Assessment of Naval Core Capabilities

Jerome J. Burke, Project Leader
Grant Sharp
Alfred Kaufman
Patricia Cohen
This work was conducted under contract DASW01-04-C-0003, Task BJ-55-2994, for the Secretary of the Navy's Office of Program and Process Assessment and the Under Secretary of Defense (Intelligence). The publication of this IDA document does not indicate endorsement by the Sponsoring Office, nor should the contents be construed as reflecting the official position of that Agency.


This material may be reproduced by or for the U.S. Government pursuant to the copyright license under the clause at DFARS 252.227-7013 (NOV 95).
Assessment of Naval Core Capabilities

Jerome J. Burke, Project Leader
Grant Sharp
Alfred Kaufman
Patricia Cohen
PREFACE

This document was prepared by the Institute for Defense Analyses (IDA) for the Secretary of the Navy’s Office of Program and Process Assessment and the Under Secretary of Defense (Intelligence), in partial fulfillment of the task Subject Matter Expert (SME) Support Services. The study attempts to define a naval core capability and to propose a consolidated list of naval core capabilities in priority order. The study proposes a methodology for quantifying “credible capability” for each core capability and recommends study topics for the Department of the Navy analytical agenda.

Admiral Dennis Blair, USN (Ret.), General Carl Fulford, USMC (Ret.), and Vice Admiral Phillip Balisle, USN (Ret.) served as consultants to this study. Technical Review performed by RADM Richard B. Porterfield, USN (Ret.).
ASSESSMENT OF NAVAL CORE CAPABILITIES

EXECUTIVE SUMMARY ........................................................................................................... 1

THE BRIEFING .......................................................................................................................... 3
- Context of the IDA Study ........................................................................................................ 4
- SECNAV/OPPA Tasking ........................................................................................................ 7
- IDA Analysis ................................................................................................................................ 8
- Four core capabilities ............................................................................................................. 9
- Examine Core Capabilities ..................................................................................................... 13
- realignment of naval core capabilities .................................................................................... 16
- Enablers of Core Capabilities .................................................................................................. 17
- Priority Order of Core Capabilities ......................................................................................... 19
- The Defense Planning Construct ............................................................................................ 20
- Planning Priorities and Core Capabilities ................................................................................ 21
- Priorities of Core Capabilities .................................................................................................. 23
- Alternative 1 Core Capability Priorities .................................................................................... 24
- Priorities of Naval Core Capabilities ....................................................................................... 26
- OPPA’s Follow-on Tasks .......................................................................................................... 28
- Mapping Operational Forces to the Core Capabilities .......................................................... 29
- Credible Capability and How to Quantify It ............................................................................. 30
- Methodology for Quantifying “Credible Capability” ............................................................... 31
- Data Sources ............................................................................................................................ 33
- Demonstration .......................................................................................................................... 34
- Recommended Analytic Agenda ............................................................................................... 36
- Conclusions and Recommendations ......................................................................................... 38
- References .................................................................................................................................. R-1
EXECUTIVE SUMMARY

The Navy and Marine Corps use the term “Core Capabilities” as convenient shorthand for explaining what they do uniquely to secure the nation. After the initiation of the War on Terror, additional core capabilities have found their way into various authoritative Department of the Navy (DoN)\(^1\) documents. Concerned with the lack of consistency between the various lists of naval “core capabilities,” the Secretary of the Navy’s Office of Program and Process Appraisal (OPPA) tasked IDA to provide an independent assessment. The study proposes a consolidated list of naval core capabilities in priority order. The order of priority is responsive to current DoD planning priorities:

- **First – Strategic Deterrence (Redefined).** Maintaining at sea a credible deterrent threat must remain the most important core capability of the DoN.

- **Second – Maritime Security/Irregular Warfare (New).** Developing and maintaining the ability to seek out and destroy the terrorist at sea or ashore should remain the second priority core capability.

- **Third – Power Projection (Enduring).** DoN must retain the capability to project combat power from sovereign U.S. platforms at sea. Power projection is also a key element in deterring and, if deterrence fails, fighting a conventional or irregular warfare campaign.

- **Fourth – Sea Control (Enduring).** The ability to control, selectively, ocean areas against highly capable adversaries is fundamental.

- **Fifth – Forward Deterrence/Assurance (Redefined).** DoN forces operating worldwide strengthen partnerships, deter adversaries, and provide national security decision-makers significant flexibility in the selective application of maritime power.

The study proposes a methodology for quantifying “credible capability” for each core capability and recommends study topics for the DoN analytical agenda.

The study recommends that the DoN give even greater emphasis to a strategic communications campaign to document the roles the Marine Corps, Navy Special

---

\(^1\) Department of the Navy (DoN) includes both the U.S. Navy and U.S. Marine Corps. Similarly, unless specifically stated otherwise, “naval” refers to both the U.S. Navy and U.S. Marine Corps.
Warfare, and naval power projection forces have played in the success of the War on Terror.

Greater emphasis also needs to be placed on developing the analytical frameworks for striking an appropriate balance between the current focus on the War on Terror and future threats.
Assessment of Naval Core Capabilities

Institute for Defense Analyses
January 15, 2009
Context for Undertaking the Study

- Application of naval core capabilities to the War on Terror
- Simultaneous requirement to surge for major conventional conflict
- Impacts of recession on DoD/DoN budget

Current frameworks for examining naval capabilities, requirements and forces are not aligning well.

