DEPLOYING BEYOND THEIR MEANS
AMERICA'S NAVY AND MARINE CORPS AT A TIPPING POINT

BRYAN CLARK
JESSE SLOMAN
Global navies accompany global interests

Dutch, Spanish, and British had worldwide reach, combat credibility, access, and ability to maintain multiple “hubs”

Countries that were once part of British Empire
Forward presence more difficult to sustain with shrinking fleet and costlier personnel & maintenance
Is the Navy nearing a “tipping point?”

A shrinking fleet sustaining 100 deployed ships since 1998

Sources: CSBA Analysis and CNA Study “The Navy at a Tipping Point: Maritime Dominance at Stake?”
Marine Corps deployed at its limit today

MRF-Darwin

Unit Deployment Program Rotation

III MEF Forward Stationed

SPMAGTF-South

3x Afloat MEUs

SPMAGTF-CR-CENTCOM

SPMAGTF-CR-AFRICOM

Black Sea Rotational Force

USMC Active Force Structure FY16

- Infantry Battalions: 24
- Artillery Battalions: 9
- Tank Battalions: 2
- Combat Engineering Battalions: 2
- MARSOC Raider Battalions: 3

Assumes current OPTEMPO and budget levels above BCA caps

Amphibious Ships

- 38: Optimal amphibious fleet size
- 33: Economy amphibious fleet size

Manpower Requirements

- Deployed Afloat
- Deployed Ashore
- Total Deployed
- Minimum Force Requirement for 1:2 D2D
- AD Operating Forces

 FY16 FY21 FY26 FY31 FY36

Manpower Requirements FY2011-2020

38: Optimal amphibious fleet size
33: Economy amphibious fleet size

38
35
30
25
20

140000
120000
100000
80000
60000
40000
20000
0

High OPTEMPO affecting readiness & morale

USS Essex unable to fulfill mission for 2nd time in seven months

By Matthew M. Burke
Stars and Stripes
Published February 1, 2012

SASEBO NAVAL BASE, Japan — For the second time in seven months, mechanical or maintenance issues have prevented the USS Essex from meeting a commitment at sea, Navy officials said Wednesday.

The 21-year-old flagship of the forward deployed Expeditionary Strike Group 7 was scheduled to depart several days ago for Cobra Gold 2012, an annual exercise with Thailand. The mission was scrapped due to an equipment failure.

Congress Considers the Carrier 'Gap'

By Christopher P. Cavas

Assessing the Fleet: The 2014 Navy Retention Study
AUGUST 2014
By CDR Guy Snodgrass

On March 7, 2014, a self-directed study was emailed to Vice Admiral Bill Moran, the U.S. Navy’s Chief of Naval Personnel. Titled “Keep a Weather Eye on the Horizon: A Navy Officer Retention Study,” the paper provided Vice Admiral Moran with a canary in the coal mine, describing a looming retention downturn using historical data and, perhaps most importantly, timely and relevant information based on primary source interviews with hundreds of U.S. Navy Sailors.

Report: Maintenance of overseas-ported ships growing problem for Navy

By Wyatt Gilson
Stars and Stripes
Published Feb. 7, 2015

Reports of degraded maintenance on U.S. Navy ships in years, with the core homeported ships of the U.S. Fleet, repeatedly delayed, according to a report. Congress, accounts worse, the Navy has no plan to deal with it.

Ship crews face litany of maintenance problems

VIRGINIA BEACH, VA — The atmosphere was one of frustration and uncertainty at a surface fleet centered on growing demand and diminishing funds.

Washington, D.C. — As much as the Marine Corps wants to increase its deployment-to-dwell ratio from the current 1:5 to the more sustainable 1:1, Assistant Secretary of the...
# Options to sustain overseas naval presence

<table>
<thead>
<tr>
<th>Deploy longer or more often</th>
<th>Already exceeding planned length and frequency</th>
<th>Possible with appropriate maint. And compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build more ships</td>
<td>Shipbuilding plan exceeds historical funding</td>
<td>Can shift to less expensive presence ships</td>
</tr>
<tr>
<td>Base forces overseas</td>
<td>Expanding in Rota, Guam, Bahrain, Japan</td>
<td>Can expand further in Japan, Australia, Guam, Europe</td>
</tr>
<tr>
<td>Change force packages</td>
<td>Could more efficiently meet demand</td>
<td>Need ways to train and equip wider “menu” of force packages</td>
</tr>
</tbody>
</table>

More shipbuilding a long-term answer, but forward basing could be expanded in near-term
Naval forces rotationally train and maintain

Marine Corps Force Generation Process (Variable Length)

- Deployment
- Redeployment
- Synchronization
- Force Generation
- Pre-deployment Training

Carriers / Surface Craft: Optimized Fleet Response Plan (36 mos)

- Deployment
- Sustainment
- Maintenance & Basic Training
- Integrated Training
- Stand Down

Submarines (24 months)

- Deployment
- Sustainment, Rest & Maintainence
- Pre-Overseas Movement

Forward Deployed CG/DDG (12 months)

- Deployment
- Maintenance & Training

Amphibious Ships (27 months)

- Deployment
- Sustainment
- Maintenance
- Basic Training

...but the Navy has been unable to execute its plans
### Will the Navy be able to grow the fleet?

