

NDIA

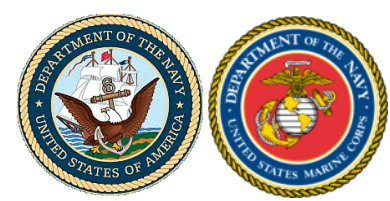
Expeditionary Warfare Conference

19 Nov 2014



Mr. Tom Dee
DASN ELM
703-614-4794
Pentagon 4C746

Unclassified



Agenda



- Expeditionary context
- Fiscal Environment
- Programs
- Affordability



AAV



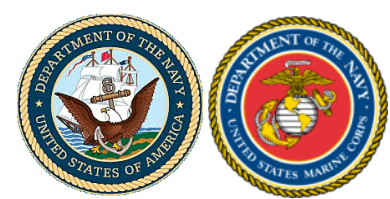
Mk 18 UUV



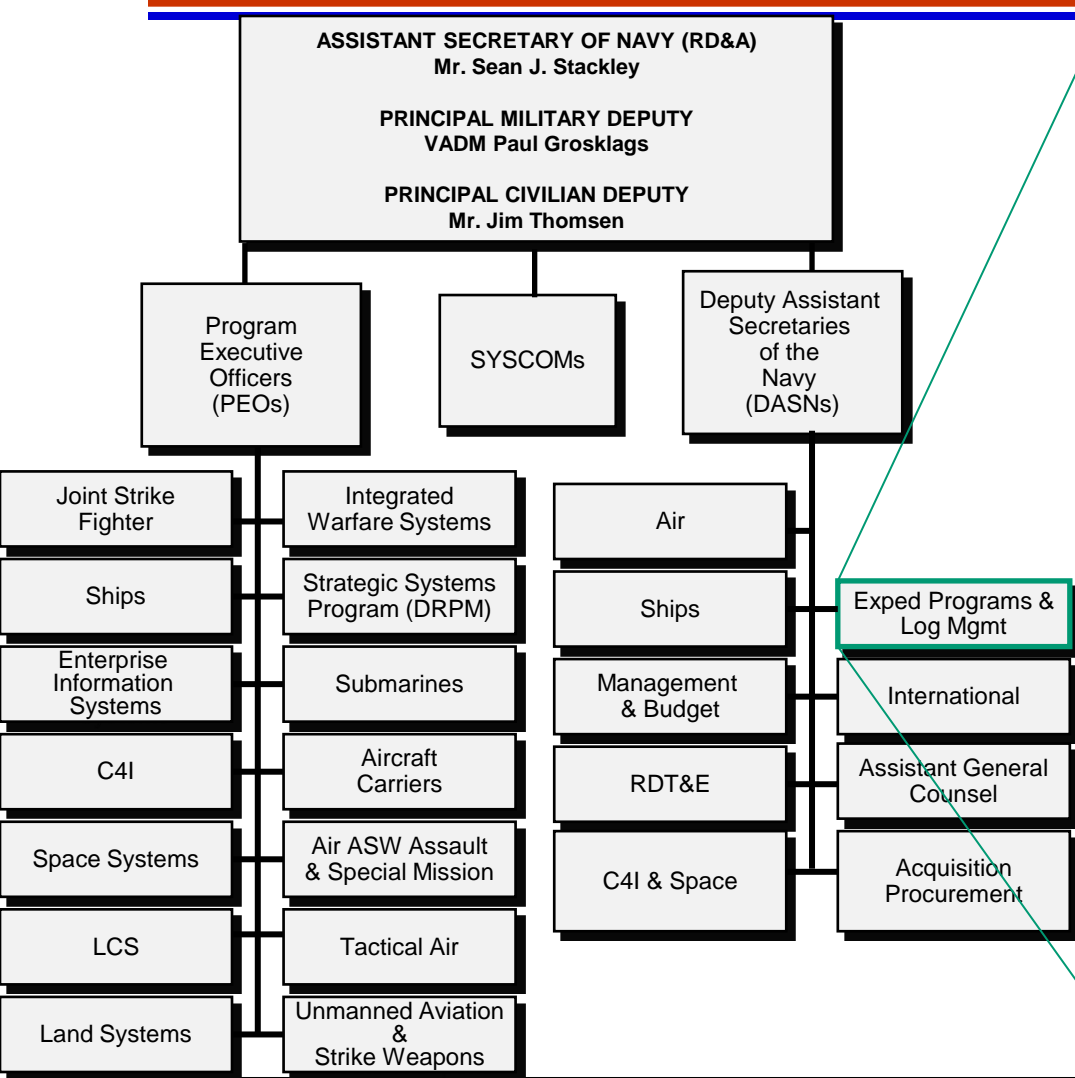
Robotics



EOD



ASN (RDA)



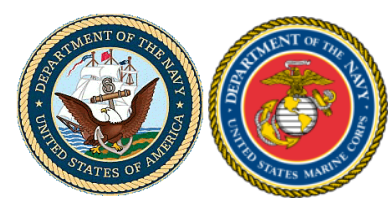
- **U.S. Marine Corps Ground Programs:**
 - Amphibious Assault Vehicles
 - Tanks
 - Tactical-wheeled combat and support vehicles
 - Personal Protective Equipment (PPE)
 - Ground-based radars and command and control
 - Artillery, weapons and ammunition

- **Navy Expeditionary Programs:**
 - Explosive Ordnance Disposal
 - Counter-IED / CREW
 - Ground Robotics
 - Biometrics
 - Marine mammals
 - Tactical Vehicles
 - Non-lethal Weapons

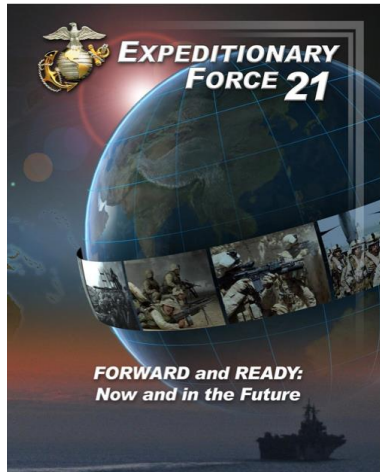
- **Acquisition Logistics Management**

- **Rapid Acquisition Processes**

Facilitate Successful Acquisition Outcomes



Expeditionary Warfare



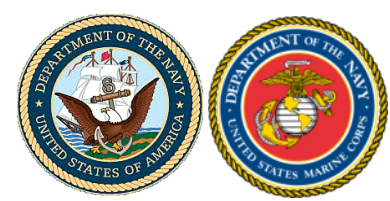
USMC
Expeditionary Force 21,
Mar 2014



Operation Damayan
USMC Taiphooon Relief
Nov 2013

The expeditionary mind-set is not dependent on acquisition. It is instead derived from discipline, training, and an overwhelming need to accomplish the mission regardless of the situation. An expeditionary force is built on several key principles:

- *Solving problems with minimal support and broad guidance.*
- *Deploying and employing tailored, economical forces of almost any size and configuration.*
- *Deploying where there is no infrastructure and operating immediately.*
- *Achieving success in those missions where action delayed is action denied.*
- *Living and operating in austere conditions where large support bases are unacceptable or infeasible.*
- *Minimizing potential adverse cultural and political impact by stepping lightly in all areas of support and infrastructure and working with our regional partners to achieve success.*
- *Working with affected populations wherever deployed—because we respect and protect those who are caught in the middle of a conflict or disaster.*
- *Maintaining equipment, including aviation, in forward areas with organic assets.*
- *Enhancing partnerships with Special Operations Forces that exploit our complementary capabilities.*



Current and Future Environment



“While meeting current commitments and preserving readiness, the Marine Corps must reconfigure and refit to meet coming challenges. The future evolving and complex security environment will only increase the demands on the Marine Corps.”

