Agenda

- Overview
- Program Vision
- VAMOSC Team
What Naval VAMOSC Provides

- Comprehensive weapon system O&S reporting coverage
  - 886 cost elements
  - 313 related non-cost data elements
  - ~$29B costs reported annually
  - Personnel costs represent actual pay reported by person
- Quarterly updates capture additional transactions from data source corrections
- Data anomalies and deficiencies reported with each release
- Most costs presented in both TY and CY $s
- Easy web-based access for registered users – no special software installation needed on desktop
- O&S Cost Analysis Model (OSCAM) suite is populated with VAMOSC data
  - 226 trained on Ship and Air models to date
## Naval VAMOSC Components

### Aviation
- **FY1986 - 2003 (Top Level Report)**
- **FY1996 - 2003 (O&I Level Maintenance)**
  - 179 Aircraft T/M/S
  - 1000s Aircraft Subsystems

### Ships
- **FY1984 - 2003 (Ships)**
- **FY1993 - 2003 (Shipboard Systems)**
  - 600+ Active Ships
  - 50+ Naval Reserve Force Ships
  - 500+ Military Sealift Command
  - 73 Shipboard Systems

### USMC Ground Systems
- **FY1995 - 2003**
  - 343 Ground Combat Systems

### Weapons
- **FY1990 - 2003**
  - 17 Air-Launched Missiles
  - 9 Surface-Launched Missiles
  - 4 Torpedoes

### Personnel
- **FY2002 - 2003**
  - 74 Cost Elements
  - 69 Counts and Attributes
### Sample O&S Cost Information Available

#### Direct Costs
- Personnel
- POL
- Repair parts/Supplies
- Depot Level Reparables
- Purchased Services
- Labor - Intermediate Maintenance
- Material - Intermediate Maintenance
- Commercial Industrial Services
- Depot Maintenance
- Fleet Modernization
- Equipment Rework
- Weapon Second Destination Transportation
- Missile/Torpedo System Software Maintenance
- Missile/Torpedo Demilitarization and Disposal

#### Linked Indirect Costs
- Training
- Publications
- Engineering & Technical Services
- Software Support
- Ammunition Handling
Non-Cost Information Available

- Number of Systems
- Ship status (i.e., active, reserve)
- Ship and aircraft age
- Percent of fiscal year ship was commissioned
- Steaming and flying hours
- Barrels of fuel by type of fuel
- Number of officers vs. enlisted
- Number of corrective maintenance actions
- Maintenance manhours and mandays
- Depot availability type
- Start and end dates of depot availability
- Training course ID, length & equivalent graduates
- Number of personnel required per shipboard system
- Number of personnel trained by shipboard system
- Shipboard system Initial Operating Capability (IOC)
- Unit Identification Codes on which the shipboard system is installed
- Data sources (EIC, ESWBS, NALC, NEC)
Aviation Databases

**Force**
Navy total, and by Fleet, Type, or Type/Model
Roll-up of Type/Models - air wing, tactical, transport, etc.

**Aircraft**

**By Type/Model/Series**
- Break-outs by O-level, I-level, Depot, FRS, Mods, Support Services, Contractor Logistics Support
- O-level, I-level, and Fleet Readiness Squadrons contain actual personnel costs

**Subsystem**

**By Work Unit Code (WUC)**
- O & I level maintenance labor hours
- Aviation Depot Level Reparables costs
- Consumables costs
- Beyond Capability of Maint (BCM) counts

ATMSR = Aviation Type/Model/Series Reporting
NAMSR = Naval Aviation Maintenance Subsystem Reporting
Ship Data Visibility

Navy total, and by Fleet, Type, and Class

By Hull (1350+ individual hulls reported over 19 years)
Break-outs by Active, Naval Reserve Force, and Military Sealift Command, and by Major Claimant

By Radar, Sonar, C4I, Gun, Launcher, etc.
Data for entire O&S cost element structure (CES) (73 subsystems only)
Organizational and Intermediate-level maintenance breakouts by Equipment Identification Code (EIC)
Public shipyard maintenance breakouts by Expanded Ship Work Breakdown Structure (ESWBS)
USMC Ground Systems

**Cost Data**
- Maintenance Labor (O or I-level or by RUC)
- Depot Maintenance
- Parts/Supplies
  - Organizational (Consumable and Reparable)
  - Intermediate (Consumable and Reparable)
- TAMCN Ammunition Cost
- DODIC Ammunition Cost
- Fuel Costs
- Cost per Round

**Non-Cost Data**
- Quantity of Ammunition Fired
  - Quantity of training ammunition fired for a given TAMCN or DODIC
- Operating Tempo
  - Average miles/hours of system operation
- Inventory Counts
  - Number of units of a particular TAMCN at a given location
- Operator Counts
  - Number of personnel required to operate a given TAMCN

TAMCN = Table of Authorized Material Control Number
DODIC = DoD Identification Code
Weapon System Reporting Coverage

Organization and System Coverage

AIR LAUNCHED
- AMRAAM
- HARM
- HARPOON (AGM-84)
- HELLFIRE
- JDAM
- JSOW
- MAVERICK
- PENGUIN
- PHOENIX
- SIDEARM
- SIDEWINDER
- SKIPPER
- SLAM
- SLAM-ER
- SPARROW (AIM-7)
- TOW
- WALLEYE