<table>
<thead>
<tr>
<th></th>
<th>Navy Plan</th>
<th>$13 Billion Alternative</th>
<th>$11.5 Billion Alternative</th>
<th>$10 Billion Alternative</th>
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<tbody>
<tr>
<td></td>
<td>2020</td>
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<td>2040</td>
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<td>Carriers</td>
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<td>10</td>
<td>11</td>
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<tr>
<td>Large Surface Combatants</td>
<td>95</td>
<td>95</td>
<td>85</td>
<td>95</td>
</tr>
<tr>
<td>Attack Submarines</td>
<td>51</td>
<td>42</td>
<td>47</td>
<td>51</td>
</tr>
<tr>
<td>Amphibious Ships</td>
<td>33</td>
<td>36</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Small Surface Combatants</td>
<td>33</td>
<td>52</td>
<td>56</td>
<td>33</td>
</tr>
<tr>
<td>Total Battle Force</td>
<td>304</td>
<td>312</td>
<td>302</td>
<td>304</td>
</tr>
</tbody>
</table>

### New Ship Construction Costs

- **Current Plan**
- **$13B Alternative**
- **$11.5B Alternative**
- **$10B Alternative**

**Navy’s plan will require $5-7B more than historical budget**
Today’s presence unsustainable

Presence levels are for operating presence, so forward-based ships provide 0.67 operating presence; this allows an “apples to apples” comparison between theaters and between forward basing and rotational deployment.

Current Plan
- CVN: 1.0
- CG/DDG: 12.0
- SSN/GN: 8.0
- Amphib: 5.0
- SSC: 5.3
- CLF: 9.0

$13 Billion Plan
- CVN: 1.0
- CG/DDG: 8.0
- SSN/GN: 2.0
- Amphib: 3.0
- SSC: 14.0
- CLF: 5.0
- ESD/ESB: 1/1

$11.5 Billion Plan
- CVN: 1.0
- CG/DDG: 4.0
- SSN/GN: 3.0
- Amphib: 0.5
- CLF: 2.0

$10 Billion Plan
- CVN: 1.0
- CG/DDG: 1.0
- SSN/GN: 0.5
- Amphib: 1.0
- SSC: 2.5
- CLF: 1.0

Small Surface Combatants
- Current Plan
- $13 Billion Plan
- $11.5 Billion Plan
- $10 Billion Plan

Required inventory at dotted line

5th Fleet
- CVN: 1.0
- CG/DDG: 8.0
- SSN/GN: 2.0
- Amphib: 3.0
- SSC: 14.0
- CLF: 5.0
- ESD/ESB: 1/1

6th Fleet
- CVN: 1.0
- CG/DDG: 4.0
- SSN/GN: 3.0
- Amphib: 0.5
- CLF: 2.0

4th Fleet
- CVN: 1.0
- CG/DDG: 1.0
- SSN/GN: 0.0
- Amphib: 0.5
- SSC: 2.0
- CLF: 1.0

NAVAF
- CVN: 1.0
- CG/DDG: 1.0
- SSN/GN: 0.5
- Amphib: 1.0
- SSC: 1.0
- CLF: 1.0

Amphibs
- Current Plan
- $13 Billion Plan
- $11.5 Billion Plan
- $10 Billion Plan
What historical funding can deliver
May need more Europe presence

Create a 3rd hub in 6th fleet

7th Fleet
- CVN 1.0
- CG/DDG 12.0
- SSN/GN 8.0
- Amphib 5.0
- SSC 5.3
- CLF 9.0

4th Fleet
- CG/DDG 0.0
- SSN/GN 0.0
- Amphib 0.5
- SSC 2.0
- CLF 1.0

5th Fleet
- CVN 1.0
- CG/DDG 8.0
- SSN/GN 2.0
- Amphib 3.0
- SSC 14.0
- CLF 5.0
- ESD/ESB 1/1

6th Fleet
- CVN 1.0
- CG/DDG 5.0
- SSN/GN 3.0
- Amphib 0.5
- CLF 2.0

NAVAF
- CG/DDG 1.0
- SSN/GN 0.5
- Amphib 1.0
- SSC 2.5
- CLF 1.0

Current Plan
- $13 Billion Plan
- $11.5 Billion Plan
- $10 Billion Plan

May need more Europe presence
Mitigating shortfalls with forward basing

<table>
<thead>
<tr>
<th>Country</th>
<th>CVN</th>
<th>CG/DDG</th>
<th>Amphib</th>
<th>MCM/LCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>1</td>
<td>9 to 11</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Guam</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSN</td>
<td>4 to 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCS***</td>
<td>Up to 4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Surge (by 30 days)

