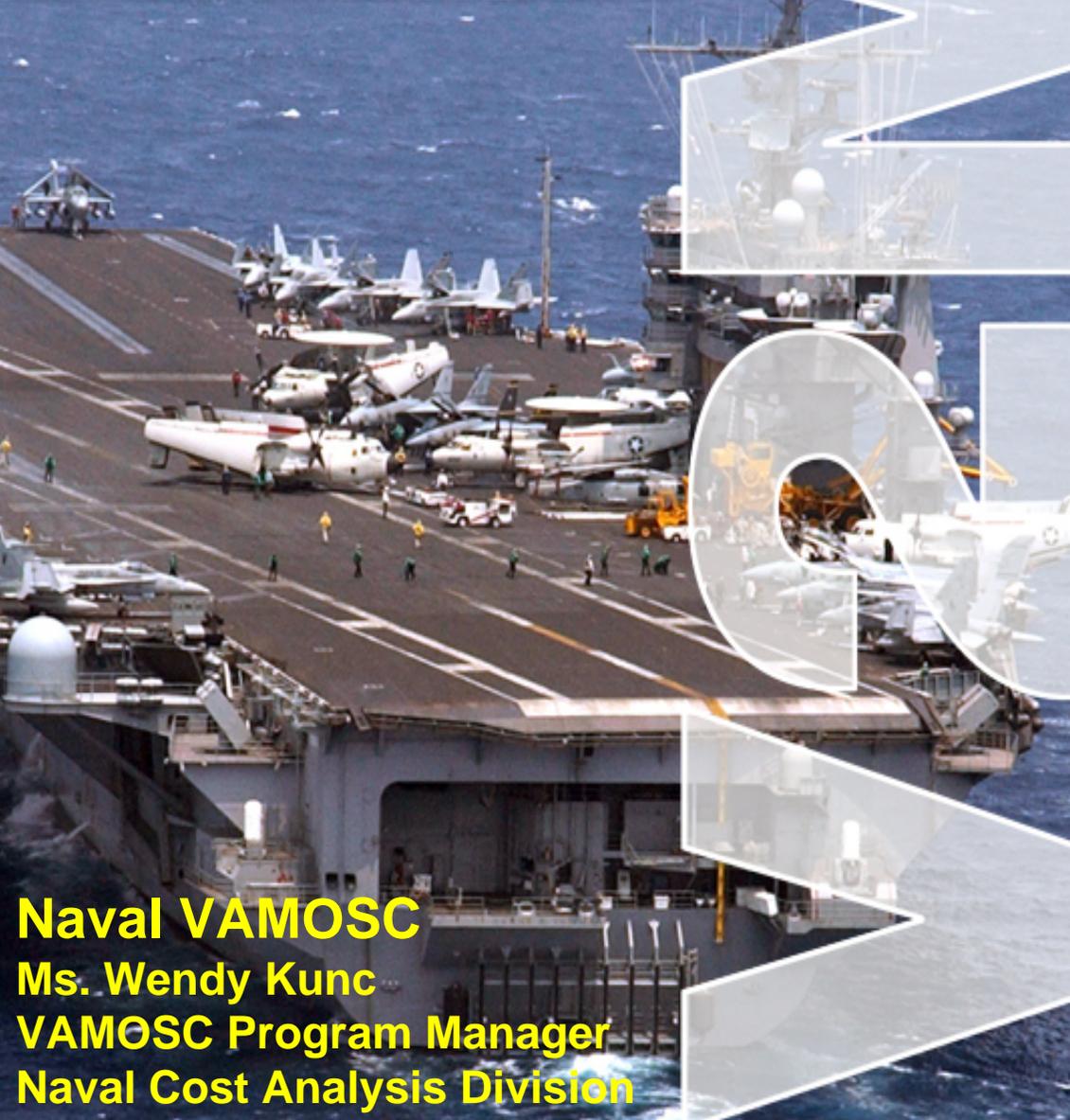




SCEA
DC Chapter
28 Sep 04



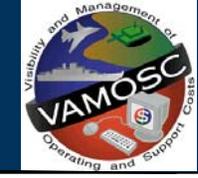
FROM VISIBILITY



TO MANAGEMENT

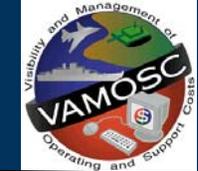


Naval VAMOSC
Ms. Wendy Kunc
VAMOSC Program Manager
Naval Cost Analysis Division



Agenda

- Overview
- Program Vision
- VAMOSOC 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

