Billet Analysis Tool (BAT)

WG5: Analytic Tools and Data For Force Structure Analysis

26 January 2011

Briefer
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OPNAV N14B
**Report Documentation Page**

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2011 Force Structure Workshop, TASC Heritage Conference Center, Chantilly, VA, 24-27 January 2011
Why the Navy needs an analytic tool to study manpower requirements:

- Rising manpower costs and declining endstrength have elevated the importance of manpower requirements and costs in assessing force structure alternatives.
- Previous tools to extract and compile TFMMS data to assess these alternatives were cumbersome and tedious to use.
- Most assessments looked only at manpower requirements of force structure units.
  - For example, if the Navy decommissions four destroyers, only the billets on these ships go away.
- Need to assess the manpower effects of force structure changes within the shore infrastructure.
  - For example, if the Navy decommissions four destroyers, where should shore manpower requirements decrease and by how much?
- Need to forecast requirements beyond the FYDP.
  - What will requirements look like in 10, 15, and 20 years?
  - May require changes well in advance to ensure that inventory matches requirements or that requirements are executable.
How will force structure changes affect fleet manpower requirements?

How will force structure changes affect shore manpower requirements?

What will the Navy’s manpower requirements be in 10, 15, 20, and 30 years?

Original BAT

Original BAT

Enhanced BAT

2006

Accomplishing via WCM
**BAT EXAMPLES**
- 30 YR SHIP PLAN/SEA BILLETS
- LCS MANNING EXCURSIONS
- CV PLAN
- SURFACE COMBATANTS
- COMMUNITY IMPACTS
30-Year Shipbuilding Plan

Will this result in an increased short-term MP requirement?
30-Year Shipbuilding Plan

FY18 Naval Force Ship Inventory
- Carriers (11)
- Surface Combatants (93)
- LCS (55)
- SSN/SSBN/SSGN (66)
- Expeditionary Warfare Ships (31)
- CLF (30)
- Mine Warfare Ships (12)
- MPF (12)
- Support Vessels (20)
- TOTAL = 330

FY36 Naval Force Ship Inventory
- Carriers (12)
- Surface Combatants (73)
- LCS (55)
- SSN/SSBN/SSGN (63)
- Expeditionary Warfare Ships (30)
- CLF (30)
- Mine Warfare Ships (0)
- MPF (12)
- Support Vessels (21)
- TOTAL = 296

FY08 Naval Force Ship Inventory
- Carriers (11)
- Surface Combatants (108)
- LCS (4)
- SSN/SSBN/SSGN (71)
- Expeditionary Warfare Ships (33)
- CLF (35)
- Mine Warfare Ships (14)
- MPF (0)
- Support Vessels (18)
- TOTAL = 294

Will this result in an increased short-term MP requirement?
Ship Inventory vs Projected Ship BA

Inventory increase:
- 11 LCS
- 3 Support ships
- 1 MPF vessel

313 Baseline

Ship Inventory
Ship BA (LCS 4:3)
Ship BA (LCS Blue/Gold)
Carrier BA Beyond the FYDP

- 12 Carriers
- 11 Carriers (- Kitty Hawk + Bush)
- 11 Carriers (- JFK)
- 10 Carriers (- Enterprise)

- 12 Carriers (+ CVN-21 - Nimitz)
- 12 Carriers (+ CVN-21 - Eisenhower)
- 12 Carriers (+ CVN-21 - Vinson)

FY06 to FY36
Surface Combatants (SC)

SC force structure becomes smaller while manpower requirements become more senior.....
Analysis of Force Structure Change Impacts on Community Health

Surface URL Billets on All Ships (Ships Company)

2008

- 0.6
- 0.5
- 0.4
- 0.3
- 0.2
- 0.1
- 0
0 300 600 900

Billets - 2008

- ENS
- LTJG
- LT
- LCDR
- CDR
- CAPT

- Cost/Officer=$118.6K

2016

- 0.6
- 0.5
- 0.4
- 0.3
- 0.2
- 0.1
- 0
0 300 600 900

Billets - 2016

- Cost/Officer=$122.5K

2030

- 0.6
- 0.5
- 0.4
- 0.3
- 0.2
- 0.1
- 0
0 300 600 900

Billets - 2030

- Cost/Officer=$126.4K

Beyond the FYDP, focus must shift from accessions to retention

- Results in a more senior and more expensive (cost per member) force.
- How do we grow enough Dept Heads with a shrinking O-1/O-2 base?

Force structure decisions are creating significant community challenges
QUESTIONS