CONTEXT OF THE IDA STUDY

*The Congress shall have Power ... To provide and maintain a Navy*

– Article 1 Section 8 U.S. Constitution

In keeping with this constitutional mandate, the American public looks to its Navy and Marine Corps to keep the peace and to fight and help win the nation’s wars. Having emerged from World War II as the world’s pre-eminent naval power, the Navy and Marine Corps advanced what are termed “Core Capabilities” as convenient shorthand for explaining what it does to secure the nation.\(^1\) While we have been unable to find a consistent definition of “core capability,” as used by the Navy and Marine Corps, the term suggests the specific, enduring attributes realized by the:

- Types and numbers of maritime forces acquired,
- Military and civilian workforce,
- Basing structure, loosely termed the “shore establishment,”

---

\(^1\) Unless specifically stated otherwise, “naval” refers to both the U.S. Navy and U.S. Marine Corps.
• Aggregate body of knowledge (e.g., history, strategy, policies and procedures, doctrine, tactics), and

• Operational competencies developed to employ these forces in actual combat and in peacetime.

Together, these “things,” “people,” and “concepts” define the Navy and Marine Corps within their constitutional mandate, their roles in the nation’s security structures and in the perceptions of friends, allies, and adversaries. These core capabilities are enduring, having been proven in combat over decades if not centuries. As such, they define what the Navy and Marine Corps do uniquely – they make the Navy and Marine Corps what they are and who they are.

Traditionally, the Navy and Marine Corps have identified four core capabilities: Sea Control and Power Projection, which have a distinctive “fight the nation’s wars” focus; and Forward Presence and Deterrence, which, while founded in the combat capabilities of sea control and power projection, had until the outbreak of the War on Terror a distinctive peacetime focus. These four “core capabilities” are useful in serving as focal points for the development of maritime strategies for the employment of current forces, for the planning and procurement of future forces, the education and training of the military and civilian workforce, and the maintenance of the image of the Navy and Marine Corps in the eyes of friend and foe alike.

Three factors have emerged, however, to call into question the Navy and Marine Corps’ ability to execute fully these core capabilities.

• First, as America’s War on Terror enters its eighth year, the nation and its Navy and Marine Corps have encountered adversaries less readily, visibly or easily influenced by several naval core capabilities. The deterrent effect of the Navy’s at-sea ballistic missile submarines and anti-ballistic missile defense forces means little to Al Qaid’a. Although there is a maritime component to terrorist activities in certain parts of the world, the terrorist at sea, posing a threat to off-shore oil platforms or infiltrating a nation for terrorist attack (e.g., Mumbai), poses a much different maritime challenge to the Navy’s core capability of Sea Control than World War II or Cold War adversaries. The terrorist has challenged the core capability of Forward Presence through the actual execution of a terrorist attack on USS Cole (October 12, 2000, Aden, Yemen) and the resultant redirection of focus to port security and ship protection under the newly emergent core capability of “Maritime Security.” Navy and Marine Corps Power Projection remains a potent weapon in the War on Terror. Yet the 25,000 Marines deployed in Iraq, and more than 10,000 Navy Individual Augmentees deployed in the
Theater are disaggregated from the maritime base from which the Navy and Marine Corps have traditionally projected combat power.

- Second, although preparing for major conflict is a second order priority in current DoD planning guidance behind Fighting the War on Terror and Defending the Homeland, the Navy and Marine Corps must still plan for major conflict. Secretary of Defense Gates recently noted that “U.S. air and sea forces have ample untapped striking power should the need arise to deter or punish aggression – whether on the Korean Peninsula, in the Persian Gulf, or across the Taiwan Strait … Other nations may be unwilling to challenge the United States’ fighter to fighter, ship to ship, tank to tank. But they are developing the disruptive means to blunt the impact of U.S. power, narrow the United States’ military options, and deny the U.S. military freedom of movement and action.”

- Third, the United States is in a major economic recession. While significant sums are being appropriated for economic stimulus and recovery, the DoD budget is not likely to increase. The incoming Administration has already indicated the “supplemental appropriation,” the principal vehicle for funding the Iraq War, will no longer be used, with war funding likely being rolled into DoD Operations and Maintenance accounts. The Army, Marine Corps, and National Guard face significant costs in refitting and replacing equipment used in the ground wars in Iraq and Afghanistan. Many DoD procurement programs are experiencing significant cost increases. Thus, there is concern the Navy shipbuilding and aircraft procurement accounts will be used to offset current and projected expenses for ongoing wartime operations and recapitalization.

Based on the foregoing, it appears the current frameworks for examining capabilities, requirements, and forces are not aligning well.

Required Tasks and Related Questions

- Examine and prioritize Department of the Navy (DoN) “core capabilities” in terms of current and projected DON requirements as expressed by naval component commanders
  - Are core capabilities identified in the Maritime Strategy the right capabilities on which the Navy and USMC should be focusing?
  - What should be the relative priority of these capabilities given current and future threats?

- Develop high level “best fit” mapping of forces to these core capabilities

- Propose methodology for quantifying “credible capability” for each of these capabilities. Make recommendations, as applicable, for DoN analytic agenda and structure

Naval core capabilities are defined as those capabilities that are enduring and essential to the primary functions of naval forces.

SECNAV/OPPA TASKING

The Secretary of the Navy’s Office of Program and Process Appraisal tasked IDA to provide an independent assessment of the Navy and Marine Corps core capabilities by addressing three issues.

- Examine and prioritize Department of the Navy (DoN) “core capabilities” against current and projected DoN requirements as expressed by Naval Components.
- Develop high level “best fit” mapping of forces to these core capability areas.
- Propose methodology for quantifying “credible capability” for each of these areas. Make recommendations, as applicable, for DoN analytic agenda and structure.