SURFACE LAUNCHED
- HARPOON (RGM-84)
- RAM
- SPARROW (RIM-7)
- STANDARD (SM-1MR)
- STANDARD (SM-2MR)
- STANDARD (SM-2ER)
- STANDARD (SM-2ER)
- TOMAHAWK (RGM-109)
- TOMAHAWK (UGM-109)

TORPEDOES
- ASROC/VLA
- MK-46
- MK-48/MK-48 ADCAP
- MK-50

4 TORPEDOES
9 SURFACE LAUNCHED WEAPONS
17 AIR LAUNCHED WEAPONS
Personnel Cost Element Structure

Level 1
- Base Pay
- Allowances Sum
- Bonuses Sum
- Entitlements Sum
- Separation Pay Sum
- FICA
- Retirement
- PCS

Level 2
- BAS
- BAH Sum (sum of 2 elements)
- OHA/VHA Sum (sum of 5 elements)
- MIHA Sum (sum of 6 elements)
- Other Allowances Sum (sum of 5 elements)
- Officer Bonus Sum (sum of 7 elements)
- Enlisted Bonus Sum (sum of 3 elements)
- Reserve Bonus Sum (sum of 3 elements)
- Location/Danger Ent. Sum (sum of 5 elements)
- Skill/Certification Ent. Sum (sum of 5 elements)
- Other Ent. Sum (sum of 9 elements)

Level 3
- Sum of five separation payments

(Level 4)
Personnel Non-Cost Elements

- Active Duty/Reserve Indicator
- Pay Grade/Status
- Special Pay Designator
- Current Pay Status
- Date of Birth
- Gender
- Primary Dependents
- Marital Status
- Designator
- Additional Qualification Designator
- Separation Reason Code
- Mobilization Recall
- Present Date of Rank
- Unit Identification Code
- Primary Navy Enlisted Code (NEC)

- Monitored Command Code
- Billet Military Occupation Skills
- Primary Military Occupation
- Reporting Unit Code
- Reserve Reporting Unit Code
- Geographic Location Code
- Home Port
- Military Spouse Information
- Pay Entry Base Date (PEBD)
- Planned Separation Program Designator
- Race
- Separation Code
- Estimated Loss Code
- Loss Code
- Loss Date
Recent VAMOSC Use & Relevance

**MSC Database:** CNA Report: “Civilian Manning of Navy Salvage Ships: the Potential for Cost Savings”

**Detailed Ships Database:** Center for Economic Forecasting and Analysis (Florida State Univ.) study of destroyers that would be comparable (equipment/cost-wise) to a DD(X)

**Shipboard Systems and Weapons Databases:**
- PEO IWS 3 for Assistant Secretary comparing and contrasting the MK 57 NATO SeaSparrow Missile System and for the MK 31 RAM Guided Missile Weapon System

**Ship and Aviation Databases:**
- Naval Surface Warfare Center – Carderock Single Fuel Initiative study

**Aviation Maintenance Subsystem Databases:**
- JSF Program Office validation of supplier repair/condemnation costs at Organization and Part Number levels

**Aviation Type/Model/Series Database:**
- RAND study on JSF maintenance costs for land-based Air Force aircraft and carrier-based Navy aircraft

**Personnel Database:**
- NSWC Port Hueneme study on assigning Gunnersmates to various ship classes

**Weapons Databases:**
- Naval Air Warfare Center - China Lake’s Joint Common Missile life cycle cost estimate and analysis of alternatives

**USMC Database:**
- HQMC study of current and future fire support options for the E0665 Howitzer
VAMOSC Users

- Contractor: 34%
- DON: 59%
- FFRDC: 2%
- Non-DoD Govt: 2%
- Other DoD: 3%

82% increase in active VAMOSC users since 2002
- > 650 active user accounts
- > 4,000 hits on websites per month
Program Vision and Objectives

Be the authoritative source and tool of choice for the Operating and Support costs of an evolving Navy

VAMOSC-based Toolset
- OSCAM suite of models
- Other FMB applications

Timeliness
- Faster releases
- Quarterly processing

Usability
- Data warehousing
- Business intelligence s/w
  - Web services

Depth and Breadth
- Inclusion of more Infrastructure costs
- Link costs to accounting/budgeting
- Expand Civilian Personnel coverage
- Increase Training costs detail
- Expand source data collection
  - ERP, DIMHRS, etc.
New Data Products Showing High-Level Trends

Example Display from Aviation Type/Model/Series Almanac

F/A-18 Flying Hour Program Direct Costs

Aviation Depot Level Repairables

Then Year Dollars (M) vs. Flying Hours (K) for Fiscal Years 1997 to 2003

Consumable Materials/Repair Parts

Then Year Dollars (M) vs. Flying Hours (K) for Fiscal Years 1997 to 2003

POL/Energy Consumables

Then Year Dollars (M) vs. Flying Hours (K) for Fiscal Years 1997 to 2003

Contractor Logistics Support

Then Year Dollars (M) vs. Flying Hours (K) for Fiscal Years 1997 to 2003
Online Data Access

- Only need Internet browser to access OLAP tool
  - http://www.navyvamosc.com
  - http://www.usmcvamosc.com

- Online user registration and support
  - VAMOSC Team POCs
  - Online documentation
  - Online movie-based training modules
  - Feedback form
  - Register for upcoming Aviation User Conference, 6 Oct

- Access granted to authorized users
  - Government personnel
  - Government sponsored contractors
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