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LET'S TAKE THE CV OUT OF CVBG: MODERN USES FOR AMPHIBIOUS
FORCES FOR THE 1990s AND BEYOND

by
Isaac E. Richardson III
Captain, U.S. Navy

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JUL 14 1993
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A paper submitted to the faculty of the Naval War College
in partial satisfaction of the requirements of the Department
of Operations.

The contents of this paper reflect my personal views and
are not necessarily endorsed by the Naval War College or the
Department of the Navy.

Signature:

Isaac E. Richardson III

17 May 1993

Paper directed by Captain H. Ward Clark
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ABSTRACT

With the fall of the Soviet regime, and the end of the WARSAW pact, most strategists believe that future conflicts will be primarily low intensity in nature. The U.S. military is undergoing a reorganization and downsizing to meet the diminished world threat. The Navy has restructured its doctrine, from one of open ocean warfare, to that of a joint force that supports joint doctrine. The new "...FROM THE SEA" strategy falls directly in line with the mission that the amphibious forces have been practicing for decades. As the amphibious force undergoes modernization, it brings with it new capabilities that have not been completely tested or incorporated into naval doctrine. Today's amphibious forces possess a tremendous capability that is not being used to their fullest potential. The United States cannot send a CVBG to help quell each situation or show presence, due to competing global priorities. The current downsizing of the carrier force lends credence to this supposition. Today's modern Amphibious Ready Group/Battle Group may well be the United States' answer to this dilemma. This paper will review major capabilities of the modern amphibious force, propose a ship and force mix that can accomplish selected missions, at reduced expense, while avoiding the necessity to use the CVBG.

PREFACE

The intent of this paper is to point out an alternate method of mission accomplishment during crisis and contingency operations. Historically, most of these missions have been assigned to the Carrier Battle Group. Today's amphibious Ready Group provides the military with an alternate choice. The reader should not construe that these solutions are the only choices available; however, the reader should consider these options as a creditable alternative to the traditional carrier battle group. This is a break with traditional mainstream naval strategy. All of the articles and books in the bibliography have been written by American authors. Most sources reflect the views of students of the various national, and service affiliated war colleges. The reference material is current, and has been written between 1989 and 1993, except for two key historical books.

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BOUNDS OF PAPER

This paper will focus on the United States' need to reexamine the roles and missions of the amphibious task force. The Navy's inventory of older amphibious ships is rapidly reaching block obsolescence. They are being replaced by a new breed of sophisticated and capable platforms. This paper will address the capabilities of this new breed of ships that will be coming into the United States Navy's inventory in the next twenty-five years. It will draw contrasts between the roles and missions of the Carrier Battle Group (CVBG), as envisioned today, and the modern Amphibious Group's new capabilities. It will investigate several missions that could be accomplished by the modern Amphibious Ready Group and the embarked Marine Expeditionary Unit (MEU). Cost of the ARG and the CVBG will be compared, and advantages and disadvantages discussed. The missions will be limited to those that can be accomplished by the ships and embarked MEU. The ability to augment embarked forces will be lightly explored, but this topic will be left for future papers and analysis.

THESIS

The modern ship's of today's Amphibious Ready Group possess a tremendous capability. The Navy's joint amphibious doctrine is out dated. Doctrine must be developed that will reflect the flexibility, mobility, and advanced technology available in these new amphibious platforms. In this era of strong fiscal restraint, our seagoing platforms must be used as efficiently as possible. The modern amphibious task force offers the military commander several new options for mission accomplishment. Missions normally belonging to the Carrier Battle Group can now be efficiently completed by these new amphibious ships at reduced cost.



**LET'S TAKE THE CV OUT OF CVBG: MODERN USES FOR
AMPHIBIOUS FORCES FOR THE 1990s AND BEYOND**

I. INTRODUCTION.

THE PROBLEM.

Since World War II, the United States has postured against a possible attack from the Soviet Union. The Cold War build up of military platforms and equipment has been expensive. The United States government is at a critical crossroads in its commitment to maintain sophisticated equipment and highly trained armed forces. The navy must investigate new methods of accomplishing the mission to ensure flexibility in tactics and unity of effort. In this era of strong fiscal restraint, the Navy must fully use its amphibious ships as efficiently as possible. Traditional naval strategy has historically assigned most contingency missions to the Carrier Battle Group (CVBG). Today's modern amphibious ships have been redesigned, and given special capabilities that make them a potent battle group. Naval strategy is not using their capability to full potential. The new Amphibious Ready Group (ARG) can accomplish selected missions at reduced cost. These new platforms offer the military strategist and the National Command Authority a

different and perhaps, a better option. These ideas will be fully developed in the following pages.

ASSUMPTIONS.

The assumptions of this paper are:

- (1) The defense budget will be reduced.
- (2) The threat from the Soviet Union and the Warsaw Pact countries has diminished.
- (3) Emerging democracies and third world countries have become more unstable as they master a new type of government and a different leadership style.
- (4) Less countries will allow foreign military bases on sovereign soil. These nations will restrict overflight of foreign military aircraft during contingencies. An example of this concept is France's refusal to allow overflight of their territory during Operation "El Dorado Canyon."

II. BACKGROUND.

In 1990, President Bush announced the four pillars of the national security strategy of the United States: strategic deterrence, forward presence in key areas, worldwide crisis response, and force reconstitution¹. He recognized the changing world conditions, and orchestrated a plan that

directed the military to perform an orderly 25% force reduction over the next six year period. According to an Aspen strategy group report in 1989 they wrote: "The 1990's will find the world in an environment of global economic and political transition inside the Soviet Union, inside the U.S., and within both the NATO and Warsaw Pact alliances²." This report appears insightful and right on target. The Soviet Union is in political and economic chaos, the Warsaw Pact nations are embroiled in civil wars, and the American economy is in need of transition and attention.

NATIONAL STRATEGY.

AS previously mentioned, President Bush announced the national strategy of strategic deterrence, forward presence in key areas, worldwide crisis response, and force reconstitution³. Implicit in this statement is the idea that the U.S. will no longer have as many armed forces deployed overseas. The armed forces will be tailored to the mission, and the reserve components will play a major role in any regional contingency. "U.S. strategy today and in the foreseeable future will be centered in the doctrine of flexible response. Within the spectrum of flexible response, the ability to manage escalation is critical⁴." Large

conventional forces in the U.S. has been an effective method of preventing war with the super powers; but this effort has not deterred low intensity conflicts (LICs). The number of LICs has grown steadily for the past two decades.