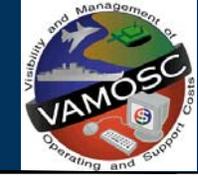


Personnel

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

ATMSR

Subsystem

By Work Unit Code (WUC)

- O & I level maintenance labor hours
- Aviation Depot Level Repairables costs
- Consumables costs
- Beyond Capability of Maint (BCM) counts

NAMSR
NAMSR +

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



Ship Data Visibility

Force

Navy total, and by Fleet, Type, and Class

Ships

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

Subsystem

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 Repairable)
 - Intermediate
(Consumable and Repairable)
- 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

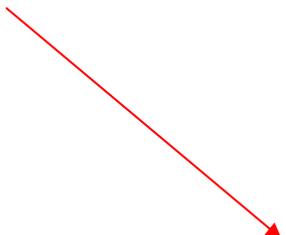
AMRAAM
HARM
HARPOON (AGM-84)
HELLFIRE
JDAM
JSOW
MAVERICK
PENGUIN
PHOENIX
SIDEARM
SIDEWINDER
SKIPPER
SLAM
SLAM-ER
SPARROW (AIM-7)
TOW
WALLEYE

SURFACE LAUNCHED

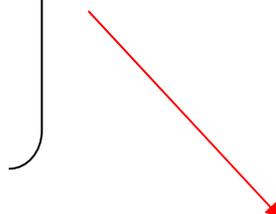
HARPOON (RGM-84)
RAM
SPARROW (RIM-7)
STANDARD (SM-1MR)
STANDARD (SM-2MR)
STANDARD (SM-2ER)
STANDARD (SM-2ER)
TOMAHAWK (RGM-109)
TOMAHAWK (UGM-109)