Expeditionary Force 21, March 2014



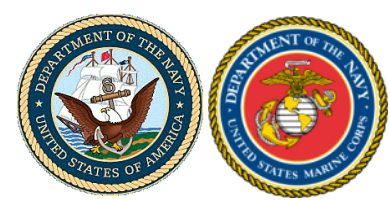
“Potential adversaries... compensate for U.S. conventional military superiority by developing asymmetric approaches and capabilities.”

SECDEF Transformation Planning Guidance, Apr 2003

“The QDR describes the tough choices we are making in a period of fiscal austerity to maintain the world's finest fighting forces... Although the future force will be smaller, it will be ready, capable, and able to project power over great distances. Investment decisions will ensure that we maintain our technological edge over potential adversaries...”



Secretary Chuck Hagel, QDR, 4 Mar 2014



Strategic Trends and Environmental Characteristics



- **Pressure for reductions in federal budgets**
 - will continue to increase; therefore, DoD cannot afford to acquire capabilities exceeding military needs.
- **Operational issues will be more complex**
 - Designing systems to easily accept technological improvements and support multiple mission needs will be increasingly important.
- **U.S. military forces will be rebalanced.**
- **Violent extremism**
 - will continue to threaten U.S. interests at home and around the globe.
- **Unmanned technologies**
 - will continue to improve in many different capability areas.
- **Cyber domain**
 - will be a conflict environment as readily as land, sea, or air and space.

Adaptable, Expeditionary Forces To Meet An Unknown Future



Building a Budget...



2014 QDR

QUADRENNIAL DEFENSE REVIEW 2014

SECRETARY OF DEFENSE
LEON PANETTA

March 6, 2014

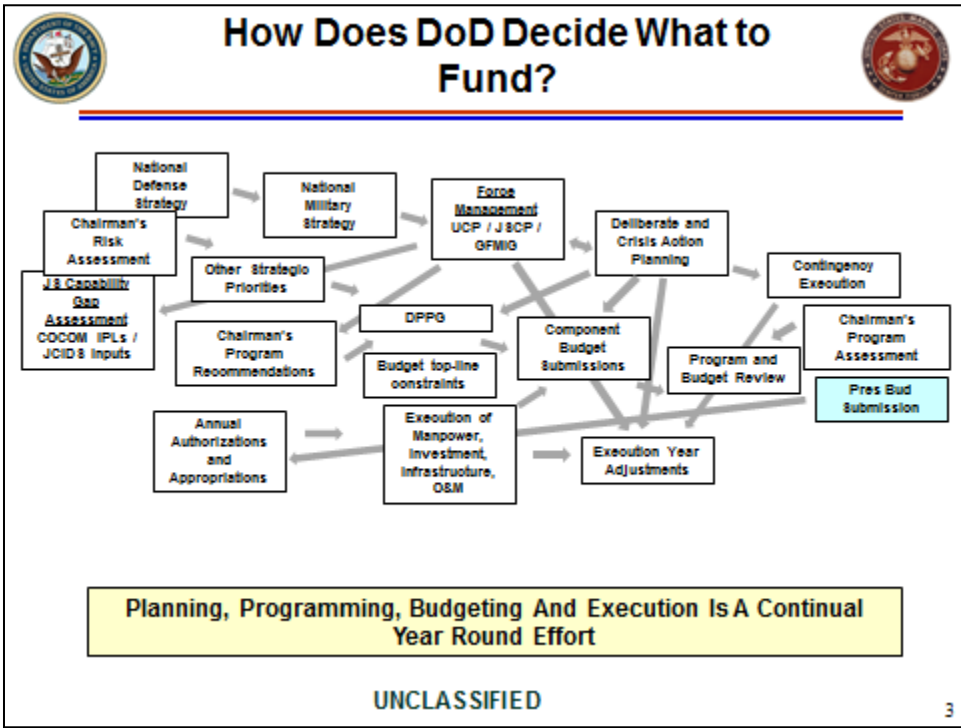
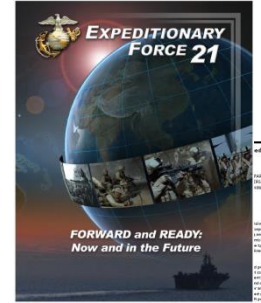
As the nation's security strategy evolves, the Department of Defense must adapt to a new era of challenges and opportunities. The 2014 Quadrennial Defense Review (QDR) provides the strategic guidance to ensure the United States maintains its global leadership and security in the 21st century.

The QDR is a key document in the Department's planning process. It provides a long-term perspective on the Department's mission and the resources needed to meet that mission. The QDR is a living document that will be updated as the Department's strategy evolves.

Secretary of Defense
Leon Panetta



EF 21



WASHINGTON POST

On dangerous ground

What Have We Learned?
Lessons From Afghanistan & Iraq

Special Security Series: U.S. Prepares for a New Era of Global Threats

The Washington Post article discusses the challenges of global threats and the need for a new strategy. It highlights the lessons learned from Afghanistan and Iraq and the impact of the 2014 QDR.

DON Objectives for FY 2015

DEPARTMENT OF THE NAVY
OFFICE OF THE ASSISTANT SECRETARY FOR RESEARCH, DEVELOPMENT AND ACQUISITION

February 27, 2014

Objectives for Fiscal Year 2015

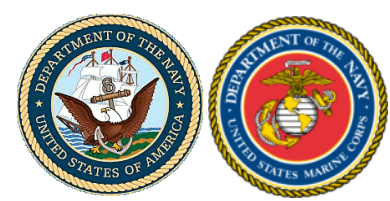
The Assistant Secretary for Research, Development and Acquisition (ASD/RDA) is pleased to announce the Department's objectives for Fiscal Year 2015. These objectives are designed to ensure the Department's readiness to meet the challenges of the 21st century.