NAVY DOCTRINE.

The global aspect of the war with the Soviet Union is over. The threat of communist expansionism has diminished significantly. No longer is the blue water open ocean war the direction of U.S. naval strategy. The naval strategic policy document "...FROM THE SEA" reflects the world's changes, and has begun to prepare the Naval service for both future and integrated joint operations. This shift in strategy will give coastal and amphibious operations priority over ocean warfare⁵. The focus will be on regional contingencies critical to the national interest. The Navy and Marine Corps will combine their efforts and concentrate on power projection from the sea. "This strategic direction, derived from the National Security Strategy, represents a fundamental shift away from open-ocean war fighting on the sea toward joint operations conducted from the sea. This new direction will provide the nation: Naval Expeditionary Forces shaped for joint operations, operating forward from the sea, and tailored

for National needs⁶." An important conceptual change in doctrine is the specific tailoring of the force to meet the threat.

FUTURE HOSTILITIES.

The U.S. has become the most powerful nation on earth; consequently it has begun to view the world's crises' as their personal responsibility. Former Chief of Naval Operations, Admiral Watkins said that "One key goal of our peacetime strategy is to further international stability through support of regional balances of power."⁷ Former Secretary of Defense Casper Weinberger wrote, "Discriminate deterrence has not been accepted as national policy, but these elements calling for a greater concentration on low and medium intensity operations have begun to influence [military] priorities⁸." This fact is illustrated in a contrast between the traditional and emerging trends of the spectrum of conflict graphs (see figures 1 and 2 below)⁹.

SPECTRUM OF CONFLICT TRADITIONAL

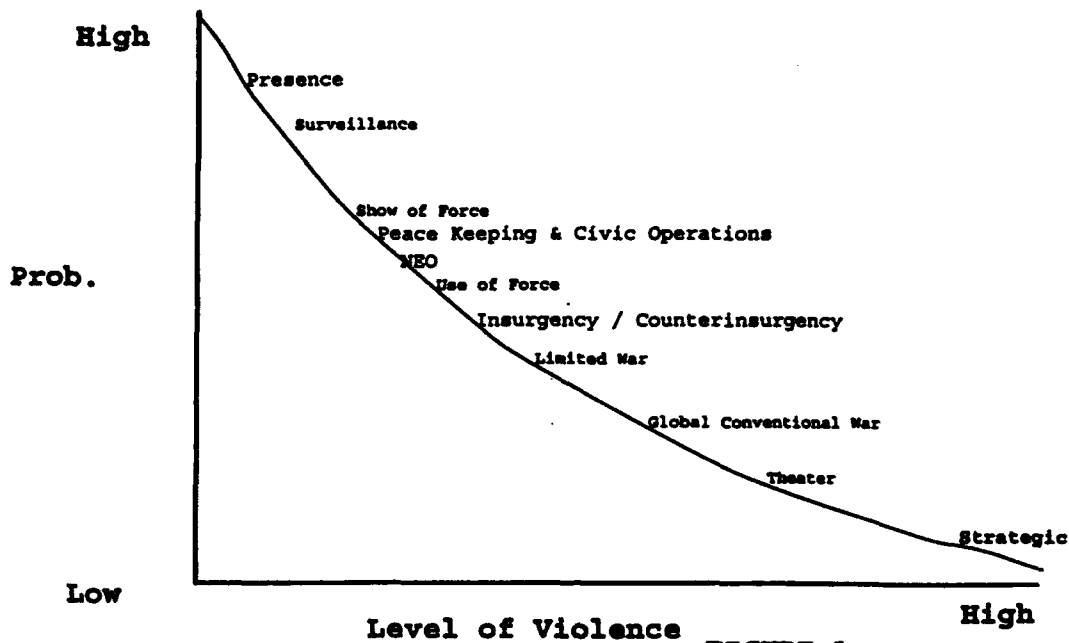


FIGURE 1.

SPECTRUM OF CONFLICT EMERGING

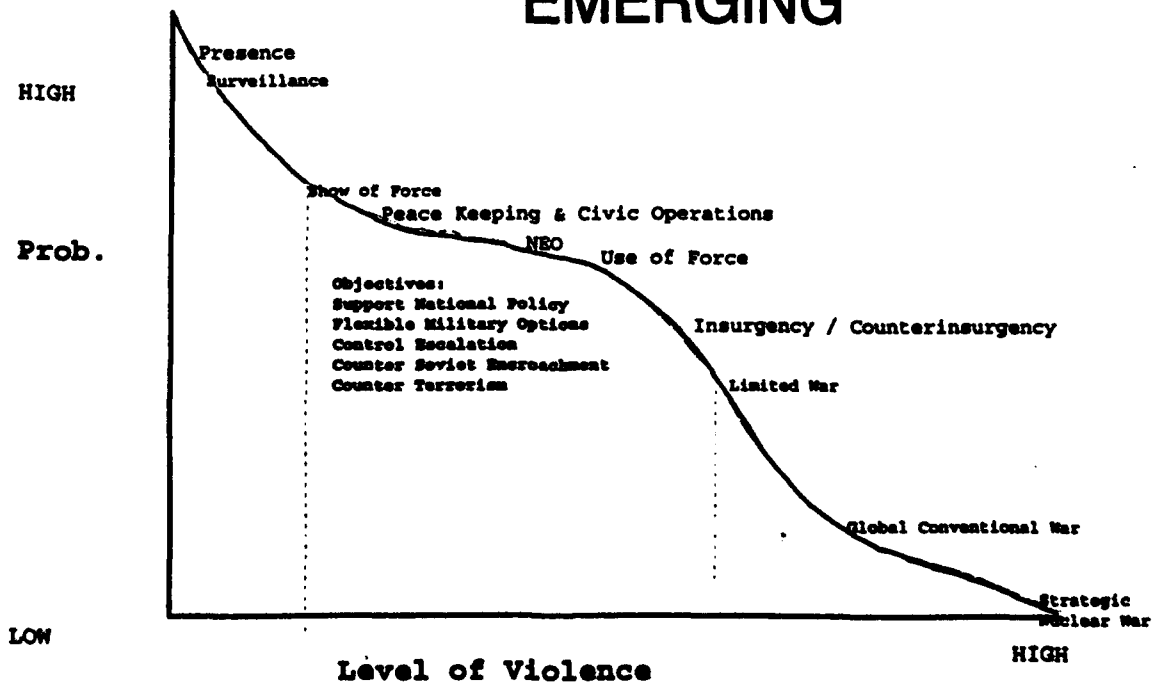


FIGURE 2.