TORPEDOES

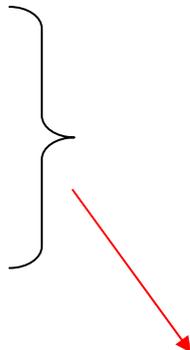
ASROC/VLA
MK-46
MK-48/MK-48 ADCAP
MK-50



17 AIR LAUNCHED WEAPONS



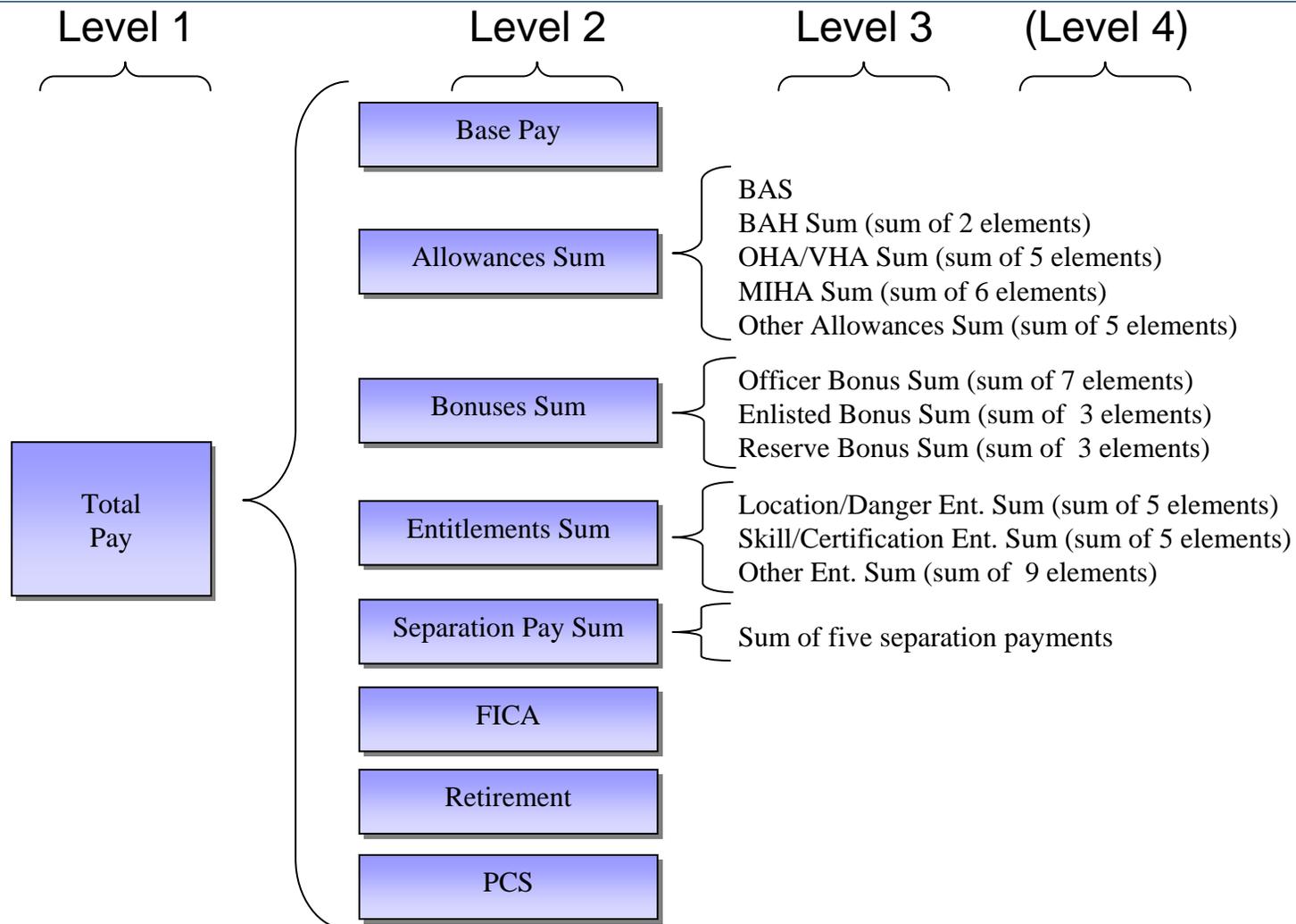
9 SURFACE LAUNCHED WEAPONS



4 TORPEDOES



Personnel Cost Element Structure





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



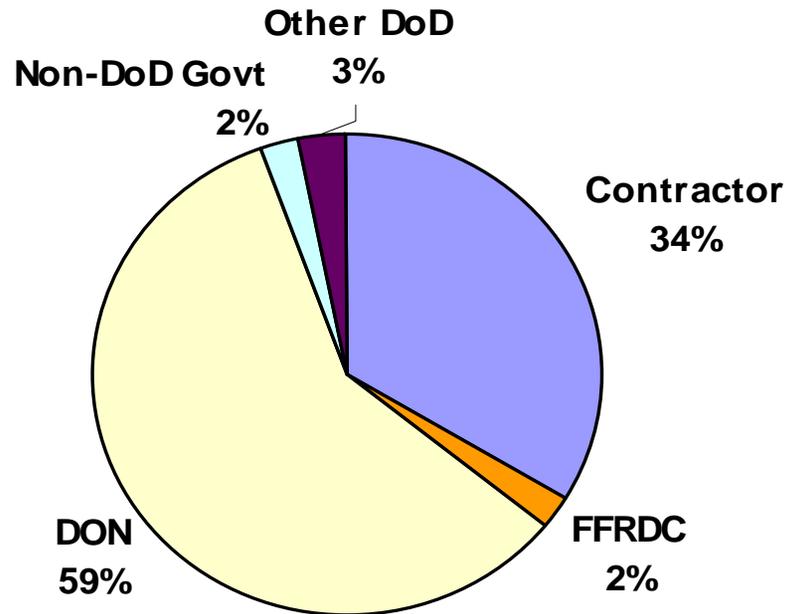
Weapons Databases: Naval Air Warfare Center - China Lake’s Joint Common Missile life cycle cost estimate and analysis of alternatives



