section is virtually unchanged. See pages 42-43 in FMFM 1 and pages 54-55 in MCDP 1 to compare the

reality of the post-Goldwater-Nichols Department of Defense. In 2015, the Marine Corps will fight as part of a Joint force. The senior Marine Commander in that Joint Force will have a compo-
nency relationship with his higher Joint Headquarters that will supersede any traditional command relationship with the Navy.³¹ "Marine Forces" as a descriptor of the operating forces of the US Marine Corps distinctly reflects the Corps' broader role in joint warfighting.

The Commandant of the Marine Corps has stated that the 2015 force will be "concept-based."³² In this section, I will propose a concept based Marine Force for 2015. This force will be a sea-based, versatile, combined arms, expeditionary force-in-readiness; thus fulfilling the Marine Corps' core competency we validated in the first half of this paper.

Three concepts combine to structure the philosophical base of Marine Forces 2015. The first is organizational, the second military strategic, and the third is anti-growth. The *organizational* concept involves four parts: 1) The use of a *new definition* of *combined arms*; 2) *Permanent Marine Air-Ground Task Forces* (MAGTFs) at levels below that of the Marine Expeditionary Force (MEF); 3) All forces are expeditionary and naval in character; and 4) All forces are suitable for the mission depth of the "three-block fight."

passages.

³¹ This is arguably true now. "Fleet Marine Force" is obsolete as a characteristic of *all* Marine operating forces because it indicates a "type command" relationship, one subordinate to a Fleet.

³² Briefing slides, 1997 USMC General Officer Symposium, *Active Duty Force Structure Review: General Officers Symposium Results*, "Commandant's Intent."

The '*military strategic*' concept involves Marine forces deploying to the fight in two echelons. The first echelon consists of forward-deployed MAGTFs, small enough to be agile but powerful enough to be effective in power projection and complex contingencies. The second echelon consists in powerful CONUS-based follow-on forces tied to the operational mobility and capabilities of Maritime Prepositioning Ships (MPS). The third concept is one of *fiscal constraint*. The fiscal realities are anti-growth; in the future smaller, if cheaper, is better. Therefore, as a planning assumption for this paper, the Marine Corps will grow no larger in gross numbers than it is now. (Indeed, the Corps may likely face external pressure or fiat to grow smaller.) That said, the planning ceiling for Marine Forces 2015 will be no more than 96,900 (96.9K), as measured in man-years.³³ Relatedly, Marine Forces 2015 does not require major changes to the type and numbers of major end-items currently planned, programmed, or projected for the years between now and 2015 for both the active duty and reserve force. Where savings in both manyears and major end-items could be realized without affecting mission capability, those savings are identified.

A New Design

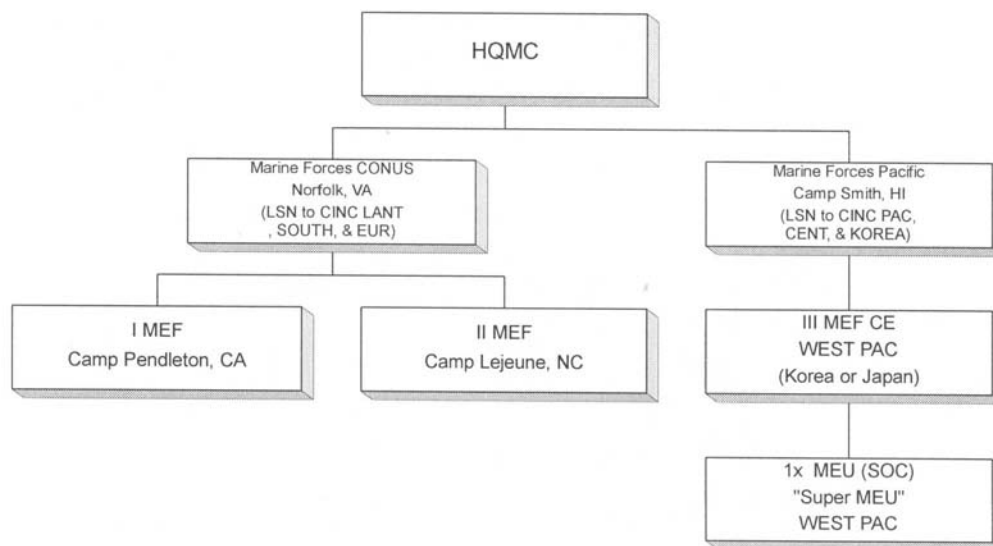
In the US joint warfighting schema, individual services provide forces to the unified combatant commanders (CINCs). A necessary precursor therefore to our new design for Marine

³³ Do not be alarmed by this figure! The 1997 Active Duty FSRG computed that from an end strength of 171.8K (as measured in manyears) and after subtracting 28.8K for T2P2 (Training, Transients, Prisoners, and Patients), 37K for the supporting establishment, and 9.1K for "special" operating forces units (such as HMX 1, Fleet Readiness Squadrons etc.), 96.9K was available to man the operating forces. *Report of the Active Duty FSRG*, 7-9.

operating forces in 2015 is a depiction of where service obligations ("recruit, train and equip") link to the combatant commanders. Our discussion therefore begins at the Marine Component level.

Marine Component Headquarters in 2015

Figure A below shows two Marine Component Headquarters in the year 2015, much like now. Important differences however do



exist, the first relating to the division of forces between Marine Forces Pacific (MARFORPAC) and Marine Forces in the Continental United States (MARFORCONUS)

Recent challenges to redundancy and inefficiency in the Unified Command Plan (UCP) will, by 2015, break the control currently held by US Pacific Command (PACCOM) over West Coast forces.³⁴ Should this occur, today's Marine Forces Atlantic

³⁴ See Charles S. Robb, "Examining Alternate UCP Structures, *Joint Forces Quarterly*, No. 14 (Winter 96-97), 85-93, for this point of view and several proposed alternate structures. Importantly, Senator Robb added as a provision to the FY 97 National Defense Authorization Act a requirement for the CJCS to review the responsibilities and force structure of the unified combatant commanders.

(MARFORLANT) will be renamed as MARFORCONUS, and will command all CONUS-based Marine operating forces. In the above model, MARFORCONUS serves a similar role to that of US Atlantic Command (ACOM) and provides forces, through ACOM, to unified combatant commanders.³⁵

MARFORCONUS remains a component commander for ACOM, as well as for whomever holds responsibilities now held by CINCEUR and CINCSOUTH. In the Pacific, MARFORPAC is the component commander for current PACCOM, CENTCOM, and for Korea. This latter component HQ structure--superficially redundant without assigned troops other than a MEF Command Element (CE) and one "Super MEU"--is important for three related reasons. One, it is not practical to give a single Marine component headquarters global responsibilities. While an expanded staff may be achievable theoretically, placing the burden of working for six CINCS on one Commanding General is not. Two, this construct focuses MARFORPAC towards the theaters where both of the US' existing war plans reside. The provision of a forward deployed MEF CE to the Western Pacific is an investment towards the Korean war plan as well as a recognition of the importance of Asia. Finally, the forward deployed "Super MEU" is available as a WESTPAC "fire brigade" and covers gaps in Indian Ocean coverage due to that body of water's distance from the US. This paper will address the composition of the "Super MEU" in the next section, as part of the discussion of the MEF of 2015.

³⁵ Since 1993, ACOM has been the principal joint force integrator, trainer, and provider of combat forces to the other unified combatant commanders. See John J. Sheehan, "Next steps in Joint force Integration, Joint Forces Quarterly, No. 13 (Autumn 96), 43.