The bulge in figure 2 reflects the changing philosophy that regional conflicts will become more prevalent. A recent Brookings Institution study reports that "amphibious forces were used in 33 percent of the incidents in which the U.S. was involved between 1945 and 1975. From 1988 to present this figure increases to an astonishing 70 percent¹⁰." Most strategic planners believe future major regional contingencies will occur as separate and distinct events. That is to say, there will not be a need for large scale, simultaneous U.S. intervention, at multiple locations, throughout the world. These contingencies will be small regional conflicts, limited in scope, and will most likely not involve full scale attacks on heavily defended beaches. In the past several years the Navy and Marine corps have teamed up to conduct countless special operations. These special operations have included evacuations such as Sharp Edge in Liberia, Eastern Exit in Somalia; and humanitarian assistance operations such as: Provide Comfort in northern Iraq, and Sea Angel in Bangladesh¹¹. There is no reason to believe that this tempo will subside.

AMPHIBIOUS HISTORY.

The need for a capable amphibious force has not always been a popular view shared by the military leaders of the United States. Traditional wisdom of the early 1900s decreed that any attack on fortified positions from the sea was doomed to failure. Britain's ill-fated attempt to invade the Dardanelles at Gallipoli in 1915 confirmed this traditional wisdom¹². In contrast, Liddell Hart called amphibious operations "the most important tactical innovation of the war¹³." General MacArthur proved the tactical viability of a seaborne force, when he bypassed the North Korean defenses and landed the Marines at Inchon in 1950¹⁴.

There is no doubt that the amphibious force needs to remain a vital capability in the arsenal of the Navy and our political leaders. A capable amphibious force is an instrument of national policy. It has both political and military ramifications associated with its use. An amphibious force can be used very effectively as leverage by the diplomats. An example of this political tactic can best be illustrated by this quotation from F. T. Watts Jr., "...before an amphibious force is committed, its presence provides the government with a means of supporting its foreign policy at a

place and under the terms of its choosing.¹⁵"

AMPHIBIOUS DOCTRINE.

The Navy's current amphibious doctrine was developed in the late 1950s and promulgated in 1962. It has not changed appreciably since then¹⁶. However, there has been a large change in technology in the last forty years. Littoral warfare is going to be the future mode of warfare. Raids from the sea will become a very effective tool of national diplomacy. The role of amphibious forces and the type of operations they will accomplish is expanding. These forces will be involved in presence operations, littoral warfare, evacuation of American citizens in troubled locations, and several other peacetime operations. The necessity to maintain this capability has never been more critical. According to Rear Admiral J. B. LaPlante "What we don't have in amphibious warfare is a game plan for doing these things. We have lots of players: the type commanders, the amphibious group commanders, the Washington players, OPNAV, and so forth...there are a lot of players, but if I can be glib, there's no coach, there's no manager¹⁷." This issue needs to be addressed and solved. As the Navy gets smaller, and the strategy "...From the Sea" becomes more entrenched, it is

estimated that 25% of the surface Navy will be amphibious ships¹⁸. Amphibious operations require a core of specialized ships, landing craft and helicopters, to meet the principal capability requirements of sealift; command and control, and communications and intelligence (C³I); and speed of off-load for both men and equipment. The modern amphibious ships being constructed meet these requirements. They possess tremendous operational capabilities that can offer the leadership another method of mission accomplishment. The lack of an up to date joint amphibious doctrine is the program's biggest weakness.

III. ECONOMIC CONSIDERATIONS.

WHERE DO WE GO FROM HERE?

Over the last two decades, the Navy has largely ignored the amphibious fleet choosing to purchase: aircraft, submarines, and combatant surface vessels. These decisions were predicated on the need to be prepared to battle the Soviet Union. Today the world finds itself in completely different circumstances than those four decades ago. The state of the economy and the required fiscal belt tightening will involve some very tough choices; not only for the administration, but also for the armed forces, and the Navy in particular. Choices that will directly affect the

composition, and operational capabilities of the amphibious fleet. These tough choices were begun over the last seven years and will continue into the future. The Navy has scheduled the retirement of 28 amphibious ships due to their age and material condition¹⁹. This retirement will mark the end of six classes of amphibians²⁰. The Navy has gone from approximately 540 ships to a current inventory of 410, and the forecast is to further reduce the force. This will reduce the number of aircraft carriers from a previous high of fifteen to a planned force of twelve. Rumors abound that the reduction might go as low as eight or nine CVBGs. This represents a tremendous cut in offensive power. Since aircraft carriers cannot be in two places at once, alternate methods of accomplishing the mission must be devised.

IV. OPERATIONAL CONSIDERATIONS.

TRADITIONAL WEAKNESSES OF AMPHIBIOUS FORCE SHIPS.

The Navy's historical approach to building amphibious ships has been to make them almost defenseless, and provide expensive combatant warships to escort and protect them in the amphibious operations area. A lack of speed has characterized the traditional amphibious vessel. The command and control equipment has been historically deficient.

An amphibious landing operation is a highly choreographed mission. It requires the best command and control, communication, computers, and intelligence processing equipment (C⁴I) available. Reliable communication is critical, to orchestrate the landing, coordinate material arrival and remain flexible during this complex event. Little regard has been given to procuring anti jam equipment to operate in this hostile environment and coordinate these events. The paucity of state of the art intelligence processing equipment has hampered the ARG in its autonomous role. The following paragraphs will discuss some of these weaknesses in greater detail.

COMMUNICATIONS.