Key objectives include:

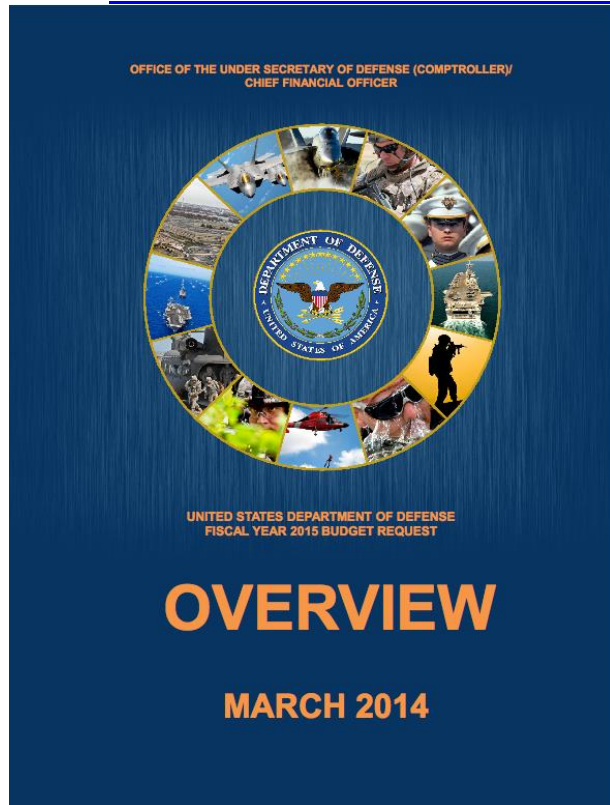
- Enhance the Department's research and development capabilities.
- Improve the Department's acquisition process.
- Strengthen the Department's financial management.
- Enhance the Department's operational readiness.

Assistant Secretary for Research, Development and Acquisition
John C. Williams

**Strategy, Informed by Reality:
Threats, Opportunities, and a Dynamic Political/Military Environment**



FY15 DoD Budget Request



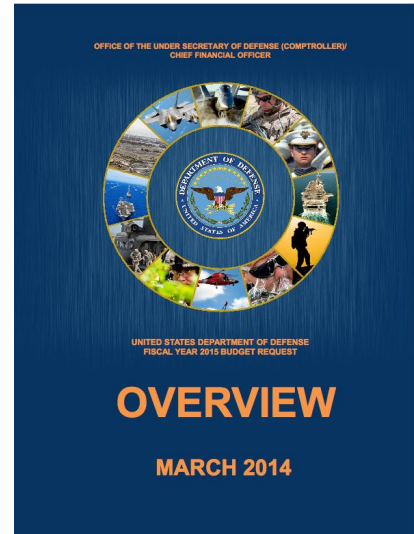
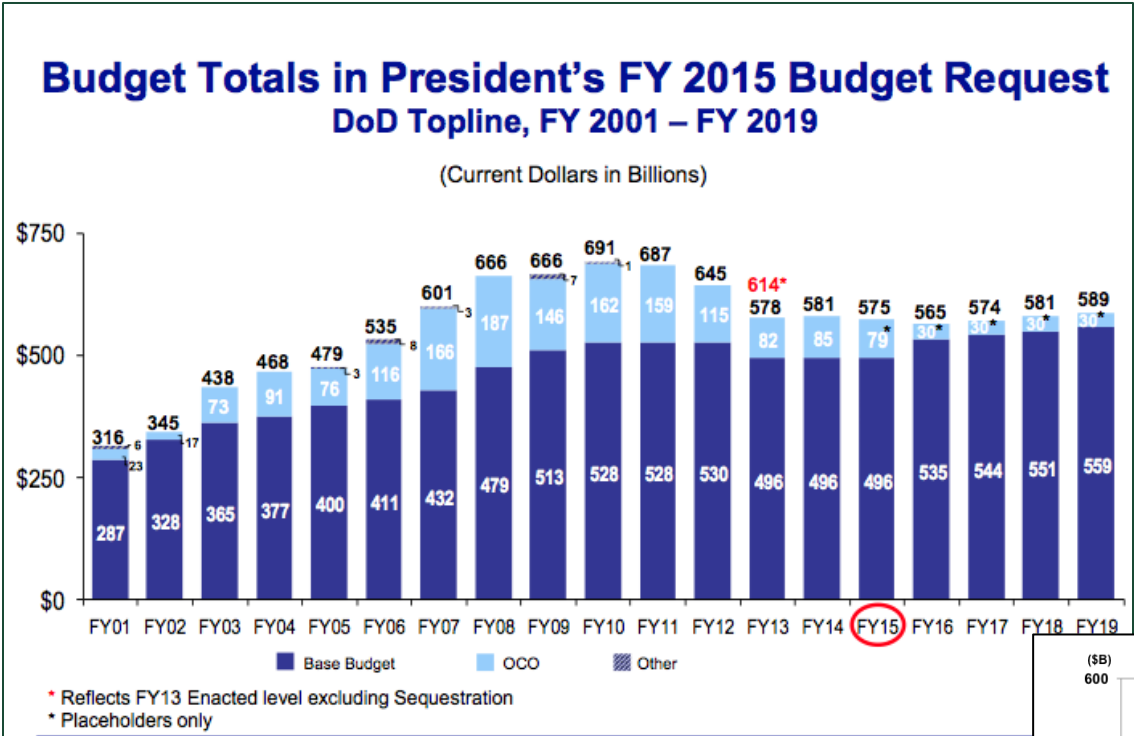
**“Rebalancing for a broad spectrum of conflict:
Future conflicts could range from hybrid contingencies against proxy groups using asymmetric approaches to a high-end conflict against a state power armed with weapons of mass destruction or technologically advanced anti-access and area-denial capabilities.”**

“We are repositioning to focus on the strategic challenges and opportunities that will define our future: new technologies, new centers of power, and a world that is growing more volatile, more unpredictable, and, in some instances, more threatening to the United States.”

This budget will protect basic and applied research despite a significantly constrained fiscal environment to ensure our technological edge. The Administration emphasizes a strong national investment in research and development, emphasizing science and technology that is vital to our future competitive advantage.

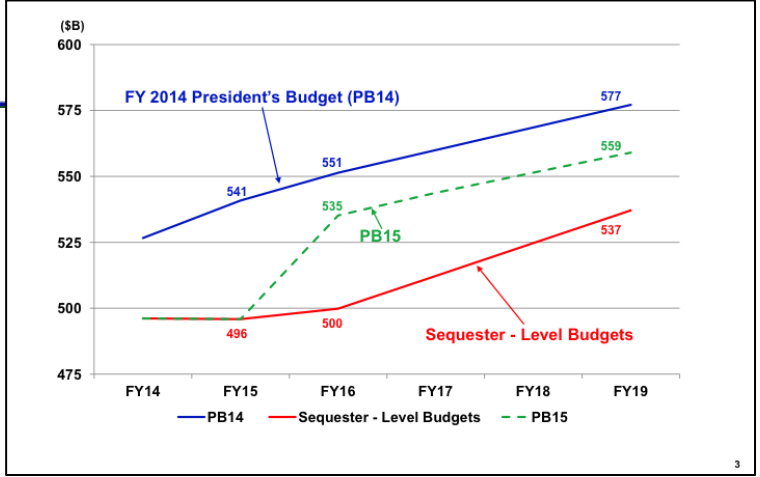


Continued Uncertainty...