The MEF of 2015 is where the Commandant's concept-based imperative really takes hold. Organizationally, we use a new definition of combined arms. This new definition represents an advance in our understanding of what constitutes a combinable arm.

In 1917, one of the combinable arms on the battlefield was the machine gun. To this end, many armies fielded separate formations of machine gun troops, an example of which is the 6th Machine Gun Battalion, who along with the 5th and 6th Marines comprised the Marine Brigade in World War One. Today, the machine gun is an organic weapon and no separate machine gun formation exists above the platoon level anywhere in the Marine Corps.³⁷ The process of internalizing the machine gun into force structure is but one example of how a combinable arm for one generation becomes an organic arm for the next. This larger trend is the evolution of thought and practice in what constitutes a combinable arm.

The next step in combined arms is therefore to internalize the combinable arm into the next generation of force structure. Witness the inclusion of every ground weapons system inside the modern Division structure. Our new definition of combined arms must push the envelope even farther and combine the power of

³⁶ Millet, *Semper Fidelis*, 293.

³⁷ *Table of Manpower Requirements (TMR) Multiple/Composition Report* (Quantico, VA: Total Force Structure Division, Marine Corps Combat Development Command, Report ID: 15921C11, 9/24/97)

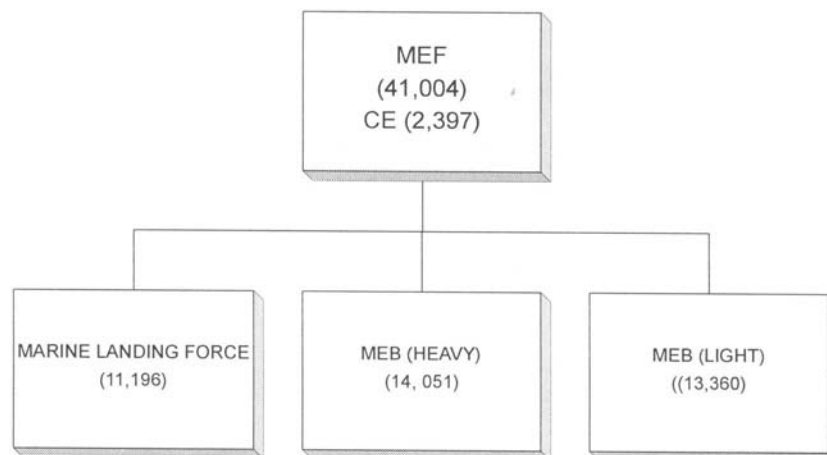
³⁸ Jonathan M. House, *Towards Combined Arms Warfare: A Survey of 20th Century Tactics, Doctrine and Organization* (Fort Leavenworth, KS: Combat Studies Institute, 1984), 188–189.

Marine Aviation into our basic warfighting organizations.

The Marine Corps is distinctive from other warfighting organizations in the US because of its MAGTF paradigm. The inclusion of fixed wing tactical air inside the MAGTF makes the MAGTF unique from an Army Division with its organic helicopter aviation brigade. Yet besides the MEF, no permanent MAGTF exists.

Therefore, following from the first point, Marine Forces 2015 will consist of permanent MAGTFs *below* the level of the MEF.

In 2015, on both coasts, the MEF will look as per figure B, below:³⁹



Each major subordinate command (MSC) of the MEF is a MAGTF, as is the MEF itself. Gone are the Marine Division, Wing, and Force Service Support Group (FSSG) of the present MEF organization. As we shall see, each MSC is expeditionary and naval and tied to the amphibious lift and Maritime Prepositioning Forces available in 2015. Each has the mission depth for the "three-block fight."

The result is that the MEF of 2015 is an extraordinarily flexible

³⁹ Throughout this paper, wherever manpower numbers are proposed, they reflect 100% manning of the force. The numbers in each MSC are the total of Marine manyears required per element. Exact details are found in Appendix A.

organization with enhanced breadth and depth across its mission areas.

The 'military strategic' concept behind the above MEF organization is that the Marine Corps will go to future fights in two echelons. The first echelon will be from forward deployed forces on amphibious shipping. This echelon may include amphibious forces that sortie in emergencies from CONUS on CONUS-based amphibious shipping. The second echelon will be CONUS-based forces that are tied to forward-deployed MPS squadrons. Driving this approach is the hard reality of the paucity of amphibious shipping in the year 2015. There are simply not enough 'gators' to get the whole Marine Corps to a fight.

In 2015, with the anticipated numbers of LPD-17, the Naval Service will have 36 amphibious ships, arrayed into twelve 3-ship Amphibious Ready Groups (ARG). Each ARG will center on a "big-deck amphib" such as an LHA or LHD and all told, will possess slightly less than 2,900 boatspaces for embarked personnel.⁴⁰ In its totality, best case, the amphibious Navy will be able to carry only approximately 34,300 Marines to a hostile shore. This alone drives the Marine Corps into two echelons. We will begin with the first echelon as contained in the Marine Landing Force resident in each MEF.

The Marine Landing Force and the "Super MEU"

The Marine Landing Force (MLF) consists of four "Super MEUs" of roughly 2,700 Marines each and a deployable Command Element.

⁴⁰ Joel R. Powers, "The Amphibious Lift Deficit: Is the Risk Necessary?" *Marine Corps Gazette*, Vol. 80, No. 3 (March 1996), 17. Also, John D. Goetke and William A.D. Wallace, *Project Culebra: Establishing the MEF (Afloat) in 2010*, (Alexandria, VA: Center for Naval Analyses, June 1995), 7.

Each "Super MEU" is a permanent MAGTF, as is the MLF in its entirety. The MLF CE deploys when overseas situations call for the combining or compositing of two or more "Super MEUs." Based upon the particulars of a given situation, composite Marine Expeditionary Brigades (MEB) can flexibly coalesce from up to nine permanent "Super MEUs," four on each coast and one, as previously mentioned, permanently based in the Western Pacific.

The best and most recent example of forming larger expeditionary units at sea comes from the 1991 Gulf War where both 4th and 5th MEB included embedded MEUs.⁴¹ The ability to tailor the size of the afloat MEB to the size of the situation provides graduated response options to overseas problems and is a classic advantage of forward deployed amphibious forcible entry forces. Additionally, four "Super MEUs" per coast allow a two-year training and deployment cycle in peacetime. Lastly, as amphibious ships historically have a 20 percent non-availability due to routine extended maintenance cycles,⁴² precious force structure is not placed against ships that are not always available.

At the heart of the MLF are its four "Super MEUs." The MEU is the "jewel in the crown" of the modern Marine Corps. Now, and in the expeditionary environments of 2015, the MEU provides "rheostatic options"⁴³ for the National Command Authority (NCA) in periods of crisis. In its almost 35 years of existence it has

⁴¹ Edwin H. Simmons, "Getting Marines to the Gulf" in Charles D. Melson and others, *U.S. Marines in the Persian Gulf War, 1990-1991: Anthology and Annotated Bibliography* (Washington, DC, History and Museums Division, Headquarters United States Marine Corps, 1992), 12-14.

⁴² Goetke and Wallace, *Project Culebra*, 2, 7.

⁴³ Concepts and Issues 97: "Making Marines, Winning Battles (Washington, DC: Programs and Resources Department, Headquarters United States Marine Corps, 1997), 10.

repeatedly demonstrated its value to the nation. But it can--and should be--improved upon.