Communications lies at the heart of every successful operation. It promotes flexibility, rapid reaction to enemy maneuvers, and helps coordinate problems. The important theme is that communications must be reliable, secure, rapid and flexible. The following is a partial listing of requirements that need to be met to fully enable an ATF. The required system must support the joint communications architecture as well as theater requirements. It must allow rapid data, image, and voice exchanges with the CINC and the NCA. The

World Wide Military Command and Control System (WWMCCS) teleconference net is the principal circuit for instant exchange of warfighting and operational messages between superiors and component commanders. Super high frequency systems are also needed to ease the traffic on UHF satellite based systems and provide reliable high quality images. The system must be "pull" oriented so that the war fighter can query the intelligence portion of the system and obtain required data without being innundated with superfluous information²¹. There is currently only one ship in the Navy that totally meets these requirements, the USS Coronado (AGF-11). According to Vice Admiral Jerry O. Tuttle, Director of Space and Electronic Warfare, "I wish the Coronado could have been part of the U.S. forces in Operations Desert Shield and Desert Storm. In my estimation the Coronado's C³I facilities, are the finest in the world. It has Inmarsat, SHF (Super High Frequency), UHF SATCOM (Ultra High Frequency Satellite Communications), and the first operational EHF (Extremely High Frequency) system." In order for the new amphibious ships to reach their fullest potential, and allow autonomous operations these communication issues must be addressed as soon as possible. Historically, these encrypted "high tech" satellite based systems have been reserved for the Navy's most

capable combatants. This can no longer be the rule. The world is changing, and the Navy's employment doctrine must change with it. The Navy cannot continue to do business as usual. It's time to break the historical mold and become innovative in our approaches to communications and future operations.

Hypothetically, let's assume after the military drawdown, the Navy will retain ten CVBGs and eleven Amphibious Ready Groups with embarked Marines (MARGs). Doesn't it make sense to have twenty one capable Battle Groups (of varying capabilities), than ten CVBGs and a bunch of troop transports which are incapable of autonomous operations except in the most benign environments.

MINE WARFARE.

This important facet of sea control has been neglected by the Navy for a long time. After Operation Desert Storm this shortcoming has received a great deal of attention. This was a hard lesson to admit, the world's most powerful Navy had lost control of the sea. To combat this problem Admiral Pearson has taken command of the newly established Mine Warfare Center. The Inchon (LPH-12) has just begun a long term conversion into the Navy's first large mine counter

measures platform at the Norfolk Naval Shipyard.

It's obvious that in the final stages of an amphibious landing the ATF must have the organic ability to sweep the approach lanes rapidly and efficiently. Without this capability the best planned and executed operations will be difficult and costly, and their success will be in jeopardy.

IMPORTANCE OF INTELLIGENCE.

Intelligence is probably the most necessary and important part of any contingency operation that is undertaken by amphibious forces. Intelligence organizations can help fill the void left by the reduction in forward deployed intelligence units, and platform retirements, by providing dependable indications and warning (I&W) to the National Command Authority (NCA). Early notification allows the nation sufficient time to mobilize their armed forces. It should be noted that planning on reliable advanced warning is both dangerous and foolhardy. This idea is mentioned to try to circumvent some of the lost capabilities due to the force reduction. Current U.S. indications and warning programs must become more efficient. They must adapt to the changing world scenarios. Our current intelligence network is highly structured. Advance warning relies heavily on space based

systems. This is extremely effective if you are facing a sophisticated enemy, who possesses the latest electronic technology. What do you do if the adversary does not possess this sophisticated equipment? The country's intelligence system must become more adaptive. One major deficiency in the intelligence agencies today is their lack of cooperation among themselves. These agencies must streamline their processes, discard their parochialism, and integrate their efforts into a cohesive service for use by the political leadership and the armed forces. The State Department's "country team" can be an extremely important source of information to the amphibious commander. The "country team" is in a unique position to provide information on the intangibles within the host nation: the mood of the people, the support of their leadership, and perceptions toward the U.S.. This timely information can also decrease American response time by providing early I & W. This information can be used to tailor the forces required to successfully carry out the mission.

The largest drawback to the ARGs ability to handle missions autonomously has been the lack of a true anti air warfare capability. Except for Radio-electronic combat, these traditional weaknesses are receiving great attention at NAVSEA and have for the last five years. The new and future

amphibious platforms are being constructed with more potent offensive and defensive capabilities. Only with these new initiatives can the Navy realize the full potential of their newest Battle Groups, the MARGs.

V. MODERN AMPHIBIOUS FORCES AND SHIPS.

The military strategist has recognized for a long time the need for an amphibious branch of the Navy. The lessons learned during World War II remain valid: "the need for close coordination of all arms, naval forces to secure the route to the beachhead, air power to secure the skies over the bridgehead, and finally ground troops to get ashore and establish a foothold on enemy territory²²." Put in these terms the amphibious operation sounds very simple, but it's not. An amphibious landing is one of the most demanding and complex operation's the Navy and Marine Corps performs. This type of operation must continually be practiced, to establish the coordination and the proficiency needed for successful execution. If it is not, this skill is quickly lost. There is a great difference between the troop transport ships of World War II and the modern amphibians of today. Today's ships are also front line combatant vessels. To do this job correctly you must have the right tools. The Navy has started

to construct the right platforms to enhance mission accomplishment. "These modern amphibious ships with their high speed, night fighting landing craft, and vertical takeoff and landing (VTOL) aircraft, truly offer the Commander Amphibious Task Force (CATF) and Commander Landing Force (CLF) more flexibility in their choice of ship-to-shore options²³." Modern amphibious platforms will consist of the following ships:

LHD/LHA (MULTI-PURPOSE ASSAULT SHIP)

LPD (AMPHIBIOUS TRANSPORT DOCK)

LKA (AMPHIBIOUS CARGO SHIP)

LPH (HELICOPTER ASSAULT SHIP)

LSD (DOCK LANDING SHIP (NEW WHIDBEY ISLAND CLASS))

LSD(CV) (DOCK LANDING SHIP CARGO VARIANT)

LX (NEW CLASS)

The following paragraphs will discuss the highlights of the modern amphibious ships, in an attempt to provide the reader with an operational insight into their new capabilities.

The LHD and LHA.

The LHD is the Navy's latest design of a multi purpose amphibious assault ship. Like its' predecessor the LHA these ships are intended to combine the capabilities of several

amphibious ships in a single hull. According to Rear Admiral J. B. LaPlante "An LHD is sized precisely to the requirements of an amphibious squadron commander and a marine expeditionary unit commander²⁴." The LHD is rated at 24 knots, making it one of the fastest ships in the ARG.