“A central challenge in delivering the best Navy possible for the funds appropriated is properly balancing the cost of procuring force structure and capability with the cost of maintaining them at an appropriate level of readiness... Unstable budget levels...force reductions in maintenance and training. Over time, this begins to take an untenable toll on our enduring ability to deploy forces that are sufficiently ready to complete their missions with acceptable risk...”

CNO Posture Statement to HASC, 12 March 2014





Dept of the Navy PB 15

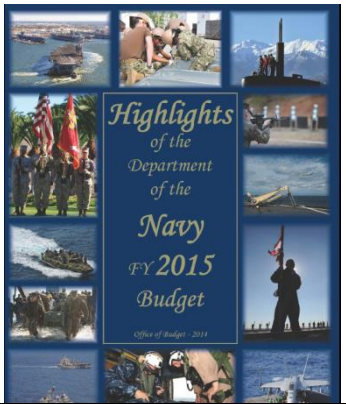


Figure 2 - DoN Topline Trends FY 2014 - FY 2019 (Dollars in Billions)

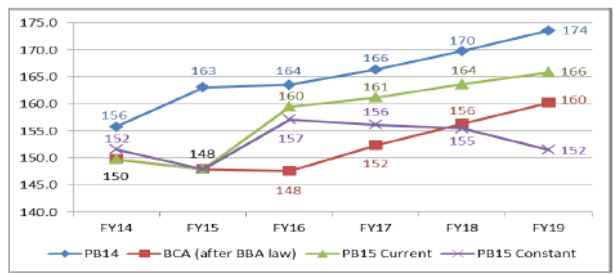
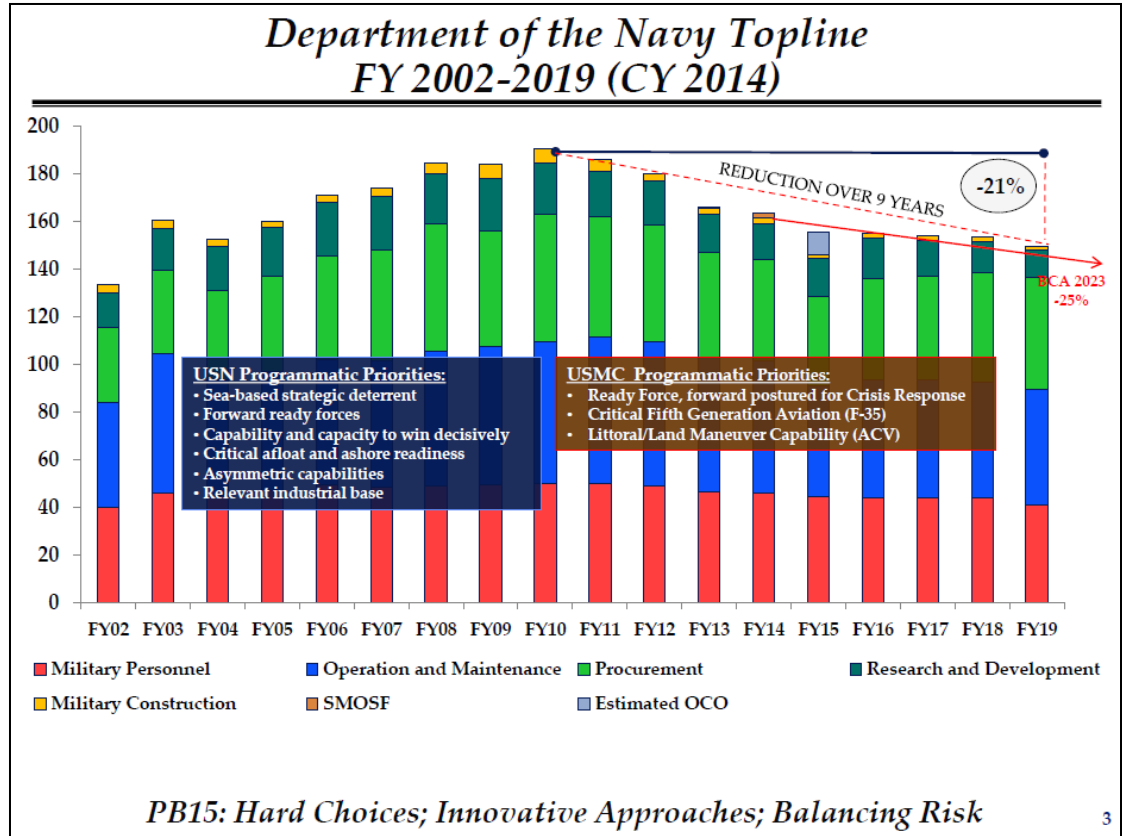
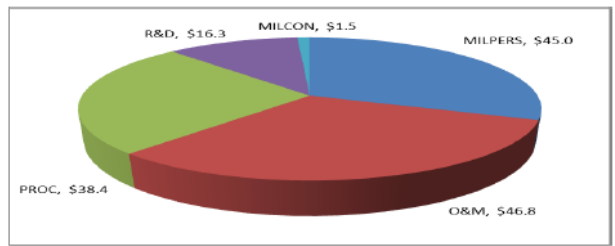
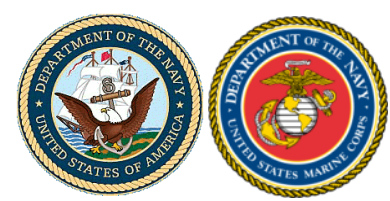


Figure 3 - FY 2015 DoN Budget by Appropriation Title (\$148 Billion)





Amphibious Shipbuilding



LHA-6 USS America
Commissioned 11 Oct 11



MLP-2 Mountford Point



Figure 32-Shipbuilding Plan

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FYDP
CVN-21	-	-	-	-	1	-	1
SSN-774	2	2	2	2	2	2	10
DDG 51	1	2	2	2	2	2	10
LCS	4	3	3	3	3	2	14
LHA(R)	-	-	-	1	-	-	1
T-ATF	-	-	-	2	1	1	4
JHSV	-	-	-	-	-	-	-
MLP/AFSB	1	-	-	1	-	-	1
T-AO(X)	-	-	1	-	1	1	3
New Construction Total QTY	8	7	8	11	10	8	44
New Construction Total (\$B)	\$11.8	\$11.9	\$14.2	\$15.6	\$17.0	\$15.9	\$74.6
LCAC SLEP	4	2	4	4	4	-	14
Ship-to-Shore Connector	-	2	5	5	8	11	31
SC(X) (R)	-	-	-	-	1	2	3
Moored Training Ships	-	1	-	1	-	-	2
CVN RCOH	-	-	-	-	-	-	-
Total Shipbuilding QTY	12	12	17	21	23	21	94
Total Shipbuilding (\$B)	\$15.4	\$14.5	\$15.8	\$17.6	\$18.6	\$17.7	\$84.2

Total Shipbuilding includes all new construction, RCOH, SLEP or conversion in SCN, R&D and NDSF, as well as other related line items including Service Craft, Outfitting and Post Delivery.

Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for FY2015

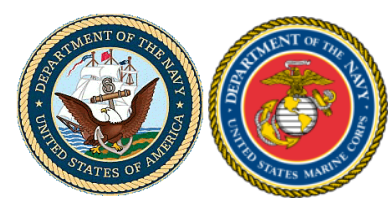
Prepared by:
Deputy Chief of Naval Operations (Integration of Capabilities and Resources) (N5)
Office of the Chief of Naval Operations
2000 Navy Pentagon
Washington, DC 20350-2000

June 2014

The estimated cost of this report or study for the Department of Defense is approximately \$201,000 in Fiscal Years 2013 - 2014. This includes \$206,000 in expenses and \$66,000 in OOD labor. Generated on 2014Apr02 14:02: 0-0241003

30 Year Shipbuilding Plan

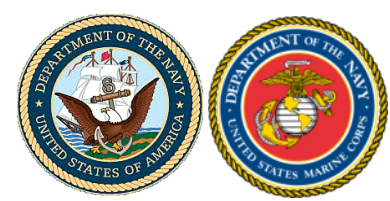
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
LHA/LHD	9	9	9	10	10	10	10	10	10	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	10	11	10	9	9
LPD	9	10	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
LSD/LX (R)	12	12	12	12	12	12	12	12	12	12	14	13	14	13	13	12	12	13	12	10	10	11	11	11	11	11	11	11	11	11
Total	30	31	32	33	33	33	33	33	33	34	34	36	35	36	35	35	34	34	35	34	32	32	33	33	33	32	33	32	31	31



PEO Ships Workload



Ships Under Construction	Add'l Ships Under Contract	Pending Award (FY14)	Deliveries (FY14)	Future Contracts
4 DDG 51 class (DDG 113, 114, 115, 116)	10 ships (DDG 117-126, FY13-17 MYP)		----	DDG 51 FLT III
3 DDG 1000 class (DDG 1000, 1001, 1002)			----	----
2 LPD 17 class (LPD 26, 27)			1 LPD (LPD 25)	LX(R) (FY20)
1 LHA (LHA 7)			1 LHA (LHA 6)	LHA 8 (FY17)
3 JHSV (JHSV 4-6)	4 JHSV (JHSV 7-10)		1 JHSV (JHSV 3) 1 JHSV (JHSV 4)	----
1 T-AGS (T-AGS 66)			----	T-ATF (FY17)
1 MLP AFSB (MLP 3 AFSB)		1 MLP AFSB (MLP 4 AFSB)	1 MLP (MLP 2)	MLP AFSB (FY17)
2 AGOR (AGOR 27, 28)			----	T-AO(X) (FY16)
	9 SSC (SSC 1-9)		----	SC(X)(R) (FY18)
17	23	1	5	



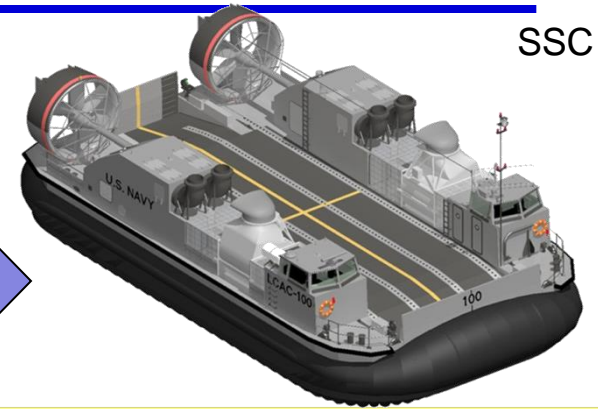
Ship to Shore Mobility

Recapitalization of primary surface ship to shore connectors

LCAC (SLEP)



Ship to Shore Connector (SSC) replaces LCAC to retain high speed over the shore assault capability-- from sea basing ranges.



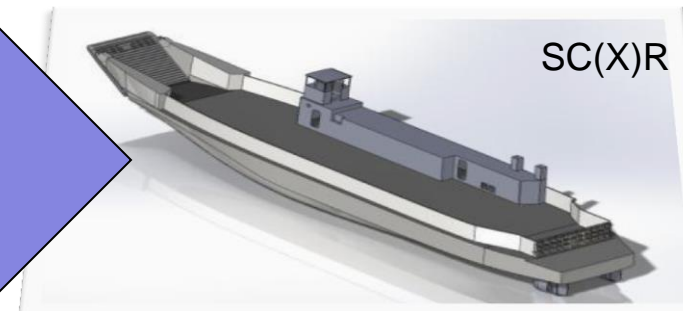
SSC

- Increased payload, temperature and sea state parameters (74 tons; 100 F; high SS 3)
- 72 craft procurement ~\$ 4.1B through 2027
- Under contract for detail design with options for the first 9 craft

LCU-1610 Class

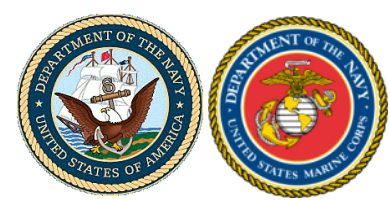


- Surface Connector (X) Replacement (SC(X)R) recapitalizes a rugged, persistent, economical, high capacity utility landing craft.



SC(X)R

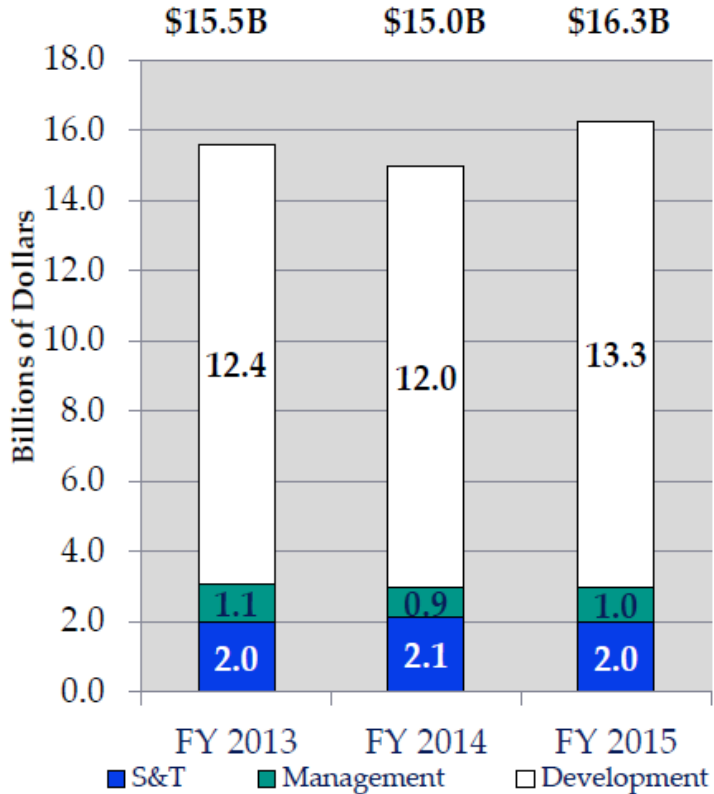
- Analysis of Alternatives in progress
- Anticipate 32 craft procurement beginning 2018