Marine Major John Quinn offered a cogent way to do this in an award winning 1996 Marine Corps Gazette article entitled "The Future Fleet Landing Force." Major Quinn argued for a 3,000 man MEU--which he called a Brigade--built around two small infantry battalions of 700-750 Marines each, the current MEU aviation combat element (ACE) split into 2 small squadrons, a MEU Service Support Group (MSSG) and a "full service Headquarters."⁴⁴ Quinn supported his arguments with sound logic and there is great merit in the kernel of his ideas. My proposal deviates slightly from his in nomenclature (Super MEU vice Brigade) and in that my Super MEU is a permanent MAGTF. Additionally, I see only one aviation element, albeit composed of the same pieces, and I group the GCE combat support elements into a Combat Support Battalion.

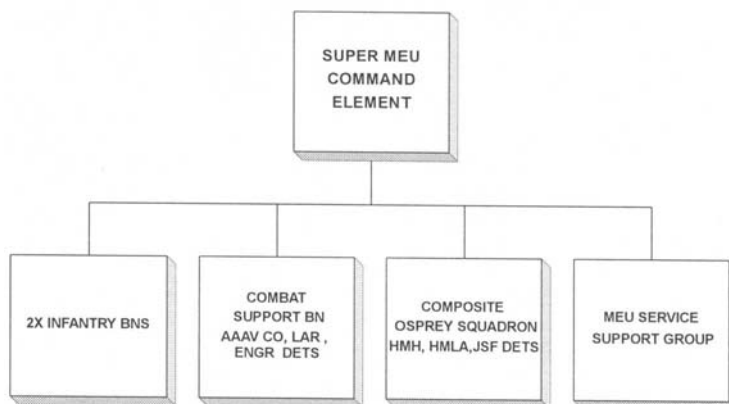
Figure C below depicts the Super MEU of 2015. It consists of 198 Marine Officers and 2,535 Marines for a total of 2,733.⁴⁵ As previously said, it is a permanent MAGTF who, when not embarked, stays together to train, develop cohesion, trust, implicit communications, and teamwork.⁴⁶ Full time attention goes to MEU missions, to include the "special operations capable" syllabus. The permanent nature of the Super MEU allows redundancy elimination; no longer are there individual administration and

⁴⁴ John T. Quinn, "The Future Fleet Landing Force," *Marine Corps Gazette*, Vol. 80, No. 6 (June 1996), 24-25.

⁴⁵ See Appendix A for specific numbers per element.

⁴⁶ MCDP 1 *Warfighting* states "Trust is a product of confidence and familiarity." Implicit communications is developed "through familiarity and trust." (MCDP 1 *Warfighting* (Washington, DC: Headquarters, United States Marine Corps, Jun 1997), 58,79.

logistics sections/platoons in each MEU element. Streamlining



helps transfer manpower from "tail to tooth," boosting the combat power of the Super MEU.

The Super MEU increases the number of embarked Marines from today's MEU by about 500. The addition is almost entirely in ground combat power. The two infantry battalions number about 750 each and consist of 3 rifle companies, a weapons company, and a very small headquarters element; service functions having been distributed to either the MSSG or MEU CE, which remain much as today in composition and size due to likely improvements in functional processes.⁴⁷ Combat Support Battalion groups an advanced amphibious assault vehicle (AAAV) company, and company-minus elements⁴⁸ of light armor vehicles (LAV) and combat engineers under a small headquarters element. Significantly missing: both artillery and armor units.

⁴⁷ 28% of the current infantry battalion T/O resides in HQSVC CO. This is ridiculously high. FSRG 97 believes that many USMC functional processes are in 1950s organizational constructs and have not taken advantage of dramatic improvements in technology. When these improvements are realized, flattening of the administration and logistics "tail" should occur. See the *Report of the Active Duty FSRG*, 4-5.

⁴⁸ Each "Company-minus" element is two platoons and a CO HQ.

The Super MEU of 2015 forgoes artillery and armor as cumbersome and of limited operational agility. Both eat up valuable space on amphibious shipping and must be delivered ashore by LCAC. Aviation-delivered fires (augmented by a Carrier Battle Group), naval gunfire of extended range, and enhancements to the battalion's own mortar capability⁴⁹ replace the current inclusion of an artillery battery. An assault gun variant of the LAV offers much of the utility of the tank, without its weight.

The provision of one AAV Company allows one infantry battalion to land across the beach while the Combat Support Battalion lands by Landing Craft Air Cushion (LCAC). The third leg of the Corps' "mobility trinity" is the Composite Squadron centered on the MV-22 Osprey. The second infantry battalion lands this way. The Osprey Squadron (called an "VMM" in my construct) has 12 aircraft. Detachments of CH-53E (4), AH-1W (4BW) (6), UH-1N (4BN) (3), and Joint Strike Fighters (Short take off and vertical landing) (JSF (STOVL)) (6), complete the mix.

The Super MEU increases the capability of the MEU for both power projection and "MOOTW from the Sea." The extra firepower and infantry strength give it enhanced capability-depth to meet the mission-depth challenge of the "three block fight." The permanent nature of the Super MEU can not help but enhance performance through increased cohesion, familiarity, and mission-training focus. The Super MEU is permanently ready as it never has a forming stage.

⁴⁹ "Upgunning" the Weapons Company Mortars to 120mm is an alternative, as is the LAV 120mm variant. Both systems exist now. Further, the MCWL's ongoing "Box Mortar" experimentation demonstrates promise.

While deployed, the 3-ship ARG and the Super MEU are flexibility personified. They can, as discussed, combine with other Super MEUs to form a composite MEB. Inside the ARG/MEU, the capacity to conduct split ARG operations improves with the addition of the second infantry battalion. This challenge, wherein the ARG/MEU divides and performs geographically separate missions, seems to be the wave of the future, as fires outnumber fire brigades. For example, a recent MEU spent only 22 days together in a six month deployment to the 6th Fleet.⁵⁰ As a Super MEU split into two pieces approaches the capabilities of today's MEU in its entirety, the result is an overall improvement in split operations capability.

The Marine Landing Force in total consists of 11,196 Marines. It is the first echelon of naval expeditionary forces the Marine Corps will provide to the nation in 2015. Behind it is the rest of the MEF, the second echelon, itself a powerful naval expeditionary force of combined arms. This echelon provides the depth to the flexibility and breadth of the first echelon. Consisting of two additional MAGTFs of MEB size, it is the next portion of the Marine Forces 2015 we will explore.

The Heavy and Light MEB

In 2015, as previously mentioned, only 34,800 boatspaces exist on amphibious shipping. Nine Super MEUs require 24,597 of those spaces. Is there a need for Marine forces to back up the MLF? If so, how will they go to the fight? What makes them different from US Army forces seeking to fill a similar niche?

⁵⁰ BLT 1/2 LF6F Post-deployment briefing slides, 23 Dec 97.

The answer to the first question is "yes." Common-sense requires a follow-on force capability, as a forward deployed Super MEU, either alone or composited with others, is not a very large or sustainable force. It requires back-up. That back-up comes in the form of the rest of the MEF and its two subordinate MAGTFs, the Heavy and Light Marine Expeditionary Brigades. Each MEB numbers 14,051 and 13,360 Marines, respectively.⁵¹ Depicted below, in figures D and E, are both types.

Suited for mid-intensity combat, the Heavy MEB has at its heart an Amphibious Com-

bined Arms Regiment (ACAR)

of infantry, artillery,

AAAVs, and tanks. The

Light MEB finds its place

lower on the spectrum of

conflict as it centers on

an infantry Regimental Landing Team (RLT). The RLT is 'light'

because it possesses no tanks

or AAAVs.