The main offensive and defensive air capability comes from 20 embarked AV-8B Harrier aircraft²⁵. This ship will be the centerpiece in the amphibious assault, much as the aircraft carrier is to the CVBG. The Harriers can deliver offensive air support to the marines, as well as provide anti air protection for the ARG. The Harrier will become a better anti air warfare (AAW) aircraft once it has been retrofitted with the APG-65 radar (scheduled for FY 95)²⁶. This radar is currently installed in the F-18 Hornet. This upgrade will remedy this long standing deficiency, the inability to locate an adversary beyond visual range.

State of the art automated status boards and sophisticated display monitors have also been retrofitted to help decision makers with their intelligence processing problems. These large screen displays and automated C⁴I systems are located in the Combat Information Center, the Landing Force Operation Center, and Flag Plot to monitor and support tactical operations²⁷.

The LHD has been specifically designed to operate with air cushion landing crafts (LCACs). This ship can carry four LCACs. They are a welcome addition to the amphibious force. They also will remedy problems that have plagued the Navy and Marine Corps for forty years. With a range of over 300 nautical miles and speeds of 40 knots (when carrying a 65-ton payload) they have expanded the battlefield²⁸. LCACs can reach 60+ knots when empty²⁹. Reconnaissance and surface surveillance will become an organic mission of this versatile platform. Covert intelligence missions, human intelligence (HUMINT) sorties, and special forces raids will be much easier to conduct successfully. Advantages in troop delivery from the amphibious ships using LCACs include:

- (1) A faster transit time to the beachhead.
- (2) 75 percent of the beaches will be available as a beachhead³⁰.
- (3) Time to disperse the troops will be expanded.
- (4) Logistic delivery schedule will be quicker.
- (5) Landing Force will not be exposed to beachhead defenses for as long during the transit to the beach.
- (6) Casualties will most likely be lower during an amphibious operation.

This added speed has complicated the adversary's ability to

pinpoint the amphibious landing area.

There are two primary reasons to conduct over-the-horizon (OTH) amphibious warfare. The first is to achieve a tactical advantage over enemy forces, and the second to counter threats to the amphibious task force³¹. OTH operations using LCACs are now a reality. The Navy has accepted delivery of 72 LCACs with another 20 scheduled to be delivered before to 1995³².

(See appendix A, pages 40-41, for the number of LCACs carried by each class of amphibian.)

Typical LCAC loads are:

- ** 250 combat equipped marines
- ** three AAVs
- ** five light armored vehicles
- ** one main battle tank & one LAV
- ** two M198 howitzers and prime movers
- ** twelve HUMVs³³

TABLE I.

Source: Antony Preston, "Amphibious Warfare in the 1990s," Naval Forces, April 1992, pp. 12-15.

An impressive capability no matter how you measure it! These improvements equate to enhanced tactical mobility, operational speed, and operational flexibility: the keys to success in maneuver warfare.

The LPD.

Decommissioning program is rapidly catching this class of ships. The amphibious transport docks have provided a majority of the lift capabilities since 1964. These ships are approaching the completion of thirty years of service. They will be replaced by the new LX design at the turn of the century (see LX below for details).

The LKA.

These ships are primarily used to carry heavy supplies for use in the amphibious assault. Their special design allows for rapid off-load of equipment and material into landing craft and helicopters in the combat environment. They are not capable of carrying the LCACs.

THE LPH.

The helicopter amphibious assault ship is capable of simultaneously inserting 600 marines ashore with its organic helicopter assets. A total of twelve AV-8B Harriers can operate from the large flight deck at the expense of several helicopters. This ship has extensive medical facilities including: operating rooms, X-ray, hospital ward, isolation

ward, laboratory, pharmacy, dental operating rooms, and large medical store rooms³⁴.

THE LSD-41 and LSD-41(CV) .

The LSD-41 class of ships are being constructed to replace the Thomaston class (LSD-28). They are the primary troop delivery ships that will support of the USMC. The cargo variant LSD-41(CV) will be similar to the LSD-41, but will have a smaller docking well to provide increased space for storage of supplies, vehicles, helicopters, and troops³⁵.

THE LX.

The LX will replace the 38 ships of the Austin (LPD-4), Raleigh (LPD-1), Anchorage (LSD-36), and Newport (LST-1179) classes, which reach the end of their service lives beginning in the mid 1990s³⁶. The LX will be able to embark a minimum of 700 troops, 25,000 cubic feet of cargo, four CH-46E helicopter equivalents, and carry two LCACs in the wet well³⁷. Once delivered, this group of ships will be the backbone of the amphibious forces for the next twenty five years. The first LX will be delivered in late fiscal year 2002. The anticipated force structures of the Navy's amphibious fleet can be seen in table II below.

**MODERN AMPHIBIOUS SHIP
INVENTORY**

SHIP	NUMBERS	DELIVERED	DELIVERY DATE OR REMARKS
LPH	7	7	REPLACED BY LHD ALL GONE BY FY 97
LHD	6	3	FY95/97/02
LX	12	0	FY 02-09
LSD-41	8	7	FY 93
LSD-49 (CV)	3	0	FY94/94/95/
LHA	5	5	IN-SERVICE UNTIL APPROX 2005-2010
LPD	11	11	DECOMMISSION 3 SHIPS FY96-97
LKA	5	5	DECOMMISSION 3 SHIPS FY92- 93

TABLE II.

Source: Pat G. McCartney, "Amphibious Fleet of
Tomorrow," Naval Forces, April 1992, pp. 69-70.

Jane's Fighting Ships, 1993, pp. 763,765.

The comments in the remarks block of table II, display how quickly the ships will be delivered to the fleet. The LPHs are reaching the end of their service life. All will be

retired by the end of 1997³⁸.

The LX will be the replacement for five classes of ships, and will consist of twelve platforms. The C⁴I suites placed aboard will be the best available at the end of the construction phase. Final determination will not be finalized until the turn of the century. This effort will ensure that the platform will not be technologically obsolescent before fleet introduction. The modern ARG C⁴I, as currently envisioned, will be based on the Copernicus system. This is a satellite based data and communication system that is much more capable than any currently fielded on any combatant today. This will remedy historical amphibious C⁴I deficiencies. The amphibious force construction programs will provide a minimum of eleven deployable ARGs with a surge capability that meets the Marine sealift requirement levied by the Department of Defense.³⁹

Originally the LX was configured to have a 5-inch gun, Standard Missile (SM-2) package, and a tomahawk vertical launch cruise missile system⁴⁰. A potent offensive and defensive capability. The Navy appears to be wavering on these requirements. They may reverse this decision and continue with the antiquated theory that big deck carriers and sophisticated combatants will protect the amphibs⁴¹. In these

times of austere funding, a declining carrier force, is it smart to put the eggs in this unprotected basket? If this is allowed to occur, the autonomous roles of these potent amphibious ships will be reduced, the result will diminish their ultimate potential and utility.