R&D Investment



ACV 1.0

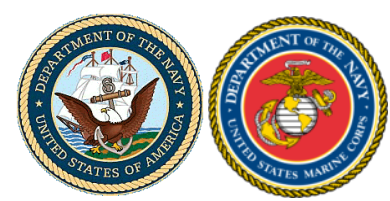


G/ATOR

Major Systems (\$M)	FY13	FY14	FY15
Aviation			
Joint Strike Fighter (F-35)	1,281	856	1,029
CH-53K	536	462	573
Executive Helo Development	46	94	388
Shipbuilding			
Ohio Replacement Program	506	1,081	1,219
Virginia Class SSN	81	122	205
AMDR	194	125	145
CVN 78	158	148	123
Surface Ship Torpedo Defense	84	86	53
Unmanned			
MQ-4C Triton	613	375	498
UCLASS	99	122	403
NUCAS - D	128	21	36
USMC			
Amphibious Combat Vehicle	83	123	106
G/ATOR	70	78	99

DoN PB15 Budget brief 4 Mar 2014

Unclassified



Marine Corps Procurement



G/ATOR

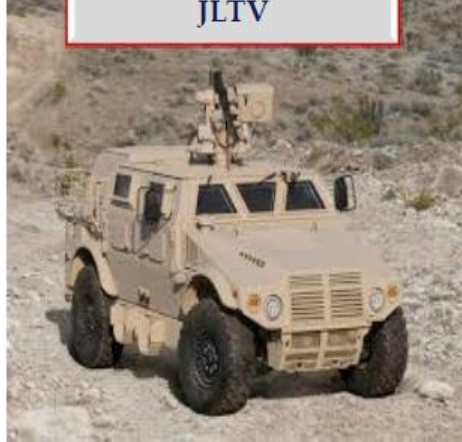


RQ-21

Major Combat Systems (\$M)	FY13	FY14	FY15
Weapons and Combat Vehicles			
AAV PIP	16	32	17
Mod Kits (Armor/Weapons)	34	38	22
Weapons and Combat Vehicles	17	20	7
LAV PIP	26	6	78
Guided Missiles & Equipment			
Ground Base Air Defense (GBAD)	13	16	31
AAWS-Medium	29	66	0
MODKits (Missiles)	42	42	5
G/ATOR	0	0	89
RQ-21	14	67	71
Communications & Electrical Equipment			
Combat Support System	23	3	2
Common Computer Resources	212	109	34
Command Post Systems	33	84	38
Radio Systems	126	64	65
Radar Systems	135	102	20
Intelligence Support Equipment	51	71	44
Support Vehicles			
Commerical Cargo Vehicles	14	31	11
HMMWV	6	1	57
Family of Tactical Trailers	28	23	10
CAC2S	0	0	12
JLTV	0	0	8
Engineers & Other Equipment			
Tactical Fuel Systems	71	22	4
Power Equipment Assorted	69	63	9
Material Handling Equipment	36	37	9
EOD Systems	264	83	7