The motivation for the study was the sponsor’s concern with the lack of consistency between the various lists of naval core capabilities that have recently appeared in a number of authoritative DoN documents. The study has therefore attempted to define a core capability and to propose a consolidated list of naval core capabilities in priority order.
Examine Naval Core Capabilities

- Naval Core Capabilities in DoN documents
- Realigning Naval Core Capabilities
- Identify Core Capability Enablers

IDA ANALYSIS

In order to answer the first task, we identified the sources of the Navy and Marine Corps core capabilities. We then examined these core capabilities and, as a result, developed a series of recommendations to realign them. Equally important was the identification of what we term “core enablers.” These are the warfare areas, the specialized mission areas and their supporting systems (e.g., missiles, aircraft, and ships of a specific type) as well as logistics, Intelligence, Surveillance and Reconnaissance (ISR), command, control and communications (C3) and other supporting systems that provide the means to execute the core capability.
FOUR CORE CAPABILITIES

Four core capabilities – Sea Control, Power Projection, Deterrence, and Forward Presence – have been part of the U.S. naval lexicon for generations. Indeed our research found references to these capabilities in the yearly reports of the CNO to the Secretary of the Navy in the immediate post-WWII era.

In recent years, especially after the initiation of the War on Terror, additional core capabilities, Maritime Security and Humanitarian Assistance/Disaster Relief were incorporated. We used four authoritative documents as the definitive sources for naval core capabilities:

- **A Cooperative Strategy for 21st Century Seapower** – An unclassified exposition of the nation’s maritime strategy as developed and approved by the Chief of Naval Operations, the Commandant of the Marine Corps, and the Commandant of the Coast Guard. Issued for public release in October 2007.

- **Naval Operations Concept 2008 (NOC 08)** – Fifth Draft – Describes how, when, and where U.S. naval forces will contribute to preventing conflict and prevailing in war in order to guide maritime strategy implementation. When published, NOC 08 will be issued under the signatures of the Chief of Naval Operations.
Operations, the Commandant of the Marine Corps, and the Commandant of the Coast Guard.

- *Navy Strategic Plan in Support of Program Objective Memorandum 2010 of 05 November 2007* – Translates strategy into strategic guidance for the development of POM-10 and reflects the strategic priorities of the Chief of Naval Operations. As such it is a Navy-only document.

- *Marine Corps Vision and Strategy 2025* – states as its purpose “…to inform all Marines where we intend to take our Corps, to give combatant commanders a concept of how we might best be employed, and to provide our civilian leadership a reference point as to how to see Marine Corps contributions to national defense in the coming years and decades.” While no analogous “core capabilities” are described, the document describes six “core competencies,” which the Marine Corps states “…reflect our particular skill sets and thus describe what we do.” The six “core competencies” of the U.S. Marine Corps are:

1. The Corps conducts persistent forward naval engagement and is always prepared to respond as the Nation’s force in readiness.
2. The Corps employs integrated combined arms across the range of military operations, and can operate as part of a joint or multinational force.
3. The Corps provides forces and specialized detachments for service aboard naval ships, on stations, and for operations ashore.
4. The Corps conducts joint forcible entry operations from the sea and develops amphibious landing force capabilities and doctrine.
5. The Corps conducts complex expeditionary operations in the urban littorals and other challenging environments.
6. The Corps leads joint and multinational operations and enables interagency activities.\(^3\)

These four enduring core capabilities, identified in the four authoritative Department of the Navy documents noted above, are readily understandable and have been used to describe, justify, plan and program naval capabilities for decades.

**Current Core Capabilities**

In recent years, Maritime Security has been added to the list of core capabilities, as a product of the War on Terror. Maritime Security is defined as the creation and maintenance of security at sea, which is essential to mitigating threats short of war, including piracy, terrorism, weapons proliferation, drug trafficking, and other illicit

---

activities. Briefly looking at the Navy’s history, the principal reason for establishing a Navy in the first place was to deal with the Barbary pirates of the Mediterranean.

Humanitarian Assistance (HA) and Disaster Response (DR) were only recently added to the list of core capabilities. U.S. naval forces have historically provided medical aid, sustainment, and disaster recovery. In 2004, many operating forces of the Seventh Fleet, including a Carrier Strike Group and a hospital ship, provided immediate medical and disaster assistance to coastal regions of Indonesia, which were ravaged by a typhoon. A year later, the Navy deployed significant resources to facilitate the recovery of New Orleans, Louisiana, after Hurricane Katrina. As a result, HA/DR has been incorporated into the baseline set of core capabilities.


In our view, HA/DR and Security Cooperation are the products of the traditional core naval capabilities. Essentially, by maintaining naval forces in a forward posture, they will be able to respond to non-combat natural disasters as required. Hospital ships were acquired and are maintained to provide medical care to U.S. personnel wounded in combat. The ability to divert or deploy hospital ships, or other ship types, to provide medical care to non-combatants is another way to employ the core capability – power projection.

Similarly, security cooperation – sharing professional advice and assistance, formalized training, and foreign military sales – has its own bureaucratic apparatus within the Defense Department, in which naval forces participate. As such, we consider security cooperation to be a product of core naval capabilities and an essential element of U.S. diplomacy.

Civil Military Operations, Counterinsurgency, Counterterrorism, Combating Weapons of Mass Destruction make up, among other missions, the general area of Irregular Warfare, which we will examine later in the report.

Air and Missile Defense at the tactical level are components of what is best termed Integrated Air and Missile Defense, which is a core capabilities enabler. At the strategic level, Missile Defense is considered part of Strategic Deterrence.

Information Operations, like C4ISR, enable the core naval capabilities.
Concerning the Marine Corps, the Commandant of the Marine Corps is a signatory of *A Cooperative Strategy for 21st Century Seapower* and will sign the final version of the *Naval Operations Concept 2008 (NOC 08)*. Headquarters, U.S. Marine Corps, has worked closely with the Navy Staff in the development of these documents. We conclude the Marine Corps concurs with the naval core capabilities described in these documents. Based on our review of *Marine Corps Vision and Strategy 2025*, it is clear the Marine Corps supports most directly naval core capabilities Power Projection, Forward Presence, and Deterrence.
EXAMINE CORE CAPABILITIES

During the process of reexamining the core capabilities, we concluded Sea Control and Power Projection are very well defined, are clearly understood, and require no realignment. Concerning Forward Presence, Deterrence and Maritime Security, however, we concluded a realignment was necessary in order to describe more definitively what the nation looks to its naval forces to accomplish in war and peace.