VI. CARRIER BATTLE GROUP MYTHS AND MISCONCEPTIONS.

The aircraft carrier has been the centerpiece and focus of naval thought and strategy for the last five decades. The ability to covertly arrive within striking distance of the enemy's homeland, and unleash the power of an air wing in the middle of the night, is a great strategic and tactical advantage, and a huge political bargaining chip. Most contingency missions assigned to the carrier battle group usually fall into one of these two broad categories: sea control (anti surface warfare, anti submarine warfare, anti air warfare, and space and electronic warfare) and power projection (strike). There are several myths and misconceptions that accompany the aircraft carrier mystic. The aircraft carrier cannot accomplish more than one major mission category at a time. The normal carrier launches about 100-120 sorties per day. It has a surge capability of approximately 150 sorties per day. The aircraft carrier

cannot sustain around the clock operations for more than about three consecutive days. It can perform all of the category missions well, but it must focus on only one at a time. This means that when the carrier and the battle group escorts are concentrating on fleet defense, they are unable to accomplish any other concerted mission.

VII. MISSION CONTRAST BETWEEN THE ARG AND THE CVBG.

The missions of both the ARG and the CVBG are quite similar. The difference appears to be in the type of conflict that each is maximized to win. The aircraft carrier was designed to deliver massive air power both on the open ocean as well as in the littoral regions. The ARG was designed to deliver combat troops to a foreign soil. The embarked MEU is the main combat power of the ARG. The ARG uses its air power as airborne artillery, close air support, troop delivery, logistics, and air interdiction in support of the land campaign. The carrier uses its air power for power projection and self-defense. Both are the means to an end - mission accomplishment. They just go about the task in a different manner.

Control of the air has always been a temporary victory. Once you have left the area, the air reverts to a neutral

battlefield. This is one of the major deficiencies inherent in the utilization of air power and the carrier battle group. The CVBG is unable to put troops on the ground and maintain control of the area that it has won. In contrast, the ARG can make a forcible entry, and control the terrain. Obviously, the enemy must be carefully evaluated as to his military potential, and the U.S. force must be tailored to meet that threat. The degree of U.S. military response is key to the selection of one force over the other. Each has its forte. The ARG possesses the ability to incrementally escalate the conflict with the insertion of ground forces of various sizes. The CVBG can escalate hostilities via the deep strike mission. If an airfield is available, the ARG's lack of a deep strike capability can be remedied by the introduction of an Air Force composite wing to lend support. This would allow the CVBG to continue to operate on other fronts or areas where the tactical luxury of a land based airfield was not available.

VIII. MISSIONS FOR THE MODERN ATF.

The national interests have become entwined with the aims and aspirations of newly emerging and underdeveloped nations. The importance of having a visible reminder of democracy to these nations usually falls on the armed forces. These

reminders take many forms from presence to armed combat. The modern ARG can accomplish many of these missions admirably within the spectrum of low intensity conflict. The ARG is ideally suited for noncombatant evacuation operations (NEO), Insurgency and counterinsurgency operations, peace keeping and civic action, and presence operations.

NONCOMBATANT EVACUATION OPERATIONS.

NEO operations are most capably handled by an ARG because of its ability to deploy troops on the host nation's terrain to direct the evacuation and protect the civilians. NEO operations are usually characterized as low intensity conflicts and rarely involve prolonged conflict between major armed forces. One of the biggest problems with this type of operation is the "come as you are mentality," and the lack of a unified doctrine for NEO operations. "The current frustration with NEO operations today can be summarized by the first line of the 101st Airborne Division's (AASLT) NEO Handbook: Currently there is no standard doctrine available for the guidance in the conduct of Noncombatant Evacuation Operations (NEO).⁴²"

INSURGENCY & COUNTERINSURGENCY.

Insurgency and Counter-insurgency operations are extremely similar. Often it depends on which side of the fence you are on, the good guys or the bad. These operations require troops on the ground to accomplish the mission. These operations usually last a long time and require a large involvement of U.S. and foreign government coordination.

PEACE KEEPING AND CIVIC OPERATIONS.

Peacekeeping operations are normally associated with NATO directives or at the direction of the NCA. These operations can be dangerous because the enemy is difficult to identify. "Civic action should be recognized as a formidable requirement certain to confront amphibious forces committed in support of political objectives."⁴³ Several examples are readily available to illustrate this point: Somalia, Grenada, and Panama.

PRESENCE OPERATIONS.

Presence operations can be as simple as a port visit by the ARG, or as complicated as helping the U.S. Ambassador complete a country plan. These operations help show the U.S. flag and can have a beneficial impact on the civilians of the

host country. These visits can have many purposes. The mission for the ARG needs to be fully articulated before the event. Presence operations can be used to either enhance the national government's stature or tear it down. This can be done by the manner the mission is accomplished and the message being sent by the NCA. Large public affairs' gains can be made by goodwill and simple forms of assistance: building a school, repainting an orphanage. These events also help foster the positive image of democracy and enhance the U.S. image.

The ARGs missions should center on the necessity to put armed forces on the ground. If the air threat is minor the modern ARG is as capable as the CVBG. The added benefits of incremental escalation and controlling terrain seem to favor ARG selection in these instances. The previous examples have shown the ARG fully capable of accomplishing the mission.

AMPHIBIOUS FORCE MIX.

Each of the above missions can be effectively completed by an appropriate amphibious force mix. The mix of the different ships capabilities can be broken down to effectively develop a generic ARG. This basic cell can then be used to tailor the force to the situation. Each ship can then be used

to its fullest potential. The factors required to evaluate the needs of each mission are: troop strength, gross lift requirements, number of troop delivery vehicles, air power requirements, command and control, and intelligence information handling equipment. Although the actual concerns are many more, a basic assessment of requirements can be made in this manner.