HMMWV



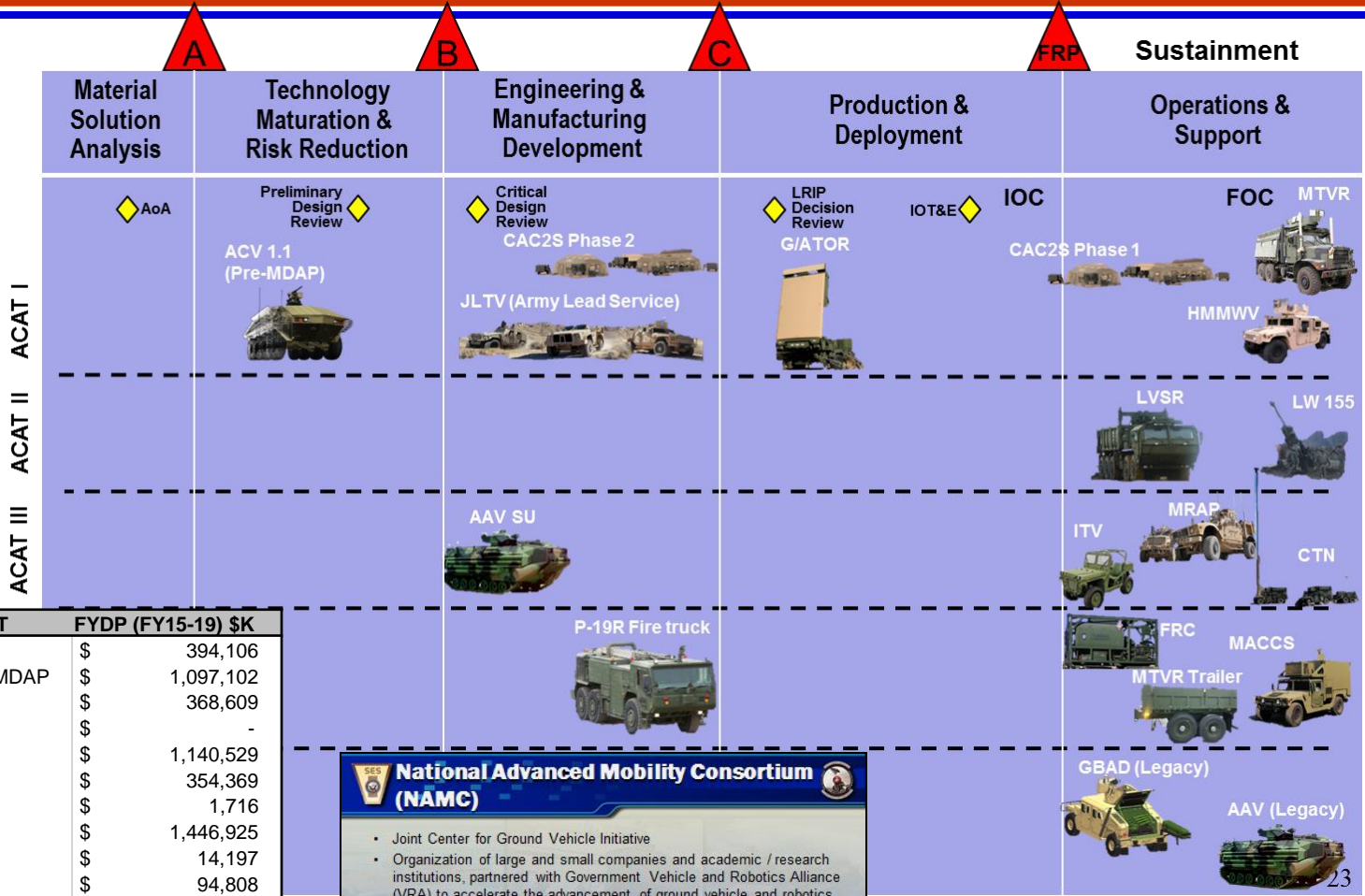
JLTV

DoN PB15 Budget brief 4 Mar 2014

Unclassified



PEO Land Systems Workload



PB-15 \$K

Program	ACAT	FYDP (FY15-19) \$K
AAV SU	III	\$ 394,106
ACV	Pre-MDAP	\$ 1,097,102
CAC2S	IAC	\$ 368,609
FRC	IVM	\$ -
G/ATOR	IC	\$ 1,140,529
HMMWV	IC*	\$ 354,369
ITV	III	\$ 1,716
JLTV	ID	\$ 1,446,925
LVS	II*	\$ 14,197
LW155	II*	\$ 94,808
MRAP	III	\$ 76,481
MTRV	IC*	\$ 49,259
MTRV TRAILERS	IVM	\$ 43,334
P-19R	IVM	\$ 120,343
ACAT Total		\$ 5,201,778
Non-ACAT Total		\$ 456,227
PEO Total		\$ 5,658,005

National Advanced Mobility Consortium (NAMC)

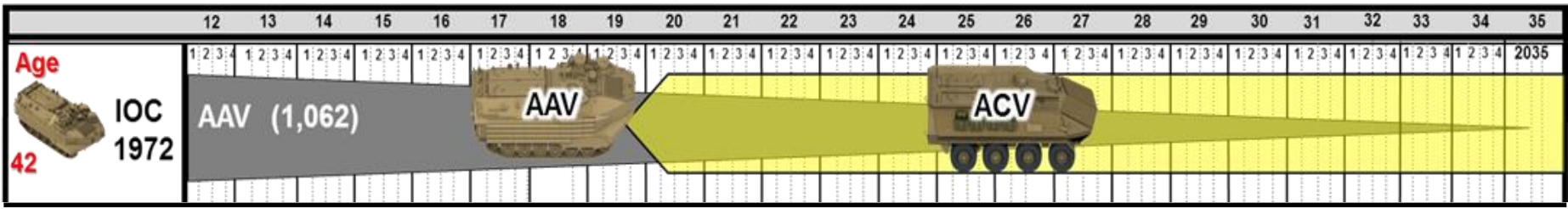
- Joint Center for Ground Vehicle Initiative
- Organization of large and small companies and academic / research institutions, partnered with Government Vehicle and Robotics Alliance (VRA) to accelerate the advancement of ground vehicle and robotics technologies
 - Improve communications
 - Leverage individual/team capabilities and investments
- Other Transaction Agreement (OTA) conduit to funnel innovative ideas and concepts to DoD programs
 - NAMC members submit white papers and proposals
 - Once proposal is accepted, and funding is available, contracts are rapidly awarded according to the OTA
 - If funding is not available, all technically acceptable proposals are put in an electronic basket and remain viable for 3 years

<http://www.namconsortium.org/>


Unclassified




Amphibious Vehicle Replacement Strategy



Total Requirement (12 BNs)

 AAV Survivability Upgrade and Sustainment (Bridge)

 Procure Non-Developmental ACV (Production Models)

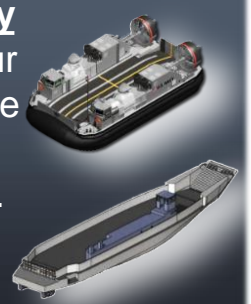
 Procure ACV Variants (C2, Fires, Log, Etc)

➤ Key Considerations

- No changes to current Amphibious Shipbuilding Plan
- No change to currently programmed connectors
- Vehicle square footage is a finite resource (Amphibs, MPSRON, connectors)

Connector Strategy

Work closely with our Naval partners on the next generation of surface connectors.

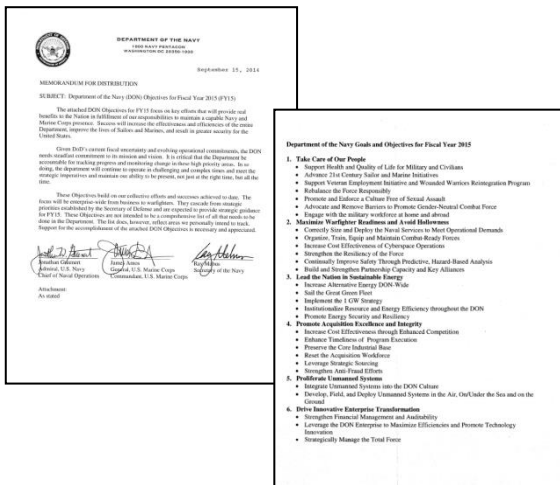




DON Objectives and Imperatives



DON Objectives for FY 2015



4. Increase Cost Effectiveness through Enhanced Competition

- Enhance Timeliness of Program Execution
- Preserve the Core Industrial Base
- Reset the Acquisition Workforce

6. Drive Innovative Enterprise Transformation

- Strengthen Financial Management and Auditability

ASN RDA Imperatives

- Get the Requirements Right
- Make Every Dollar Count
- Perform to Plan
- Mind a Healthy Industrial base
- Rebuild our Acquisition Workforce

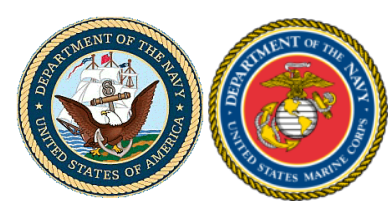


Honorable Sean Stackley
ASN RDA

We have equipped the Navy and Marine Corps with the most capable warfare systems in the world... The issue is affordability – acquisition costs are rising faster than our topline. Simply put, without deliberate, sustained action to reverse this trend, we put the future at risk.

Hon Sean Stackley, Nov 2009

“The issue is affordability...”

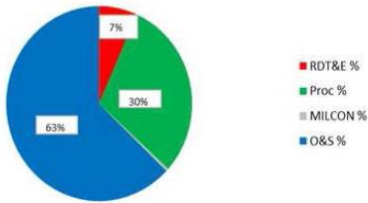


Managing DoD Total Ownership Cost (TOC)

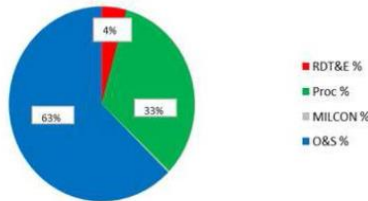


CAPE OPERATING AND SUPPORT COST-ESTIMATING GUIDE MARCH 2014

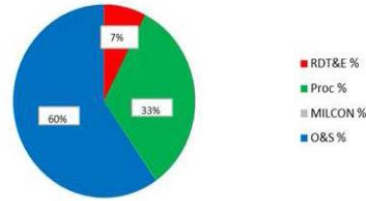
% of Program Life-Cycle Cost
Average - Fixed Wing Aircraft