Forward Presence describes a general state of naval forces when they are homeported overseas or deployed from a U.S. homeport or base. We believe the revised term Forward Deterrence/Assurance is more descriptive of the desired effects obtained from maintaining Navy and Marine Corps forces overseas. Forward Deterrence is a conventional analog to Strategic Deterrence. Immediately after the end of World War II, the Navy and Marine Corps deployed forward to the Mediterranean, the western Pacific, and the Persian Gulf – areas where the United States had then, and continues to have, significant strategic interests, commitments to allies, and dangerous potential adversaries. These forward presence operations deter conventional and irregular threats to regional stability and render powerful U.S. military forces immediately available should...
conventional deterrence fail or a regional crisis suddenly arise. The mere presence of these forces assures America’s friends and allies of our willingness to commit significant U.S. military forces in the region to support them.

Furthermore, QDR 2006 would appear to refine the traditional core capability of forward presence by introducing the concept of “shaping the choices of countries at strategic crossroads.” Specifically:

The choices that major and emerging powers make will affect the future strategic position and freedom of action of the United States, its allies, and partners. The United States will attempt to shape these choices in ways that foster cooperation and mutual security interests. At the same time, the United States, its allies, and partners must also hedge against the possibility that a major or emerging power could choose a hostile path in the future.4

As captured in the term **Forward Deterrence/Assurance**, Navy and Marine Corps forces are ideally suited to operationalize this concept of shaping

When used to describe a core capability, **Deterrence** connotes a desired behavior created in the mind of a potential adversary by, among other things, power projection and sea control capabilities of naval forces and the national will to use these capabilities. Deterrence could be achieved at the strategic or conventional levels, as has been done successfully since the end of World War II. Deterrence of irregular warfare adversaries, especially the role of naval forces in doing so, is less well understood. **Strategic Deterrence** is defined as the prevention of nuclear war and aggression or coercion threatening vital interests of the United States and/or our national survival. **Strategic Deterrence** convinces nation state adversaries that they should not take grievous courses of action by exerting secure, unambiguous, decisive influence over their decision making. **Deterrence** was refined to define specifically **Strategic Deterrence** as a single, core naval capability because it is a vital national mission that is accomplished uniquely by the highly survivable SSBN force. Strategic deterrence also includes the Navy’s sea based missile defense when deployed to defend against missile attack targeted against the U.S.

**Irregular Warfare** was added to **Maritime Security** because naval forces have realigned their Tactics, Techniques and Procedures (TTP), training, organization, personnel assignments, resources, and outfitting to counter insurgencies in Iraq and Afghanistan. This effort devoted to more effective irregular warfare operations has been

---

underway for about five years. We believe it is time to recognize the naval focus on irregular warfare capabilities is a major driver of priority investment in naval capabilities as well as a major contributor to DoD strategic priorities.
REALIGNMENT OF NAVAL CORE CAPABILITIES

The realignment of naval core capabilities is shown.

- **Forward Deterrence/Assurance** is more descriptive of the desired effects obtained from maintaining Navy and Marine Corps forces overseas.

- **Strategic Deterrence** is a single, core naval capability because it is a vital national mission that is accomplished uniquely by the highly survivable SSBN force. Strategic deterrence also includes the Navy’s sea-based missile defense when deployed to defend against missile attack targeted against the U.S.

- **Maritime Security** and **Irregular Warfare** describe more accurately the full range of naval irregular warfare capabilities.
### Naval Core Capability Enablers

<table>
<thead>
<tr>
<th>Enablers</th>
<th>Forward Deterrence/Accuriance</th>
<th>Strategic Deterrence</th>
<th>Sea Control</th>
<th>Power Projection</th>
<th>Maritime Security / Irregular Warfare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Systems, Intelligence, Surveillance &amp; Reconnaissance, IO, C4, Electronic, Cyber&amp;Space</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Naval Expeditionary Combat&lt;sup&gt;1&lt;/sup&gt;</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Navy &amp; USMC Special Warfare</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Submarine Launched Ballistic Missile</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sea-based BMD</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASW, Surface Warfare, Integrated Air &amp; Missile Defense, Mine Warfare</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strike Warfare</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

<sup>1</sup> Naval Expeditionary Combat includes USMC and USN capabilities such as amphibious forces at sea and forces committed ashore for a range of missions including irregular warfare/counterinsurgency assignments in Iraq and Afghanistan

### ENABLERS OF CORE CAPABILITIES

We describe “enablers” – the aggregation of specific systems and weapons, the operators, the bodies of knowledge about that capability – that together determine the level of performance achievable by core capabilities.

All the enablers shown here were considered as candidates for designation as a core capability. During the process of reviewing and realigning core capabilities, these enablers, though highly important, were not considered core capabilities according to the definition used for a core capability.

We acknowledge the significant role joint systems have in enabling naval core capabilities. For example, U.S. Air Force tankers are critical to executing many Navy power projection operations. Information, especially information derived and disseminated through joint systems, describes and defines overall knowledge of the operating environment. Information comprises those systems, disciplines (e.g., intelligence, meteorology, information technology) and warfare areas (e.g., information operations, cyber warfare) that enable core capabilities and all other enablers, and without which or even in a degraded state would limit or impede successful performance.
Information is listed first because it affects the level of performance of all core capabilities.

Naval Expeditionary Combat enables all core capabilities except Strategic Deterrence. Naval expeditionary combat capabilities enable irregular warfare operations; they contribute to maritime security; they are a main component of Power Projection and Forward Deterrence/Assurance.