The combination of capa-

bilities make the Heavy and

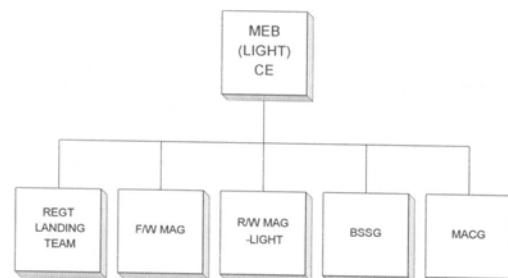
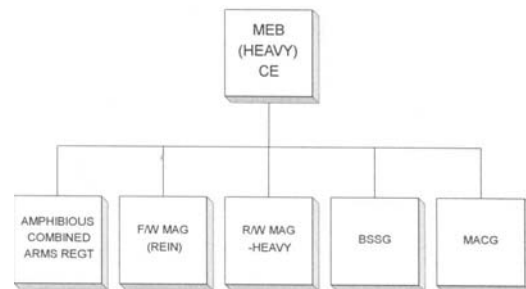
Light MEBs valuable across

the spectrum of likely litto-

ral challenges. Employed

separately or together, and

in conjunction with the MLF and its components, this construct



⁵¹ See Appendix A for specific numbers.

offers a graduated flexibility of force options to the unified combatant commanders.

Each MEB possesses a tailored helicopter Marine Air Group (MAG), with aircraft number and type tied to principal design. Rounding out each MEB is a fixed-wing NAG of four JSF (STOVL) squadrons and a Marine Air Control Group. Each MEB also includes a CE and a Brigade Service Support Group. The latter three--the CE, MACG, and BSSG--duplicate the size and composition of the proposed MEF Forward MPS set.⁵²

MEBs go to war by matching up with MPS squadrons, although this does not preclude "fly-away" deployment, complete with equipment. Currently an MPS squadron supports a MEF Forward of approximately 17,300 Marines.⁵³ The smaller sizes of the MEBs of 2015 allow for the creation of four, not three such formations while remaining inside reasonable fiscal parameters.

The four MEBs together--two heavy and two light, one of each on each coast--total 54,822 Marines. The three current MPS squadrons support three MEF Forwards of 17,300 each for a total of 51,900. The delta of 2,922, plus the 2,397 Marines in the MEF CE (4,794 for two MEFs), total 7,716, easily fitting inside the 8,700 boatspaces in the three remaining ARGs. *The result is that every member of every MEF is expeditionary, naval, and amphibious.* MEF and below, every Marine is projectable into a littoral environment.

⁵² (DRAFT) *Marine Corps Bulletin 3501*, "Maritime Prepositioning Force MAGTF Force List," (Quantico, VA: Warfighting Development Integration Division, Marine Corps Combat Development Command, Jan 1998)

⁵³ Sylvia Rosas, "Military Sealift Command and Marine Corps MPS, A Partnership Forward...From the Sea," *Marine Corps Gazette*, Vol. 80, No. 3 (March 1996), 24.

This later point is crucial, as again, the US Army possesses CONUS-based power projection forces and MPS squadrons.⁵⁴ What they do not possess of course is MAGTFs, and only MAGTFs are capable of Operational Maneuver From the Sea (OMFTS). Marine MAGTFs falling in on Maritime Prepositioning Forces (MPF) in 2015 will integrate tactically into Amphibious Task Force (ATF) operations under the supporting concept *MPF 2010 and Beyond*. In this concept, "MPFs will combine the capacity and endurance of sea-lift with the speed of airlift to rapidly deploy MAGTFs to objective areas with the capability for indefinite sea-based sustainment."⁵⁵

MPF 2010 and Beyond offers the solution to the perpetual problem plaguing modern amphibious operations--the need to seize a port and airfield to enable fly-in echelons to arrive. That requirement hamstrung the operational mobility offered by the sea; forces could move but it was simple to predict where they had to strike. The MPF enhancement effort (MPF(E)) adds to the existing MPFs an expeditionary airfield construction capability and allows the creation of its own point of debarkation for fly-on echelons.⁵⁶ It is therefore likely that the Army's Force XXI, reliant as it is on platforms like C-17 and roll-on/roll-off ships,⁵⁷ will deplane at some future Henderson Field. The

⁵⁴ Douglas A. MacGregor has proposed independent, Brigade-sized, combined arms Combat Groups" as the primary tactical unit for the Force XXI Army. See his *Breaking the Phalanx: A New Design for Landpower in the 21st Century* (Westport, CT: Praeger, 1997), 66-89.

⁵⁵ *Maritime Prepositioning Force 2010 and Beyond* (Washington, DC: Headquarters United States Marine Corps, Dec 1997), 1.

⁵⁶ *Concepts and Issues 97: "Making Marines, Winning Battles*, 28 and Sylvia Rosas, "Military Sealift Command and Marine Corps MPS," 26.

⁵⁷ TRADOC Pamphlet 525-5 *Force XXI Operations*, 3-13.

Henderson field of 2015, like its predecessor on Guadalcanal, will rest on terrain seized from the enemy by Marines landing from the sea.

Paying the Piper

Marine Forces 2015 projects out to approximately 88,729 Marines and Marine Officers for the operating forces.⁵⁸ This is some 8,171 less than the planning ceiling previously imposed in this paper. This additional manpower is available for use to patch or improve any aspect of this report. Examples of "improve" might be the provision of 4th rifle companies to infantry battalions outside the Super MEU, or additional aviation, logistics, or other ground combat structure. Experimental units also deserve a place and are "affordable." The need for "patches" will perhaps appear under precise scrutiny; such scrutiny is both welcome and healthy.

Appendix B compares Marine Forces 2015 to present force structure as depicted on a September 1997 Table of Manpower Requirements generated by the Total Force Structure Division aboard the Marine Corps Combat Development Command. "Ground Combat Element Capability Sets" refers to the specific comparison of the number of company or battery sized units between Marine Forces 2015 and today. The following "Aircraft Comparison" table is self-explanatory in that it compares the number of aircraft now in use (or projected for acquisition) and the number required for Marine Forces 2015. Both tables identify surplus and deficit areas. We will begin with the GCE comparison.

⁵⁸ See Appendix A for the breakout of numbers.

Comparing GCE Capability Sets reveal that there is additional infantry in Marine Forces 2015, specifically twelve extra rifle companies and four extra weapons companies in four extra infantry battalions. *This growth is a favorable feature, given the infantry heavy requirements directly arising from the complex contingency and urban operational environments projected for 2015.* Further, fully 65% of all infantry is in first echelon MLFs where it is both needed most and most available.

Artillery suffers in the direct comparison, maintaining but twenty of the current thirty firing batteries. Further lost is all but four artillery battalions and all of the artillery Regimental Headquarters. Marine Forces 2015 maintains the two current tank battalions.⁵⁹ LAR, Combat Engineer, and Reconnaissance companies now in existence adequately fill Marine Forces 2015, to include some surplus. "Type" battalion formations for these units disappear as they fold at Company level into Combat Support Battalions. AAV battalions also disappear, and AAV companies fall three short, but the programmed buy of 1,013 AAVs exceeds the Marine Force 2015 requirement for the active forces. Overall numbers of "fighting" battalions increase by three above current levels.⁶⁰ Overall, Marine Forces 2015 carries an increase in

⁵⁹ The issue of "expeditionary armor" in 2015 is problematic. Will it exist? Probably, but in what form? A February 1997 MOUT War Game conducted by the Marine Corps for the year 2014 postulated both MOUT Armored Fighting Vehicles (MAFV) and Advanced Armored Fighting Vehicles (AAFV). What is not yet questioned is the utility of a fighting vehicle like the tank for the foreseeable future. (Briefing Notebook, MOOT Seminar War Game, "Marine Expeditionary Force 2014+" (Quantico, VA: Marine Corps Combat Development Command, Feb 1997), Tab 0, 6-7.