These requirements can be met with the following ship mix: one LHD, one LSD-41, and one LSD-41(CV) or one LX when available. This basic unit matches lift capabilities with operational requirements. Shortly the Navy will be capable of fielding eleven of these ARGs. This three-ship ARG/MEU(SOC) team provides a force of choice to the NCA. From this concept, it may be deduced that if the threat is more powerful than the capabilities of the ARG, it can easily be augmented by the addition of two or three additional cells. This Amphibious Task Force (3 ARGs) would still be less costly than a single CVBG (See Table 3 for cost analysis). Increases in Marine strength are portrayed in appendix B, page 42.

IX. FINANCIAL CONSIDERATIONS.

The CVBG is the most expensive Navy unit that can be deployed to a troubled region. The reduction in carrier force

assets dictate the need for alternate methods of mission accomplishment. The requirement to defend military units against an attack with modern sophisticated weapons appears remote. This allows the Navy an opportunity to accomplish assigned tasks with proportionality and economy of force. Implicit in this statement is mission accomplishment as quickly as possible and at minimum expense. The force that is chosen can be a powerful messenger to the host country of U.S. resolve. There are times when the country needs to send its most capable forces. This expression of national will and resolve should only be used in the most serious circumstances to ensure the national message is clear and completely understood. The cost of sending a CVBG on a six-month deployment is as follows:

SIX-MONTH DEPLOYMENT
(SHIP O & M ONLY)

<u>CVBG</u>		<u>MARG</u>	
1 CV/CVN	\$15.4M	1 LHD/LPH/LHA	\$2.6M
3 CG/CGN	\$ 9.9M	1 LSD/LPD	\$1.9M
1 DD/DDG	\$ 7.4M	3 LST/LX	\$4.1M
3 FF/FFG	\$ 9.3M		
2 AE/AO/AOR	\$ 4.4M		
-----		-----	
11 SHIPS	\$46.4M	5 SHIPS	\$8.6M
TOTAL CVBG + ARG= \$55.0M			

TABLE III.

Source: Naval War College Global Gaming Center, January 1993.

Note: The ATF (3 ARGs) is only 60% of the cost of a single CVBG.

Another solution or method of obtaining the requisite force mix is to designate a scaled down CVBG that will accompany the amphibious ships.

SIX-MONTH DEPLOYMENT
(SHIP O & M ONLY)

CV + AMPHIBIOUS FORCE

1 CV/CVN	\$15.4M
2 CG/CGN	\$ 6.6M
1 DD/DDG	\$ 3.7M
2 AE/AOR	\$ 4.4M
1 LHD	\$ 2.6M
1 LSD	\$ 1.9M
8 SHIPS	\$34.6M

A Savings of: \$11.1M

TABLE IV.

Source: Naval War College Global Gaming Center, January 1993.

Note: These charts are based on the U.S.S. America's Battle Group deployment expenses.

It is obvious from these figures, that force tailoring for the task is the most important factor in balancing capabilities to the mission.

ALTERNATE USES FOR THE ARG SAVINGS.

The savings realized by proper force selection can be significant. The following ideas are submitted to put these savings to work to enhance the operational capabilities of the amphibious force and the Navy as a whole.

a. Most exercises only test a part of the amphibious mission. Rarely do "hot wash up" report writers discover the many critical lessons learned during an operation. Only through a complete testing of an amphibious landing, can the discrepancies be discovered and the weaknesses remedied. This test must include planning, force notification, embarkation, transit, amphibious landing, equipment off-load, and return. Granted an exercise of this type is expensive, but the savings and informational gains can be very large as well. The adage "train like you will fight" has never been more appropriate. Only through exercises of this magnitude can the Navy - Marine Corps team become more efficient in amphibious warfare.

b. The reduction in aircraft carriers will mean that we tax our remaining units to excess. This has been the mode of the past and there is no evidence to suggest that it will not continue in the future. By allowing the ARG to share some national commitments, will allow the CV/CVNs to remain not only in strategic reserve, but will also reduce the strain on

their equipment. This savings should translate into aircraft carriers that are in a better material condition, ready to respond to contingencies. Did anyone notice that there were no nuclear powered carriers involved in operation Desert Storm?

X. CONCLUSIONS.

The modern ships of today's Amphibious Ready Group possess a tremendous capability. The following conclusions are based on the evidence presented in the preceding pages.

a. The carrier force will be reduced. Although the number of carriers has not been decided, it can be confidently assumed that it will be less than the current number of fourteen. This will reduce the flexibility of the operational forces.

b. Amphibious warfare will play an increased role in the future as a means of accomplishing national objectives.

c. The Navy's amphibious warfare doctrine is obsolete and needs to be updated. Doctrine must be developed that will reflect the flexibility, mobility, and advanced technology available in these new amphibious platforms, and prepare the force for the 21st century.

d. Intelligence collection equipment and intelligence

personnel must update their ability to gather information on third world countries.

e. The complete C⁴I systems must be carefully architected to support joint interoperability and provide full Battle Group Capabilities to each MARG.

f. The Amphibious Ready Group with the embarked Marines will transmit a strong message to the host nation. The ARG has the unique ability to put the man on the ground if necessary, an advantage not available to the traditional CVBG.

g. The Amphibious Ready Group is capable of offering the National Command Authority another option for mission accomplishment.

h. The financial savings of an Amphibious Ready Group compared to the Carrier Battle Group is substantial. Often the mission can be accomplished with a 60-70 percent savings.

i. The expense saved could be used to fund realistic full scale amphibious training exercises which could test the team's joint capabilities and the entire amphibious doctrine.

j. Ordering the Amphibious Ready Group to the low intensity conflict will allow the CVBG to remain in strategic reserve for other missions.

k. The Carrier Battle Group would remain in better material condition, due to the reduced necessity of sending it

to every hot spot.

l. The amphibious team in a presence mission is a powerful deterrent to pending hostilities. "The capacity for graduated response will remain one of the principal characteristics and advantages of the amphibious technique insofar as its employment as an instrument of foreign policy is concerned."

m. The sealift capability mandated by DOD is barely being accomplished, this deficiency will not be rectified in the next decade unless large capital expenditures are authorized.

n. The Navy must continue to develop a viable Mine Warfare capability.

o. The Amphibious Ready Group has demonstrated flexibility and sustainability during recent contingencies. These new ships have a proven record of accomplishment.