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



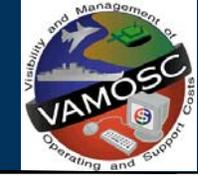
VAMOS Users



82% increase in active VAMOS 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

Timeliness

- Faster releases
- Quarterly processing

VAMOSOC-based Toolset

- OSCAM suite of models
- Other FMB applications



Usability

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

Depth and Breadth

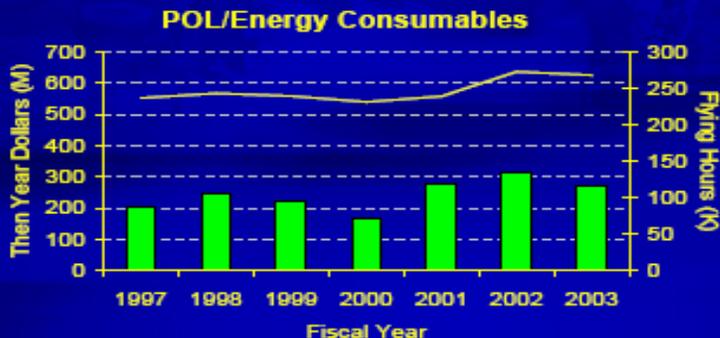
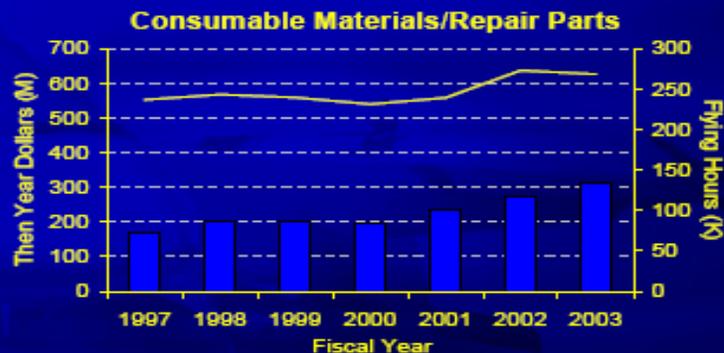
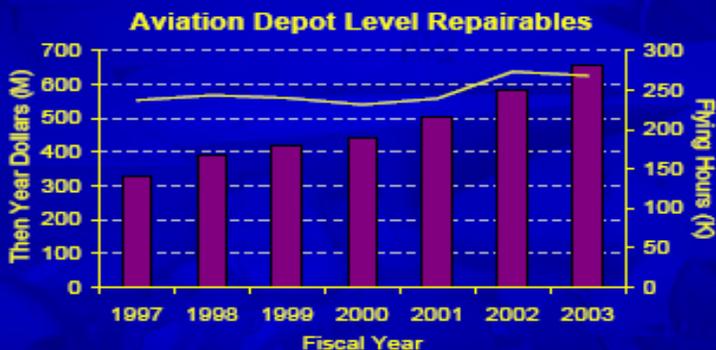
- Inclusion of more Infrastructure costs
- Link costs to accounting/budgeting
- Expand Civilian Personnel coverage
- Increase Training costs detail
- Expand source data collection
 - ERP, DIMHRS, etc.



New Data Products Showing High-Level Trends

Example Display from Aviation Type/Model/Series Almanac

F/A-18 Flying Hour Program Direct Costs

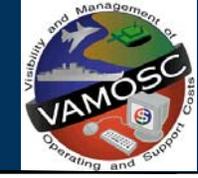




Online Data Access

- 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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