⁶⁰ Now: 44 total battalions: 24 Infantry, 10 Artillery, 3 LAR, 2 CEB, 2 Tank, 2 AAV, and 1 Combat Support. 2015: 47 total battalions: 28 Infantry, 13 Combat Support, 4 Artillery, and 2 Tank. Importantly, Combat Support Bn command will pull talent from a variety of ground combat MOS.

ground combat power. Driving this increase is the likely three-block fight of 2015. Next we will turn our attention to aviation.

For existing aircraft such as the CH-53E, the AH-1W, and UH-1N, Marine Forces 2015 just barely exceeds what is currently in the active force structure. It does not exceed the total aircraft including the 4th MAW, where an additional two squadrons of each type reside. Specifically, Marine Forces 2015 requires four more CH-53Es and an additional HMLA squadron of eighteen AH-1W, and nine UH-1N. Squadron command diminishes from six to two in the HMM community and from six to four in the HMLA. Current VMGR squadrons exceed by one twelve-plane KC-130 squadron for Marine Forces 2015 requirements. UAV (VMU) requirements are static.

Immediately obvious is a decrease in the number of MV-22 and JSF (STOVL) requirements. Marine Forces 2015 requires 252 of the projected purchase of 425 Ospreys and only 246 of the projected 609 Joint strike fighters. Although the Marine Force 2015 numbers leave out Marine Reserve and Fleet Replacement Squadron (FRS) requirements, the number programmed for purchase may be excessive. This warrants further examination.

Currently, the Marine Corps possesses a total of twenty-one squadrons of F/A-18 variant (12 aircraft each) or AV-8B (10 aircraft each).⁶¹ Marine Forces 2015 calls for sixteen squadrons of JSF (STOVL) of twelve planes each, as well as an additional 54 planes (three squadron equivalents) in 6-plane Super MEU

⁶¹ *Table of Manpower Requirements, 9/24/97.*

detachments (a value of 4 and 1/2 additional squadrons). Likewise, CH-46 squadrons number fifteen squadrons of twelve aircraft each,⁶² whereas Marine Forces 2015 calls for 21 twelve plane "VMM" squadrons. Inescapably, one must conclude that Marine Forces 2015 increases aviation combat power over current levels, not withstanding the technological leap forward of the new platforms.

Fiscal savings may be possible, although options to increase the numbers of aircraft in the MEF are viable. Force planners must consider that at some point the MAGTF's aviation element may come into direct conflict with Air Force AEF initiatives and dogfight for the same niche in the littorals. As long as Marine Air remains tied to the MAGTF it is inviolate. Above that level, it becomes susceptible to charges of redundancy.

Logistics naturally draws our attention next. In Marine Forces 2015, the FSSG construct dissolves into four permanent MSSGs and two permanent BSSGs. Importantly, they are all "seabase-able" and are thus in consonance with the concept of sea-based logistics. Each is built upon current unit sizes; the MSSG from current practice as no table of organization (t/o) exists for an MSSG inside the TMR.⁶³ The BSSG mimics the current MEF Forward CSSE, as previously mentioned. In neither of these organizations are CSS functions left by the wayside.

⁶² *Table of Manpower Requirements*, 9/24/97.

⁶³ Anthony Fazio, LtCol USMC, G-1, 2nd FSSG, interview by author, 16 Jan 1998. The MSSG is task organized "out-of-hide" from a troop list generated by the MEF.

With its four MSSGs and two BSSGs, the MEF of 2015 totals 6,382 Officers and Marines in logistics organizations.⁶⁴ For FY 03, the 1st FSSG with all its detachments will total 7,804. 2nd FSSG will total 8,084.⁶⁵ The percentage delta is between eighteen and twenty percent, respectively. What is lost?

To start, the FSSG HQ of approximately 1,486 (FY 03 figures) falls by the wayside. In sheer numbers alone, this is most of the difference. Realistically, however, it is not that simple. Because of the out-of-hide nature of the more or less three permanent MSSGs per FSSG, it is difficult to assess the real impact. Current FSSGs are fluid; like logistics, they flow to where needed. They are more a "FSSG-in-being" than a real FSSG as defined by the t/o.

Certain functions performed by the FSSG do specifically require re-capture. Foremost is the Logistics Movement Coordination Center (LMCC) function, located in the FSSG G-3. This mechanism for controlling force closure and total thru-put represents a responsibility of the MEF Commander delegated to the FSSG. The MEF CE must recapture this function and keep it resident. A possible improvement however may be a division of labor wherein the MEF maintains only the Port of Debarkation (POD) and Aerial Port of Debarkation (APOD) cells in theater. This leaves the Supporting Establishment (Base or the Marine Corps Material Command) to maintain the mirrored Port of Embarkation (POE) and Aerial Port of Embarkation (APOE) elements.

⁶⁴ See Appendix A.

⁶⁵ Force Structure Tables: *MARFOR IN FY 03*, (Quantico, VA: Total Force Structure Division, Marine Corps Combat Development Command, Jan 1998).

Next, there is the question of maintenance. Although the BSSG and MSSG do possess 3rd and 4th level maintenance capability, dispersing the FSSG may adversely effect the ability to perform the more difficult 4th echelon maintenance. This function--the re-build of major components--may however be an overstated requirement for fielded forces in 2015. Even now, 5th or Depot level maintenance belongs mostly to the supporting establishment. In 2015, if business practice improvements obtain, then "just-in-time" logistics may entail the rotation out of 4th echelon work to the supporting establishment and the rotation in of replacement components.

The impact of business practice improvements--whatever that might actually entail--will certainly have its greatest impact on administration and logistics. Streamlining will occur. Similarly, one of the promises of the information age is flattened hierarchies. Marine Force 2015 takes that step and eliminates all Regimental and Group Headquarters save those listed. Gone is the "force dispenser" mission which plagues our current Regiments and Groups. Because of the commitment to permanent MAGTFs for the forward presence mission, CONUS-based forces remain intact to train. Today, the collage of HQ elements without permanent subordinate elements waters down training, cohesion-building, and focus. Marine Forces 2015, at the high spiritual cost of casing beloved colors, corrects this problem.

The elimination of much of today's Regimental and Group headquarters, as well as all of the Divisional, Wing and FSSG headquarters, is not a weakness of the Marine Forces 2015

proposal. All of these are "type" headquarters (e.g. ground, air, logistics), limited to one-dimensional warfighting. MAGTFs gain superior fighting power by synergistically integrating combined arms in a single battle. That Marine Forces 2015 gains this synergy at levels *below* the MEF is an enhancement over the Divison/Wing/FSSG construct of today's MEF.

Traditionalists will charge that there is occasionally a need for "large" type commands such as the Divison/Wing/FSSG. However, should this need occur--and this is rare, though possible (Desert Storm is an excellent example)-- it is simpler to construct type commands from MAGTF Headquarters than the other way around.

CONCLUSION

Organizing the MEF of 2015 into a MLF, a Heavy MEB, and a Light MEB is a radical departure from the past. Gone are organizations whose names are sacred to Marines. Yet the time has come. Before there was a Marine Division or Wing, there was the Marine Brigade. Marine Forces 2015 goes "back to the future" by focusing on our core competency and the unique heritage of the MAGTF. In doing so, we align ourselves for the next century.