Because of their recent subordination to the Special Operations Command, Navy and Marine Corps Special Warfare are considered separate and distinct from Naval Expeditionary Combat. Navy and Marine Corps Special Warfare also enable all core capabilities except Strategic Deterrence.

The submarine-launched ballistic missile, with its attendant SSBN force, nuclear weapons, highly trained personnel dedicated to this specific system and mission, and shore-based supporting infrastructure (e.g., TACAMO C3) make up the enabler for Strategic Deterrence.

As the Navy develops an operational at-sea ballistic missile defense system, it becomes not only an enabler of strategic deterrence against limited ballistic missile attack aimed at the homeland, but also, when used in a regional defense context, an enabler of forward deterrence/assurance.

The warfare areas – antisubmarine warfare, integrated air and missile defense, mine countermeasures – determine the level of performance achievable in sea control when meeting a specific threat.
Establish Priority Order of Core Capabilities

PRIORITY ORDER OF CORE CAPABILITIES

Having redefined and realigned the core capabilities, our analysis then focused on the order of priority that DoD planning priorities imposed on the realigned list of core capabilities.
Prioritizing Naval Core Capabilities
Using the 2006 QDR Defense Planning Construct

- Priorities of naval core capabilities can be determined by what naval forces are required to do
- The 2006 QDR Defense Planning Construct (DPC) represents what is currently required by DoD
- Therefore, priorities of naval core capabilities will be aligned with DoD planning priorities represented by DPC
- Table at right is created from QDR DPC text description of objective areas and associated activities

THE DEFENSE PLANNING CONSTRUCT

QDR 2006 noted that, based on a number of considerations that had emerged since QDR 2001 (completed before September 11, 2001), DoD had refined its Force Planning Construct, dividing its activities into three objective areas: Homeland Defense, War on Terror/Irregular (Asymmetric) Warfare, and Conventional Campaigns. Within each of these areas, DoD conducts activities in a steady-state as well as to surge forces episodically. These are described in the graphic on the left side of the slide. The table on the right side of the slide shows these same objective areas with the objective area activities aligned below each of them. We used these as the baseline against which we arrayed the realigned core capabilities.

---

Planning Priorities

- Three alternative sets of planning priorities created from DPC objective areas
- Illustrates (in the following slides) how priorities of naval core capabilities change depending upon the order of planning priorities
- Priorities of naval core capabilities in this assessment will be aligned with current DoD planning priorities that are focused on meeting priority threats and scenarios

Strategic Emphasis Is Reflected in Order of Planning Priorities

<table>
<thead>
<tr>
<th>Alternative 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority 1: Defend the Homeland - Win War on Terror</td>
</tr>
<tr>
<td>Priority 2: Conventional Campaigns - Surge</td>
</tr>
<tr>
<td>Priority 3: Conventional Campaigns – Steady State</td>
</tr>
</tbody>
</table>

• Reflects current strategic emphasis on WOT & defending the homeland

<table>
<thead>
<tr>
<th>Alternative 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority 1: Conventional Campaigns – Steady State</td>
</tr>
<tr>
<td>Priority 2: Conventional Campaigns - Surge</td>
</tr>
<tr>
<td>Priority 3: Defend the Homeland - Win War on Terror</td>
</tr>
</tbody>
</table>

• Reflects a possible change in strategic emphasis to forward deterrence and assurance

<table>
<thead>
<tr>
<th>Alternative 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority 1: Conventional Campaigns - Surge</td>
</tr>
<tr>
<td>Priority 2: Defend the Homeland - Win War on Terror</td>
</tr>
<tr>
<td>Priority 3: Conventional Campaigns – Steady State</td>
</tr>
</tbody>
</table>

• Reflects a possible change in strategic emphasis to increase readiness for conflict with a regional peer

PLANNING PRIORITIES AND CORE CAPABILITIES

For purposes of our analysis, we established three alternative sets of planning priorities for the three QDR 2006 objective areas, each alternative responding to one specific way in which planning emphasis can be distributed over the three objective areas.

- **Alternative 1** – This alternative reflects the current emphasis and planning priorities of the Secretary of Defense.

- **Alternative 2** – This alternative reflects a strategic environment where the commitment of major ground forces to the War on Terror has ended, and naval forces return to a steady state posture emphasizing forward deterrence and assurance. Within this alternative, the ability to surge to deal with two near simultaneous contingencies remains a second priority, while defending the homeland and fighting the war on terror assumes a third internal priority.

- **Alternative 3** – This alternative reflects another analytical excursion, where the commitment of forces to the War on Terror has lessened but the war has not ended entirely. The first priority is the maintenance of a capability to surge conventional forces to deal with two nearly simultaneous contingencies.
As a third priority, naval forces return to a posture emphasizing for deterrence and assurance.
### Priorities of Core Capabilities

The following priorities of naval core capabilities are aligned to DoD planning priorities:

- Lines with arrows originate from the naval core capability and point to the DoD planning priority that the core capability largely supports.
- 1. Strategic Deterrence supports Defend the Homeland.
- 5. Forward Deterrence / Assurance supports Conventional Campaigns – Steady State.

---

### Priorities of Core Capabilities

<table>
<thead>
<tr>
<th>Alternative 1</th>
<th>Priority 1</th>
<th>Priority 2</th>
<th>Priority 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Defend the Homeland - Win War on Terror</td>
<td>Conventional Campaigns - Surge</td>
<td>Conventional Campaigns – Steady State</td>
</tr>
</tbody>
</table>

---

### PRIORITIES OF CORE CAPABILITIES

Having established these three alternatives, we arrayed the realigned core naval capabilities against each of them. As will be shown in the following slides, the priority of the core capabilities changed with each planning alternative, which demonstrates the inherent flexibility of Navy and Marine Corps forces to satisfy multiple planning scenarios and alternatives in both a steady state and surge.
ALTERNATIVE 1 CORE CAPABILITY PRIORITIES

We focused on Alternative 1 and prioritized core capabilities to reflect the planning emphasis it represents. The resulting order of priority is:

1. Strategic Deterrence
2. Maritime Security/Irregular Warfare
3. Power Projection
4. Sea Control
5. Forward Deterrence/Assurance

Enablers were then aligned in priority order within each core capability.