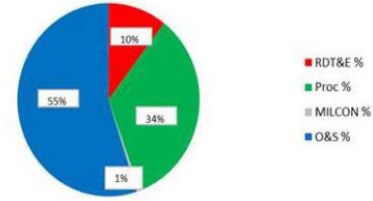
% of Program Life-Cycle Cost
Average - Ground Systems



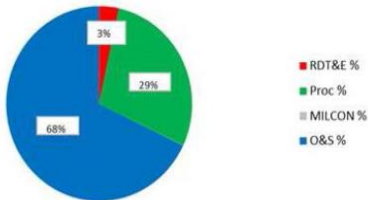
% of Program Life-Cycle Cost
Average - Submarines



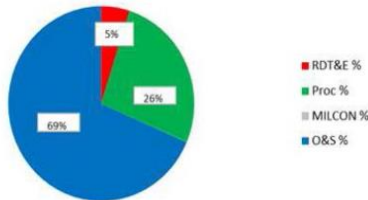
% of Program Life-Cycle Cost
Average - UAVs



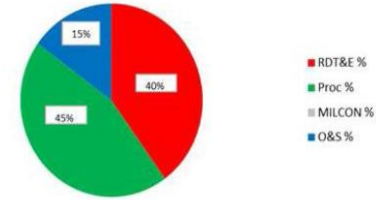
% of Program Life-Cycle Cost
Average - Rotary Wing Aircraft



% of Program Life-Cycle Cost
Average - Surface Ships



% of Program Life-Cycle Cost
Average - Space Systems



O&S Costs as Percentage of Total Life-Cycle Cost for Selected System Types

In order to improve its ability to meet the nation's security needs in a time of increased fiscal constraint, the QDR also calls for the Joint Force to "rebalance" in four key areas; (1) rebalancing for a broad spectrum of conflict, (2) rebalancing and sustaining our presence and posture abroad, (3) rebalancing capability, capacity, and readiness within the Joint Force, and (4) rebalancing tooth and tail. To satisfy these mandates of the QDR strategy, the Navy has been compelled to make tough choices between capability and capacity, cost and risk, and to do so across a wide range of competing priorities. Our fundamental approach to these choices has not changed since I assumed this position. We continue to view each decision through the lens of the tenets I established when I took office: Warfighting First, Operate Forward, Be Ready.

CNO Posture Statement to HASC, 12 March 2014



Better Buying Power

Better Buying Power 2.0 A Guide to Help You Think



Better Buying Power 3.0 DRAFT

Achieving Dominant Capabilities through Technical Excellence and Innovation

- Achieve Affordable Programs**
- Mandate affordability as a requirement
 - Institute a system of investment planning to drive it
 - Enforce affordability caps
- Control Costs Throughout the Product Lifecycle**
- Implement "should cost" based management
 - Eliminate redundancy within warfighter portfolios
 - Institute a system to measure the cost performance of institutions and to assess the effectiveness of acquisition control costs
 - Build stronger partnerships with the requirements control costs
 - Increase the incorporation of defense exportability features
- Incentivize Productivity & Innovation in Industry and Government**
- Align profitability more tightly with Department goals
 - Employ appropriate contract types
 - Increase use of Fixed Price Incentive Contracts in Low Production
 - Better define value in "best value" competitions
 - When Lowest Price Technologically Acceptable is used, Technologically Acceptable to ensure needed quality
 - Institute a superior supplier incentive program
 - Increase effective use of Performance-Based Logistics
 - Reduce backlog of DCAA Audits without compromise
 - Expand programs to leverage industry's R&D
- Eliminate Unproductive Processes and Bureaucracy**
- Reduce frequency of higher headquarters level review
 - Re-emphasize AE, PEO and PM responsibility, authority, accountability
 - Reduce cycle times while ensuring sound investment

Achieve Affordable Programs

- Continue to set and enforce affordability caps

Achieve Dominant Capabilities While Controlling Lifecycle Costs

- Strengthen and expand "should cost" based cost management
- Build stronger partnerships between the acquisition, requirements, and intelligence communities
- Anticipate and plan for responsive and emerging threats
- Institutionalize stronger DoD level Long Range R&D Planning

Incentivize Productivity in Industry and Government

- Align profitability more tightly with Department goals
- Employ appropriate contract types, but increase the use of incentive type contracts
- Expand the superior supplier incentive program across DoD
- Increase effective use of Performance-Based Logistics
- Remove barriers to commercial technology utilization
- Improve the return on investment in DoD laboratories
- Increase the productivity of IRAD and CR&D

Incentivize Innovation in Industry and Government

- Increase the use of prototyping and experimentation
- Emphasize technology insertion and refresh in program planning
- Use Modular Open Systems Architecture to stimulate innovation
- Increase the return on Small Business Innovation Research (SBIR)
- Provide draft technical requirements to industry early and involve industry in funded concept definition to support requirements definition
- Provide clear "best value" definitions so industry can propose and DoD can choose wisely

Eliminate Unproductive Processes and Bureaucracy

- Emphasize Acquisition Executive, Program Executive Officer and Program Manager responsibility, authority, and accountability
- Reduce cycle times while ensuring sound investments
- Streamline documentation requirements and staff reviews

Promote Effective Competition

- Create and maintain competitive environments
- Improve technology search and outreach in global markets

Improve Tradecraft in Acquisition of Services

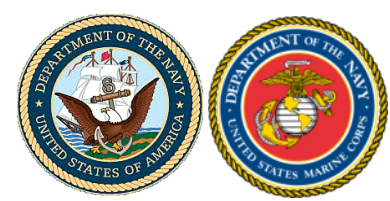
- Increase small business participation, including more effective use of market research
- Strengthen contract management outside the normal acquisition chain
- Improve requirements definition
- Improve the effectiveness and productivity of contracted engineering and technical services

Improve the Professionalism of the Total Acquisition Workforce

- Establish higher standards for key leadership positions
- Establish stronger professional qualification requirements for all acquisition specialties
- Strengthen organic engineering capabilities
- Ensure the DOD leadership for development programs is technically qualified to manage R&D activities
- Improve our leaders' ability to understand and mitigate technical risk
- Increase DoD support for Science, Technology, Engineering and Mathematics (STEM) education

Continue Strengthening Our Culture of:
Cost Consciousness, Professionalism, and Technical Excellence

Unclassified



Summary



- **We will maintain our Expeditionary Agility**
 - Retain Lessons Learned
 - “Rebalance” while adapting to budget pressures
- **Solutions must be affordable**
 - Joint service, multi-community, industry collaboration on requirements, technology and programs
- **Industry a full partner**



“The Marine Corps will continue to meet the needs of the Combatant Commanders as a strategically mobile force optimized for forward-presence, and crisis response. As we continue to work with Congress, the Department of the Navy, and the Department of Defense, your Marine Corps remains focused on today’s fight and the Marines in harm’s way. The United States Marine Corps will remain the nation’s premier crisis response force. We will remain most ready, when the nation is least ready...”

CMC, 2014 Report to Congress, Posture of the USMC, 12 Mar 2014



Discussion...