The new century demands we reevaluate and reorganize the Corps to meet its new challenges. History shows that powerful battlefield advantage accrues to those who properly anticipate the future and adapt to it. By adopting force structure that utilizes our new definition of combined arms to form permanent MAGTFs below the level of the MEF, and by ensuring that these units are naval and expeditionary in character, with manpower

depth for the "three-block fight," we keenly hone our edge for the coming challenges. The enhanced flexibility, breadth, and depth of the MEF of 2015 increases the suitability of the Marine Corps for successful actions in its likely operational environments of power projection, complex contingencies, and urban operations. Further, by reinventing the Corps within the constraints of fiscal realities, we disarm threats to the Corps based on resource competition, increase our efficiency, and control our own future. We are the masters of our own strategic inflection point.

MCDP 1 *Warfighting* describes the philosophy of the Marine Corps. In regards to the operating forces, it states that they "must be organized to provide forward deployed or rapidly deployable forces capable of conducting expeditionary operations in any environment."⁶⁶ Marine Forces 2015 meets this thesis and puts it into practice for the next century. The Cold War construct of the past falls away, and the 1997 National Defense Panel's challenge to build "rapid closing, absent forward access, smaller units and footprints, with greater lethality"⁶⁷ is met.

Marine Force 2015 is the force of the future. The Centurions of the next century will serve and fight in MAGTFs that will possess the cozy familiarity now given to Regiments. From Super MEU, through MEB, to MEF, the presence of Marines on or off a foreign shore, will mean, as it always has, chaos and confusion to the enemy.

⁶⁶ MCDP 1 *Warfighting*, 54.

⁶⁷ NDP, *Transforming Defense*, 33.

Incontrovertibly, the majority of the young Americans who will join the Marine Corps starting in 2015 are babies now or will be born in the next few years. Their future, the new century, rushes at us, and with it the Marine Corps of 2015. We have proposed a new design for the operating forces of the Corps that the next generation of Marine centurions will find. It is up to us to deliver it to them. 2015 is but seventeen years away.

BIBLIOGRAPHY

Primary Sources

Douglass-Mansfield Act, PL 416, 82nd U.S. Congress, 2nd Session, 28 June 1952.

Fazio, Anthony, LtCol USMC. G-1 2nd FSSG. Interview by author, 16 Jan 1998.

Lyons, Dwight and others. *"Hunter Warrior: Advanced Warfighting Experiment Reconstruction and Operations/Training Analysis Report (DRAFT)*. Quantico, VA: Marine Corps Warfighting Laboratory, 16 May 1997.

Joint Publication 3-07. *Joint Doctrine for Military Operations Other Than War*. Washington, DC: Joint Chiefs of Staff, June, 1995.

Marine Corps Doctrinal Publication 1. *Warfighting*. Washington, DC: Headquarters, United States Marine Corps, June 1997.

Marine Corps Doctrinal Publication 3. *Expeditionary Operations (Final Draft)*. Quantico, VA: Marine Corps Combat Development Command, January 1998.

Marine Corps Warfighting Laboratory. *Exploiting Hunter Warrior*. Quantico, VA: Marine Corps Warfighting Laboratory, Aug 1997.

National Defense Panel. *Transforming Defense: National Security in the 21st Century*. Arlington, VA: 1997 National Defense Panel, December, 1997.

National Security Act of 1947, PL 253, 80th U.S. Congress, 1st Session, 26 July 1947.

Naval Doctrine Publication 1. *Naval Warfare*. Washington, DC: Office of the Chief of Naval Operations and the Commandant of the Marine Corps, March, 1994.

Presidential White Paper. *The Clinton Administration's Policy on Managing Complex Contingency Operations: Presidential Decision Directive-56*. Washington DC: May 1997.

United States Air Force. *Air Force Issues 97*. Downloaded at <http://www.af.mil/lib/issues/1997/issuespl.html> 27 Dec 1997.

United States Army. TRADOC Phamplet 525-5: *Force XXI Operations: A Concept for the Evolution of Full-Dimensional Operations for the Strategic Army of the Early Twenty-First Century*. Fort Monroe, VA: U.S. Army Training and Doctrine Command, 1994.

United States Marine Corps. *Concepts and Issues 97: Making Marines and Winning Battles*. Washington, DC: Programs and Resources Department, Headquarters U.S. Marine Corps, 1997.

_____. *A Concept for Future Military Operations on Urbanized Terrain*. Quantico VA: Marine Corps Combat Development Command, 1997.

_____. *A Corps of Marines for the Future... Relevant, Ready, and Capable*. Washington DC: Headquarters USMC, 1993.

_____. General Officer Symposium Briefing Slides. *Active Duty Force Structure Review: General Officer Symposium Results*. Washington, DC: Headquarters U.S. Marine Corps, 1997.

_____. *LF6F Post-deployment Briefing Slides*. Camp Lejeune, NC: Battalion Landing Team 1st Battalion, 6th Marines, 23 Dec 1997.

_____. Force Structure Tables: *MARFOR in FY 03*. Quantico, VA: Total Force Structure Division, Marine Corps Combat Development Command, Jan 1998.

_____. *Maritime Prepositioning Force 2010 and Beyond*. Washington, DC: Headquarters United States Marine Corps, 1997.

_____. (DRAFT) *Marine Corps Bulletin 3501*. "Maritime Prepositioning Force MAGTF Force List." Quantico, VA: Warfighting Development Integration Division, Marine Corps Combat Development Command, Jan 1998.

_____. MOUT Seminar War Game Briefing Notebook: "Marine Expeditionary Force 2014+" Quantico, VA: Marine Corps Combat Development Command, Feb 1997.

_____. *Operational Maneuver From the Sea: A Concept for the Projection of Naval Power Ashore*. Washington DC: Headquarters U.S. Marine Corps, 1996.

- _____. *Report of the 1997 Active Duty Force Structure Review Group*. Washington, DC: Headquarters United States Marine Corps, July, 1997.
- _____. *Table of Manpower Requirements Multiple/Composition Report*. Quantico, VA: Total Force Structure Division, Marine Corps Combat Development Command, Sept 1997.
- _____. *Tentative Landing Operations Manual 2014 (Draft)*. Quantico VA: Marine Corps Combat Development Command 1997.
- _____. *United States Marine Corps Master Plan for the 21st Century*. Washington, DC: Headquarters U.S. Marine Corps, 1997.

10 U.S.C. § 5062

Secondary Sources

- Anderson, Gary. *A Proposal for U.S. Naval Strategy in the Twenty-First Century*. Newport, RI: Naval War College, 1993.
- Baumann, Robert J. "Operation Uphold Democracy: Power Under Control." *Military Review*. Vol LXXVII, No 4 (July-Aug 1997), 13-21.
- Binnendijk, Hans A. and Patrick Clawson, eds., *Strategic Assessment 1997: Flashpoints and Force Structure*. Washington, DC: Institute for National Strategic Studies, National Defense University, GPO, 1997.
- Fontaine, Yves J. "Strategic Logistics for Intervention Forces." *Parameters*, Vol. 27, no. 4 (Winter 1997-98), 42-59.
- Goetke, John D. and William A.D. Wallace. *Project Culebra: Establishing the MEF (Afloat) in 2010*. Alexandria, VA: Center for Naval Analyses, June 1995.
- Harmon, Dana. *Urban Warfare: Lessons Learned from Russian, Israeli, and British Experience*. Quantico, VA: Marine Corps Intelligence Activity, 1997.
- Hittle, LtCol James D. USMC. "The Marine Corps and the National Security Act. " *Marine Corps Gazette*, Vol. 31, no. 10 (October, 1947), 57-59.
- House, Jonathan M. *Towards Combined Arms Warfare: A Survey of 20th Century Tactics, Doctrine and Organization*. Fort Leavenworth, KS: Combat Studies Institute, 1984.