<table>
<thead>
<tr>
<th>Country</th>
<th>CSG</th>
<th>ARG</th>
<th>SSN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td><strong>3 to 2 (1 today)</strong></td>
<td><strong>3 to 2 (1 today)</strong></td>
<td>10</td>
</tr>
<tr>
<td>Spain</td>
<td>DDG 0 to 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>LCC 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bahrain</td>
<td>MCM/LCS 4 to 8</td>
<td>PC* 5 to 10 to 0</td>
<td>AFSB – I to ESB 0 to 2</td>
</tr>
</tbody>
</table>

Deployed from CONUS

<table>
<thead>
<tr>
<th>Country</th>
<th>CSG</th>
<th>ARG</th>
<th>CG/DDG</th>
<th>SSN</th>
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</thead>
<tbody>
<tr>
<td>Japan</td>
<td>~2</td>
<td>~2</td>
<td>~2</td>
<td>~9</td>
</tr>
<tr>
<td>Spain</td>
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<td>Italy</td>
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</tr>
<tr>
<td>Bahrain</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Changes in forward basing between 2000 and 2024

May not be a viable future approach due to cost of readiness model, impact on surge, and need for infrastructure.

*PCs not part of battle force ship count

** Reduction due to adoption of O-FRP

*** LCS technically not in FDNF; crews rotate to ship
2nd FDNF CVN enables third hub

7th Fleet
| CVN   | 1.4 |
| CG/DDG| 12.0|
| SSN/GN| 8.0 |
| Amphib| 5.0 |
| SSC   | 5.0 |
| CLF   | 9.0 |

Carrier and 1 CG/DDG added to 6th Fleet

6th Fleet
| CVN   | 0.8 |
| CG/DDG| 5.0 |
| SSN/GN| 3.0 |
| Amphib| 0.5 |
| CLF   | 2.0 |

5th Fleet
| CVN   | 1.0 |
| CG/DDG| 8.0 |
| SSN/GN| 2.0 |
| Amphib| 3.0 |
| SSC   | 14.0|
| CLF   | 5.0 |
| ESD/ESB| 1/1|

4th Fleet
| CG/DDG| 0.0 |
| SSN/GN| 0.0 |
| Amphib| 0.5 |
| SSC   | 2.0 |
| CLF   | 1.0 |

NAVAF
| CG/DDG| 1.0 |
| SSN/GN| 0.5 |
| Amphib| 1.0 |
| SSC   | 2.5 |
| CLF   | 1.0 |

1 CVN added to 7th Fleet FDNF creates overlapping presence

CVN

CG/DDG

SSN

Amphibs

Small Surface Combatant

Current Plan
$13 Billion Plan
$11.5 Billion Plan
$10 Billion Plan
Supporting EUCOM SPMAGTF

7th Fleet
- CVN: 1.0
- CG/DDG: 12.0
- SSN/GN: 8.0
- Amphib: 4.7
- SSC: 5.3
- CLF: 9.0

6th Fleet
- CVN: 1.0
- CG/DDG: 4.0
- SSN/GN: 3
- Amphib: 1.5
- CLF: 2.0

5th Fleet
- CVN: 1.0
- CG/DDG: 8.0
- SSN/GN: 2.0
- Amphib: 3.0
- SSC: 14.0
- CLF: 5.0
- ESB/ESD: 1/1

4th Fleet
- CG/DDG: 1.0
- SSN/GN: 0.0
- Amphib: 0.5
- SSC: 2.0
- CLF: 1.0

NAVAF
- CG/DDG: 1
- SSN/GN: 0.5
- Amphib: 1.0
- SSC: 2.5
- CLF: 1.0

Small Surface Combatant
- Current Plan
- $13 Billion Plan
- $11.5 Billion Plan
- $10 Billion Plan

1 ARG added to 7th Fleet FDNF eliminates the need for a rotation of U.S.-based amphibs.

6th Fleet amphib presence can go up by 1.

Supporting EUCOM SPMAGTF.
Conclusions

• The Navy / Marine Corps are maximizing forward presence
  - At or exceeding planned deployment lengths & frequency
  - Service chiefs acknowledge surge capacity at 1/3 normal

• Today’s optempo is wearing out the fleet faster, e.g.
  - Shortfall of strike fighters due to wearing out faster
  - Carrier gap in 5th fleet due to unexpected maintenance

• The planned fleet cannot maintain today’s presence
  - And keep to established readiness cycles

- DoD must reduce its overseas presence or implement a mix of:
  - More shipbuilding
  - Expanded forward basing
  - Readiness cycles with more deployed time