The following are disadvantages of using the ARG instead of the CVBG.

a. The intelligence estimate of the enemy's combat power must be accurate. This is especially critical in the case of the air threat.

b. The ARG does not possess a concentrated deep strike capability.

c. The MEB and MEF must have a suitable airfield that is capable of supporting the elements that fly into the theater in support of the Marine forces.

XI. RECOMMENDATIONS.

The following recommendations are needed to fully develop the synergism within the amphibious Ready Group.

a. The Navy's amphibious doctrine needs to be updated to take advantage of changes in flexibility, mobility, and advanced technology.

b. The Navy needs to conduct more full scale amphibious exercises that will test and develop the capabilities of the amphibious doctrine, identify deficiencies, and enhance the joint capabilities of the Navy-Marine Corps team. These exercises must be full scale from the on-load to the actual landing.

c. The amphibious team must be given more aggressive roles in foreign policy operations. The Navy must break this traditional mold.

d. A joint NEO doctrine must be developed that will guide the services in this, increasing frequency, operation.

e. Shipbuilding programs should be reevaluated to analyze the impact of multiple year slides in previously

authorized construction authorizations.

APPENDIX A

AMPHIBIOUS SHIPPING CHARACTERISTICS

TYPE & CLASS	DISP. IN TONS	SPEED IN KNOTS	WEAPONS	HELO'S	LANDING CRAFT	TROOPS CAP. (FT ²)
LPH IWO JIMA	18,000	23	2 SPARROW 2 CIWS 4x3in	20 CH-46	NONE	1746
LHA TARAWA	39,300	24	2 SPARROW 2 CIWS 3x5in	26 CH-46	1 LCAC 1 LCM-8 6 LCM-6 (4) LCU1600	1700
LHD WASP	40,533	23	2 SPARROW 3 CIWS	20 AV-8B 42 CH-46	3 LCAC or 12 LCM-6	1894
LPD AUSTIN	16,900	21	2X3in 2 CIWS	6 CH-46	2 LCAC	930
LSD-41 WHID- BEY ISLAND	15,726	20+	2 CIWS	LDG AREA	4 LCAC 21 LCM-6	338 17,500 CARGO
LX	20,000	23	1X5in 1(SM-2) VLS TOM AHAWK 2 CIWS	4 CH-46	2 LCAC	700 25,000 CARGO
LST NEWP- PORT	8,450	20	4x3in 1 CIWS	LDG AREA	AAV'S	420

NOTE: Helicopter and Landing craft details are illustrative; there are many permutations.

The LSD-49 has the same general characteristics as the LSD-41 (CV).

Source: M. H. H. Evans, AMPHIBIOUS OPERATIONS: The Projection of Sea Power Ashore (London: 1990), pp. 138-139.

NUMBER OF LCACs
per
SHIP CLASS

WASP CLASS LHD -----	3 EACH
TARAWA CLASS LHA -----	1 EACH
THOMASTON CLASS LSD -----	3 EACH
ANCHORAGE CLASS LSD -----	4 EACH
WHIDBEY ISLAND CLASS LSD ----	4 EACH
HARPER'S FERRY CLASS LSD ----	2 EACH
RALEIGH CLASS LPD -----	2 EACH
AUSTIN CLASS LPD -----	2 EACH

Source: Antony Preston, "Amphibious Warfare in the 1990s," Naval Forces, April 1992, pp. 12-15.

APPENDIX B

MARINE UNITS & EQUIPMENT

The Marine Expeditionary Unit (MEU).

The MEU contains approximately 1,900 Marines and 100 Navy personnel embarked on three to five amphibious ships.

GCE Battalion Landing Team
 5 Tanks
 8 81mm Mortars
 32 Dragon Trackers
 8 TOW Launchers
 12 AAVs
 8 155mm Howitzers (Towed)
 9 60mm Mortars
 20 50 cal. Machine Guns
 60 M-60 Machine Guns
 26 Mk-19 40mm Grenade Launchers

ACE Composite Squadron
 2 KC-130
 12 CH-46
 4 CH-53
 4 UH-1
 4 AH-1
 6 AV-8
 15 Stinger Teams

CSSE Service Support Group
 Supplies and Equipment for 15 days⁴⁵

The Marine Expeditionary Brigade (MEB).

The MEB contains about 15,000 Marines, 700 Navy personnel and is embarked on twenty to twenty five ships.

GCE Regimental Landing Team
 17 Tanks
 24 81mm Mortars
 96 Dragon Launchers
 48 TOW Launchers
 47 AAVs
 36 LAVs
 114 Mk-19 40mm Grenade Launchers
 24 155mm Howitzers (Towed)
 6 155mm Howitzers (Self-Propelled)
 6 8in Howitzers (Self-Propelled)
 27 60mm Mortars
 138 50 cal. Machine Guns
 255 M-60 Machine Guns

ACE Marine Air Group
 40 AV-8
 24 F/A-18
 10 A-6
 4 EA-6
 4 RF-4
 6 KC-130
 6 OV-10
 12 Hawks
 45 Stinger Teams
 16 CH-53E
 24 CH-53D
 48 CH-46
 12 UH-1
 12 AH-1
 5 OA-4

CSSE Brigade Service Support Group
 Supplies and Equipment for 30 days⁴⁶

The Marine Expeditionary Force (MEF)

The MEF contains approximately 49,700 Marines and 2,600 Navy personnel. They are embarked aboard fifty six amphibious ships.

GCE	Marine Division
	70 Tanks
	72 81mm Mortars
	288 Dragon Launchers
	144 TOW Launchers
	208 AAVs
	147 LAVs
	345 Mk-19 40mm Grenade Launchers
	90 155mm Howitzers (Towed)
	18 155mm Howitzers (Self-propelled)
	12 8in Howitzers (Self-Propelled)
	81 60mm Mortars
	435 50 cal. Machine Guns
	601 M-60 Machine Guns
ACE	Marine Air Wing
	60 AV-8
	48 F/A-18
	20 A-6
	8 EA-6
	9 OA-4
	12 KC-130
	12 OV-10
	90 Stinger Teams
	16 C-53E
	32 C-53D
	60 C-46
	24 UH-1
	24 AH-1
	16 Hawks
CSSE	Force Service Support Group
	Supplies and Equipment for 60 days ⁴⁷

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