Strategic Deterrence and Maritime Security/Irregular Warfare receive their priority as they contribute directly to Defense of the Homeland and the War on Terror, which is planning priority one in this alternative. Strategic deterrence comes first because nuclear attack remains an existential threat to the nation. Because it ensures the survival of the United States, it is considered the most important core capability throughout the analysis.
**Power Projection** supports the War on Terror (WOT) when/where land-based capabilities are unavailable or insufficient and therefore follows them in order of priority. Power projection capabilities also deter and conduct *conventional campaigns – surge*.

**Sea Control** contributes to the final two planning priorities and hence follows Power Projection.

**Forward Deterrence/Assurance** is aligned with conventional campaigns – steady state.
Priorities of Naval Core Capabilities

PRIORITIES OF NAVAL CORE CAPABILITIES

We recommend the following overall priorities for naval core capabilities:

- **First Priority – Strategic Deterrence.** The nuclear weapon remains the only weapon that can threaten the viability of the United States as a nation. Accordingly, maintaining at sea a credible deterrent threat to hold nation state potential adversaries armed with such weapons at risk and maintaining at sea the ability to engage a limited missile attack must remain the most important core capability of the Navy. Terrorists with nuclear weapons and, more generally, the proliferation of nuclear weapons and nuclear weapon technology pose an entirely different challenge.

- **Second Priority – Maritime Security/Irregular Warfare.** Based on current Defense Planning Guidance, the Navy and Marine Corps will be heavily engaged in the War on Terror for the foreseeable future. Accordingly, developing and maintaining the ability to assist legitimate governments in their War on Terror and to seek out and destroy the terrorist at sea or ashore should remain the Navy and Marine Corps second priority core capability.

- **Third Priority – Power Projection.** The War on Terror imposes new requirements for Navy and Marine Corps power projection forces. As a third priority, the Navy and Marine Corps must retain the capability to employ their
considerable combat power when and where other forces might not be readily available or sufficient. Power projection is also a key element in deterring and, if deterrence fails, fighting a conventional campaign. These sovereign forces at sea also provide the National Command Authority (NCA) significant, flexible strategic options for the selective, secure employment of U.S. military power overtly or covertly without foreign bases.

- **Fourth Priority – Sea Control.** The ability to deny, selectively, ocean areas against highly capable adversaries and the corollary capability to use the oceans in wartime are fundamental to being able to execute conventional campaigns and provide an important component to deterrence.

- **Fifth – Forward Deterrence/Assurance.** Navy and Marine Corps forces operating worldwide strengthen partnerships, deter adversaries, and provide national security decision-makers significant flexibility in the selective application of maritime power.

These realigned core capabilities are now prioritized to be responsive to DoD’s current strategic emphasis as well as, over the longer term, retaining the Navy and Marine Corps capabilities to prevail in conflict.
Address Following SOW Tasks

- Develop high level “best fit” mapping of forces to these core capability areas
- Propose methodology for quantifying “credible capability” for each of these areas.
- Make recommendations, as applicable, for DON analytic agenda and structure

OPPA’S FOLLOW-ON TASKS

Having established these priorities, we then addressed OPPA’s follow-on tasks:

- Develop high level “best fit” mapping of forces to these core capability areas
- Propose methodology for quantifying “credible capability” for each of these areas
- Make recommendations, as applicable, for DoN analytic agenda and structure.
# High Level “Best Fit” Mapping of Operational Forces to Core Capability Areas

<table>
<thead>
<tr>
<th>Naval Core Capabilities</th>
<th>Forces Employed in Core Capability</th>
<th>Enablers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Strategic Deterrence</td>
<td>• SSBN</td>
<td>• Submarine launched ballistic missile</td>
</tr>
<tr>
<td></td>
<td>• BMD capable surface combatants</td>
<td>• BMD</td>
</tr>
<tr>
<td></td>
<td>• Surface combatants, LCS, future vessels, air vehicles</td>
<td>• ISR, IO, C4, Cyber &amp; Space Superiority, EW</td>
</tr>
<tr>
<td></td>
<td>• Naval expeditionary combat forces, Navy &amp; USMC SOF, SSGN, Naval Expeditionary Combat Forces (EOD, Maritime Expeditionary Security, Riverine, Diving Operations, Naval Construction, Maritime Civil Affairs, Expeditionary Training, Expeditionary Logistics, Expeditionary Intelligence, Combat Camera, Expeditionary Combat Readiness)</td>
<td>• ISR, IO, C4, Cyber &amp; Space Superiority, EW</td>
</tr>
<tr>
<td>2. Maritime Security / Irregular Warfare</td>
<td>• Carrier Strike Group</td>
<td>• ISR, IO, C4, Cyber &amp; Space Superiority, EW</td>
</tr>
<tr>
<td></td>
<td>• Expeditionary Strike Group</td>
<td>• Strike Warfare</td>
</tr>
<tr>
<td></td>
<td>• Naval expeditionary combat forces</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Surface combatant</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• SSN/SSGN</td>
<td></td>
</tr>
<tr>
<td>3. Power Projection</td>
<td>• Carrier Strike Group</td>
<td>• ISR, IO, C4, Cyber &amp; Space Superiority, EW</td>
</tr>
<tr>
<td></td>
<td>• Surface Combatant</td>
<td>• ASW, SUW, IAMD, Mine Warfare</td>
</tr>
<tr>
<td></td>
<td>• SSN</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Maritime Patrol Aircraft</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Mine Countermeasures</td>
<td></td>
</tr>
<tr>
<td>4. Sea Control</td>
<td>• Forward deployed forces including: CSG, ESG, Surface Combatant, SSN/SSGN, MCM, Naval expeditionary combat forces</td>
<td>• All enabling capabilities from the other core capabilities except strategic deterrence</td>
</tr>
<tr>
<td>5. Forward Deterrence / Assurance</td>
<td>• Forward deployed forces including: CSG, ESG, Surface Combatant, SSN/SSGN, MCM, Naval expeditionary combat forces</td>
<td></td>
</tr>
</tbody>
</table>