- Keiser, Gordon W. *The US Marine Corps and Defense Unification 1944-47*. Baltimore, MD: The Nautical & Aviation Publishing Co. of America, 1996.
- Krulak, Charles C. "Operational Maneuver From the Sea.", *Naval Institute Proceedings*, Vol. 123, No. 127, (January 1997): 26-31.
- _____. *Commandant's Planning Guidance Frag Order of 31 August 1997*. Quantico, VA: Marine Corps Association, Oct. 1997.
- Krulak, Victor H. *First to Fight: An Inside View of the US Marine Corps*. Annapolis, MD: Naval Institute Press, 1984.
- MacGregor, Douglas A. *Breaking the Phalanx: A New Design for Landpower in the 21st Century*. Westport, CT: Praeger, 1997.
- Millett, Alan R. *Semper Fidelis: The History of the United States Marine Corps*. New York: MacMillan, 1980.
- Powers, Joel R. "The Amphibious Lift Deficit: Is the Risk Necessary?" *Marine Corps Gazette*, Vol. 80, No. 3 (March 1996): 16-18.
- Quinn, John T. "The Future Fleet Landing Force." *Marine Corps Gazette*, Vol. 80, No. 6 (June 1996): 23-25.
- Reimer, Dennis J. "Challenges and Change: A Legacy for the Future." *Military Review*. Vol LXXVII, No 4 (July-Aug 1997), 108-116.
- Robb, Charles S. "Examining Alternate UCP Structures." *Joint Forces Quarterly*. No. 14 (Winter 96-97), 85-93.
- Rosas, Sylvia. "Military Sealift Command and Marine Corps MPS, A Partnership Forward...From the Sea." *Marine Corps Gazette*, Vol. 80, No. 3 (March 1996), 23-26.
- Sheehan, John J. "Next Steps in Joint Force Integration." *Joint Forces Quarterly*. No. 13 (Autumn 96), 41-47.
- Simmons, Edwin H. "Getting Marines to the Gulf." in Charles D. Melson and Others, *U.S. Marines in the Persian Gulf War, 1990-1991: Anthology and Annotated Bibliography*. Washington, DC, History and Museums Division, Headquarters United States Marine Corps, 1992), 1-21.

United States Code Annotated: Title 10 Armed Forces § 5001 to 8010, 1997 Cumulative Annual Pocket Part. St. Paul, MN: West Publishing Co., 1997.

Van Riper, LtGen Paul USMC and MG Robert H. Scales USA,
"Preparing for War in the 21st Century." *Strategic Review*.
Vol. 25, no. 3. (Summer 1997), 14–20.

World Resources 1996-97, A Guide to the Global Environment. New York: Oxford University Press, 1996.

ALL NUMBERS INDICATE 100 PERCENT MANNING

APPENDIX A

MARINE FORCES 2015

	USMC OFF	USMC ENL	USMC TOTAL
MARFORCONUS ¹	131	504	635
MARFORPAC ²	185	1,082	1,267
I MEF	3,367	37,637	41,004
II MEF	3,367	37,637	41,004
III MEF ³	205	1,603	1,808
WESTPAC SUPER MEU	217	2,794	3,011
TOTAL	7,472	81,257	88,729
¹ MARFORLANT CE SIZE for FY 03 (W/LSN ELEMS)			
² MARFORPAC CE SIZE for FY 03 (W/LSN ELEMS & RADIO BN)			
³ III MEF CE SIZE for FY 03, MINUS MEU CE			

MARINE EXPEDITIONARY FORCE

	USMC OFF	USMC ENL	USMC TOTAL
MEF HQ ¹	257	2,140	2,397
MEB (HEAVY)	1,136	12,915	14,051
MEB (LIGHT)	1,087	12,273	13,360
MLF	887	10,309	11,196
TOTAL	3,367	37,637	41,004
¹ I MEF CE for FY03, MINUS THREE MEU CES			

MEF CE

	USMC OFF	USMC ENL	USMC TOTAL
MEF HQ	131	170	301
MEF HQ GRP	13	202	215
HQ INTEL CO	2	4	6
TOPO PLT	1	40	41
SCAMP	2	44	46
FIIU	1	38	39
DIRECT SPT TM (X2)	2	14	16
HUMINT CO	11	106	117
FORCE RECON CO	13	147	160
MEF LSN GRP	18	78	96
COMM BN	49	1,247	1,296
SOTG	14	50	64
TOTAL	257	2,140	2,397

MARINE LANDING FORCE

	USMC OFF	USMC ENL	USMC TOTAL
MLF CE	95	169	264
SUPER MEU	198	2,535	2,733
SUPER MEU	198	2,535	2,733
SUPER MEU	198	2,535	2,733
SUPER MEU	198	2,535	2,733
TOTAL	887	10,309	11,196

SUPER MEU

	USMC OFF	USMC ENL	USMC TOTAL
MEU CE	27	140	167
GCE	88	1,802	1,890
ACE	66	353	419
MSSG	17	240	257
TOTAL	198	2,535	2,733

MEU GROUND COMBAT ELEMENT

	USMC OFF	USMC ENL	USMC TOTAL
INF BN ¹	33	717	750
INF BN	33	717	750
CBT SPT BN CE	10	20	30
LAR DET ²	3	81	84
CEB DET ³	3	72	75
AAAV CO	6	195	201
TOTAL	88	1,802	1,890

¹ 3 Rifle Cos (6/176 each) as tactical units.

² 2 Plts with a small Co HQ

³ 2 Plts with a small Co HQ

ALL NUMBERS INDICATE 100 PERCENT MANNING

APPENDIX A

MEU AVIATION COMPONENT ELEMENT

	USMC OFF	USMC ENL	USMC TOTAL
VMM SQDRN	30	102	132
HMH SECT	8	37	45
HMLA SECT	14	43	57
JSF DET (W/MALS)	10	80	90
R/W MALS	1	53	54
MACG SECT	3	25	28
MWSG SECT	0	13	13
TOTAL	66	353	419

MEU SERVICE SUPPORT GROUP

	USMC OFF	USMC ENL	USMC TOTAL
HQ/CE	11	45	56
COMM PLT	1	26	27
SUPPLY PLT	1	16	17
MAINT PLT	1	40	41
ENGR PLT	1	36	37
LFD DET ¹	2	66	68
MED BN	0	11	11
TOTAL	17	240	257

¹ LANDING FORCE DISTRIBUTION BN

ALL NUMBERS INDICATE 100 PERCENT MANNING

APPENDIX A

MEB (HEAVY)

	USMC OFF	USMC ENL	USMC TOTAL
MEB CE	139	760	899
AMPHIB CAR	260	4,324	4,584
F/W MAG (+)	221	2,203	2,424
R/W MAG-H	265	2,125	2,390
BSSG	143	2,534	2,677
MACG	108	969	1,077
TOTAL	1,136	12,915	14,051

AMPHIBIOUS COMBINED ARMS REGT

	USMC OFF	USMC ENL	USMC TOTAL
REGT HQ	26	274	300
INF BN	45	860	905
INF BN	45	860	905
ARTY BN	64	930	994
TANK BN	48	743	791
COMBAT SPT BN CE	10	25	35
LAR CO	5	133	138
CEB CO	5	109	114
AAAV CO	6	195	201
AAAV CO	6	195	201
TOTAL	260	4,324	4,584

F/W MAG (REIN)

	USMC OFF	USMC ENL	USMC TOTAL
MAG HQ ¹	23	89	112
JSF SQDRN ²	23	197	220
JSF SQDRN	23	197	220
JSF SQDRN	23	197	220
JSF SQDRN	23	197	220
VMGR SQDRN	49	315	364
MALS (F/W)	26	325	351
MWSS (F/W)	31	686	717
TOTAL	221	2,203	2,424