## MAPPING OPERATIONAL FORCES TO THE CORE CAPABILITIES

The purpose of this table is to list the forces that contribute to achievement of core capabilities. Enablers are shown because they affect the level of performance of the forces employed to achieve core capabilities.

There are many highly capable, multi-mission forces. Those forces are assigned to multiple core capabilities. Typically, these highly capable multi-mission forces also possess multiple enablers. This poses a challenge when attempting to relate resources to naval core capabilities.

The force list for Maritime Security/Irregular Warfare includes a detailed list of the Naval Expeditionary Combat capabilities because they are an important Navy contribution to the WOT. They are also an area where extensive attention, organizational realignment, and resources have been made to contribute to a high DoD priority. The DoN analytic agenda includes an assessment to determine whether the present capabilities satisfy Combatant Command (COCOM) and other requirements.
CREDIBLE CAPABILITY AND HOW TO QUANTIFY IT

In order to define “credible capability,” it is necessary to develop a methodology to quantify the term.
METHODOLOGY FOR QUANTIFYING “CREDIBLE CAPABILITY”

Shown is a proposed methodology for quantifying “credible capability” for each core capability. Requirements for force planning are driven currently by the Secretary of Defense Guidance for the Development of the Force (GDF). Priorities, assumptions, constraints, and resources in the GDF govern development of overall capabilities especially in size and scope. COCOM requirements delineate the missions required to initially identify naval tasks. Analysis of threats and their implications on performing tasks are required to identify naval capabilities and their level of performance necessary to accomplish missions specified by COCOMs. Comparing existing to required capabilities and their respective performance permits identifying capability gaps.

Finding alternative solutions to identified gaps is usually a combination of material and non-material measures. Typically, analysis of a mix of alternative operational concepts and material solutions is required to converge on a cost-effective way to achieve “credible capability.” This convergence is accomplished by tradeoff analysis of core capability performance, cost, and risk of the alternative operational concepts and solutions.
The process is iterative as it converges on what constitutes “credible capability.” Frequent interaction with subject matter experts and decision-makers and access to relevant data are necessary to perform and facilitate these analyses.
Sources of Data for “Credible Capability” Analyses

**Near-term requirements/capabilities**
- COCOMs are sources for near-term operational requirements
  - Naval components can provide rationale for employment of naval forces for COCOM

**Mid to long-term requirements/capabilities/performance**
- Defense planning scenarios and vignettes are a source for developing requirements and capabilities across the spectrum of operations
  - Sources include Operational Availability (OA-Year) series of annual studies
- OA-08 is analysis of demand and availability of forces for the full spectrum of operations
  - Postulates 7 year periods that combines a sequential and concurrent mix of MCOs, irregular wars of OIF/OEF magnitude, smaller crises, with a routine forward deterrence/assurance posture
- Known sources for analyses for conventional capabilities/performance
- Survey of other sources is needed that will inform determining “credible capability” particularly for maritime security / irregular warfare

**DATA SOURCES**

Sources of data to perform analyses intended to quantify “credible capability” are essential and enable application of the methodology. The Operational Availability (OA) studies mentioned and supporting analyses performed by the DoN are a source of information for the analyses of core capabilities that are particularly applicable to major conventional campaigns.

For those core capabilities that contribute to countering irregular threats, there are fewer data available. The Joint Staff is developing an OA study for Irregular Warfare. Recognizing the difficulty in doing so, as an interim measure, a survey of data available to support analyses of all core capabilities is needed. The survey should also include the availability of modeling techniques that could be applied to analysis of irregular warfare.
DEMONSTRATION

This demonstration relies on the analysis and results of OA-05. OA-05 developed the information for the following tasks: determine requirements; analyze missions and identify required tasks; analyze threats; analyze tasks and identify required capabilities and performance. The demonstration will use the information developed by OA-05 for these analytical activities.

OA-05 uses 2012 capabilities that are neither extant nor required.

OA-05 identifies broad capability gaps in sea control. Where necessary, the demonstration will provide increased definition to the capability gaps. In addition, the demonstration will postulate capability solutions to the capability gaps as well as alternative operational concepts when deemed desirable.

The demonstration will identify the key factors affecting the tradeoffs of capability performance, cost, and risk that would influence the choice of “credible capability” for sea control for this scenario.
The demonstration will not explicitly compute performance and costs for alternative solutions, but will make estimates when data are readily available. Most of the readily available data may come from analysis performed by N-81 to support OA-5.

The objective of the demonstration would be to exercise the proposed methodology and refine it, while producing a rough estimate of “credible capability.”
Recommended DoN Analytic Agenda:
Seek Answers To These Questions

- What are the quantified levels of “credible capability” for naval core capabilities? What are the performance, risk, and cost tradeoffs of achieving “credible capability”?
  - Maritime security/irregular warfare should have priority in determining “credible capability”
- What mix of surface vessels, combatants, air vehicles, and supporting systems most effectively accomplish maritime security tasks while fulfilling other high priority missions?
  - The term surface vessels signifies ships with capabilities limited to those necessary to perform the tasks required by maritime security missions
- Do Navy expeditionary combat capabilities meet COCOM requirements?
  - If not, what are the tradeoffs between capability performance, risks, and costs of meeting requirements?
- What mitigation/risk reduction measures are needed to maintain the readiness of core capabilities to respond to changes in strategic emphasis
  - For example, what should be the high priority R&D efforts that should be initiated and preserved?
- What force posture would improve timelines of naval response for conventional campaigns requiring a surge?
  - What are the alternatives for basing that would improve response timelines?
  - What are the alternatives for permanently deployed capabilities overseas manned by rotating crews?
  - What are the tradeoffs of benefits, costs, and risks associated with these alternatives to improve response timelines?