¹ MAG HQ, MALS, MWSS FROM CURRENT MPF

² CURRENT F/A-18 SQDRN SIZE

R/W MAG HEAVY

	USMC OFF	USMC ENL	USMC TOTAL
MAG HQ R/W	23	91	114
HMLA SQDRN	67	378	445
VMM SQDRN	32	156	188
VMM SQDRN	32	156	188
HMH SQDRN	41	286	327
VMU SQDRN	15	180	195
MWSS (R/W)	30	602	632
MALS (R/W)	25	276	301
TOTAL	265	2,125	2,390

BRIGADE SERVICE SUPPORT GROUP

	USMC OFF	USMC ENL	USMC TOTAL
BSSG HQ	54	403	457
SUPPLY BN	12	397	409
MAINT BN	24	326	350
ENGR SPT BN	21	640	661
LANDING FORCE DIST BN ¹	29	682	711
MED BN	3	86	89
DENTAL BN	0	0	0
TOTAL	143	2,534	2,677
¹ COMBINATION OF LANDING SUPPORT AND MT BNs			

MARINE AIR CONTROL GROUP

	USMC OFF	USMC ENL	USMC TOTAL
MACG HQ ¹	10	61	71
TAOC	20	134	154
ATC	4	72	76
MTACS	20	105	125
MWCS DET	8	240	248
MASS	40	192	232
LAAD	6	165	171
TOTAL	108	969	1,077
¹ MACG FROM CURRENT MPF			

ALL NUMBERS INDICATE 100 PERCENT MANNING

APPENDIX A

MEB LIGHT

	USMC OFF	USMC ENL	USMC TOTAL
MEB CE	139	760	899
RLT	252	4,151	4,403
F/W MAG	172	1,888	2,060
R/W MAG-L	273	1,971	2,244
BSSG	143	2,534	2,677
MACG	108	969	1,077
TOTAL	1,087	12,273	13,360

REGIMENTAL LANDING TEAM

	USMC OFF	USMC ENL	USMC TOTAL
REGT HQ	26	274	300
INF BN	45	860	905
INF BN	45	860	905
INF BN	45	860	905
ARTY BN	64	930	994
COMBAT SPT BN CE	10	25	35
LAR CO	5	133	138
CEB CO	5	109	114
RECON CO	7	100	107
TOTAL	252	4,151	4,403

F/W MAG

	USMC OFF	USMC ENL	USMC TOTAL
MAG HQ ¹	23	89	112
JSF SQDRN ²	23	197	220
JSF SQDRN	23	197	220
JSF SQDRN	23	197	220
JSF SQDRN	23	197	220
MALS (F/W)	26	325	351
MWSS (F/W)	31	686	717
TOTAL	172	1,888	2,060

¹ MAG HQ, MALS, MWSS FROM CURRENT MPF

² CURRENT F/A-18 SQDRN SIZE

ALL NUMBERS INDICATE 100 PERCENT MANNING

APPENDIX A

R/W MAG LIGHT

	USMC OFF	USMC ENL	USMC TOTAL
MAG HQ R/W	23	91	114
VMM SQDRN	32	156	188
VMM SQDRN	32	156	188
VMM SQDRN	32	156	188
VMM SQDRN	32	156	188
HMLA SQDRN	67	378	445
MWSS (R/W)	30	602	632
MALS (R/W)	25	276	301
TOTAL	273	1,971	2,244

BRIGADE SERVICE SUPPORT GROUP

	USMC OFF	USMC ENL	USMC TOTAL
BSSG HQ	54	403	457
SUPPLY BN	12	397	409
MAINT BN	24	326	350
ENGR SPT BN	21	640	661
LANDING FORCE DIST BN ¹	29	682	711
MED BN	3	86	89
DENTAL BN	0	0	0
TOTAL	143	2,534	2,677

¹ COMBINATION OF LANDING SUPPORT AND MT BNs

MARINE AIR CONTROL GROUP

	USMC OFF	USMC ENL	USMC TOTAL
MACG HQ ¹	10	61	71
TAOC	20	134	154
ATC	4	72	76
MTACS	20	105	125
MWCS DET	8	240	248
MASS	40	192	232
LAAD	6	165	171
TOTAL	108	969	1,077

¹ MACG FROM CURRENT MPF

ALL NUMBERS INDICATE 100 PERCENT MANNING

APPENDIX A

GROUND COMBAT ELEMENT CAPABILITY SETS

	INF RFL CO	INF WPNS CO	ARTY BTRY	TANK CO	LAR CO	AAAV CO	CEB CO	RECON CO
SUPER MEU	6	2	0	0	0.66	1	0.66	
SUPER MEU	6	2	0	0	0.66	1	0.66	
SUPER MEU	6	2	0	0	0.66	1	0.66	
SUPER MEU	6	2	0	0	0.66	1	0.66	
SUPER MEU	6	2	0	0	0.66	1	0.66	
SUPER MEU	6	2	0	0	0.66	1	0.66	
SUPER MEU	6	2	0	0	0.66	1	0.66	
SUPER MEU	6	2	0	0	0.66	1	0.66	
SUPER MEU	6	2	0	0	0.66	1	0.66	
ACAR	6	2	5	4	1	2	1	
ACAR	6	2	5	4	1	2	1	
RLT	9	3	5		1		1	1
RLT	9	3	5		1		1	1
TOTALS	84	28	20	8	9.94	13	9.94	2
FY98 EQUIV ¹	72	24	30	8	12	10 ²	12 ³	3
DELTA	-12	-4		0		-3		
SURPLUS			10		2.06		2.06	1
¹ Data from Sept 1997 Table of Manpower Requirements								
² The Marine Corps is buying 1,013 AAAs.								
³ 9 Combat Engineer Co, 3 Combat Engineer Support Co								

ALL NUMBERS INDICATE 100 PERCENT MANNING

APPENDIX B

AIRCRAFT COMPARISON

	VMM SQDRN	HMH SQDRN	HMH DET	HMLA AH-1W	DET AH-1W	HMLA UH-1N	DET UH-1N	VMU SQDRN	VMGR SQDRN	JSF STOVL
SUPER MEU	12		4		6		3			6
SUPER MEU	12		4		6		3			6
SUPER MEU	12		4		6		3			6
SUPER MEU	12		4		6		3			6
SUPER MEU	12		4		6		3			6
SUPER MEU	12		4		6		3			6
SUPER MEU	12		4		6		3			6
SUPER MEU	12		4		6		3			6
SUPER MEU	12		4		6		3			6
MEB-H	24	8		18		9		1	12	48
MEB-H	24	8		18		9		1	12	48
MEB-L	48			18		9				48
MEB-L	48			18		9				48
TOTALS	252	52		126		63		2	24	246
FY98 EQUIV	425 ¹	48 ²		108 ³		54 ⁴		2 ⁸	36 ⁵	609 ⁷
DELTA		-4		-18		-9				
SURPLUS	173								12	363
¹ THE USMC INTENDS TO BUY 425 OPSPREYS										
² 6 HHM SQUADRONS OF 8 A/C EACH = 48 (+16 IN 4TH MAW)=64										
³ 6 HMLA SQUADRONS W/18 AH-1W EACH = 108 (+36 IN 4TH MAW)=142										
⁴ 6 HMLA SQUADRONS W/9 UH-1N EACH = 54 (+18 IN 4TH MAW)=72										
⁵ 3 VMGR SQUADRONS OF 12 KC-130 EACH =36										
⁸ 2 VMU SQUADRONS										
⁷ THE USMC INTENDS TO BUY 609 JOINT STRIKE FIGHTERS (STOVL)										