RECOMMENDED ANALYTIC AGENDA

High on the recommended DoN analytical agenda should be answering the question: what is “credible capability” for naval core capabilities? Knowledge in this area will be helpful for future decisions on the size and makeup of naval forces. Maritime security and irregular warfare are areas where it is urgent to answer questions about “credible capability” because it is one of the main contributors to DoD’s current top priority objective. Embedded in the question of “credible capability” for irregular warfare is investigation of the adequacy of Navy expeditionary combat capabilities to meet COCOM requirements worldwide.

In parallel with addressing the first agenda item, the appropriate mix of existing and future capabilities necessary to accomplish maritime security requirements should be addressed. The DoN analytic agenda should therefore include an assessment of the worldwide requirement for Maritime Security capabilities. Maritime security requirements are uniquely naval and global in scope, and require integration across COCOM boundaries.
Risk is going to increase in naval core capabilities where resources are inadequate to address solutions to critical gaps because of DoD priorities. Risk reduction measures can be initiated so that events triggering a change in DoD priorities can be met by the naval forces with increased responsiveness.

Improving timelines of naval response for conventional campaigns requiring a surge may be a means for closing critical gaps. Tradeoff of alternative force posture effectiveness, costs, and risk would be necessary.
Conclusions and Recommendations

- **Strategic deterrence and maritime security/irregular warfare are the current highest priority core capabilities of naval forces**
  - These priorities are responsive to current Secretary of Defense Guidance for the Development of the Force (GDF) and Guidance for the Employment of the Force (GEF)
  - Sea and land-based strategic deterrence capabilities will be decided by SECDEF
- **Maritime security recommendations:**
  - Emphasize these enablers: maritime domain awareness, intelligence, surveillance and reconnaissance designed to portray and pinpoint irregular threats
  - Field C2 capability needed to integrate activities of foreign navies and coastal security forces
  - Assess the mix of existing larger ships, LCS, future smaller vessels, and air vehicles to accomplish the world-wide maritime security mission
    - Future vessels tailored solely for regional maritime security tasks should be considered
  - Train and educate officers on employment of naval capabilities to perform maritime security
    - Refresher training for officers assigned to COCOM, naval component, and numbered fleet staffs
- **Irregular warfare recommendations:**
  - Continue providing naval expeditionary combat capabilities responsive to the emerging needs of ongoing irregular warfare operations
  - Field USN expeditionary combat capabilities responsive to requirements in Afghanistan and elsewhere

CONCLUSIONS AND RECOMMENDATIONS

The current focus of DoD planning guidance is winning the War on Terror. The foregoing analysis demonstrates that certain naval core capabilities play a key role in this war, especially the newly merging core capability Maritime Security/Irregular Warfare. We recommend the DoN give even greater emphasis to a strategic communications campaign to document the roles Navy and Marine Corps forces have played in the success of the war effort.

Maritime security is highly dependent on pinpointing and characterizing the operations of irregular groups and threats. Operations of irregular groups typically occur in the littoral with its high concentration of commercial traffic providing cover for these irregular groups. Effective maritime domain awareness, intelligence, surveillance, and reconnaissance focused on satisfying the requirements of the maritime security mission are a critical enabler of achieving credible capability.

Effective command, control, and communications (C3) is needed to support worldwide operations in conjunction with the foreign maritime forces to meet irregular
warfare challenges at sea. Maritime security is an international mission accomplished largely with the capabilities of foreign states integrated wherever possible by the U.S.

An assessment of a mix of surface and air-based capabilities to accomplish maritime security should account for the level of performance of Information and related capabilities as well as what foreign navies and coastal defense forces can provide.

There are pockets of excellence and expertise in maritime security. Based on interviews, there is a need to broaden the expertise so that operational staffs have the necessary expertise to plan and execute maritime security operations with complex maritime security challenges over a broad and varied oceans area such as CENTCOM.

Over the longer term, the nation will continue to rely on the enduring core capabilities of the Navy and Marine Corps. Greater emphasis needs to be placed on developing the analytical frameworks for striking an appropriate balance between the current focus and future threats.
The Navy and Marine Corps have traditionally advanced what are termed “Core Capabilities” as convenient shorthand for explaining what they do uniquely to secure the nation. After the initiation War on Terror, additional core capabilities found their way into various authoritative Department of the Navy documents. Concerned with the lack of consistency between the various lists of naval “core capabilities,” the Secretary of the Navy’s Office of Program and Process Appraisal (OPPA) tasked IDA to provide an independent assessment. The study attempts to define a core capability and to propose a consolidated list of naval core capabilities in priority order. The study proposes a methodology for quantifying “credible capability” for each core capability and recommends study topics for the Department of the Navy analytical agenda. The study recommends that the Department of the Navy give even greater emphasis to a strategic communications campaign to document the roles the Marine Corps; Navy Special Warfare; intelligence, surveillance and reconnaissance; and naval power projection forces have played in the success of the war effort. Greater emphasis also needs to be placed on developing the analytical frameworks for striking an appropriate balance between the current focus on the War on Terror and future threats.
The Institute for Defense Analyses is a non-profit corporation that administers three federally funded research and development centers to provide objective analyses of national security issues, particularly those requiring scientific and technical expertise, and conduct related research on other national challenges.