
ONR
Revolutionary Research . . . Relevant Results
Sharpening the Edge
Serving the Next Generation Warfighter . . . Now
Science and Technology
in Support of U.S. Marine Corps
Ground Vehicle Modernization
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Expeditionary Maneuver Warfare and Combating Terrorism Department
ONR Code 30
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OFFICE OF NAVAL RESEARCH

Our Mission

The Office of Naval Research **invests in innovative science and technology (S&T) that ensures our warfighters have the** technological edge.

ONR Mission **— "to plan, foster, and encourage scientific research in recognition of its paramount importance to future Naval power and national security." — Public Law 588 of 1946**

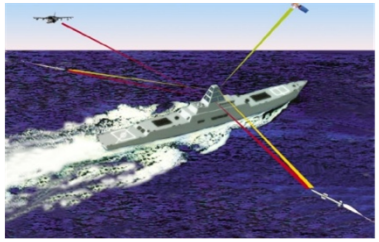
ONR S&T Departments

Code 30

Expeditionary Maneuver Warfare & Combating Terrorism

Code 31

C4ISR



Code 32

Ocean Battlespace Sensing

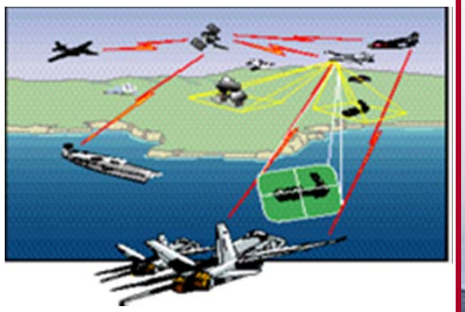
Sea Warfare and Weapons

Code 33

Warfighter Performance

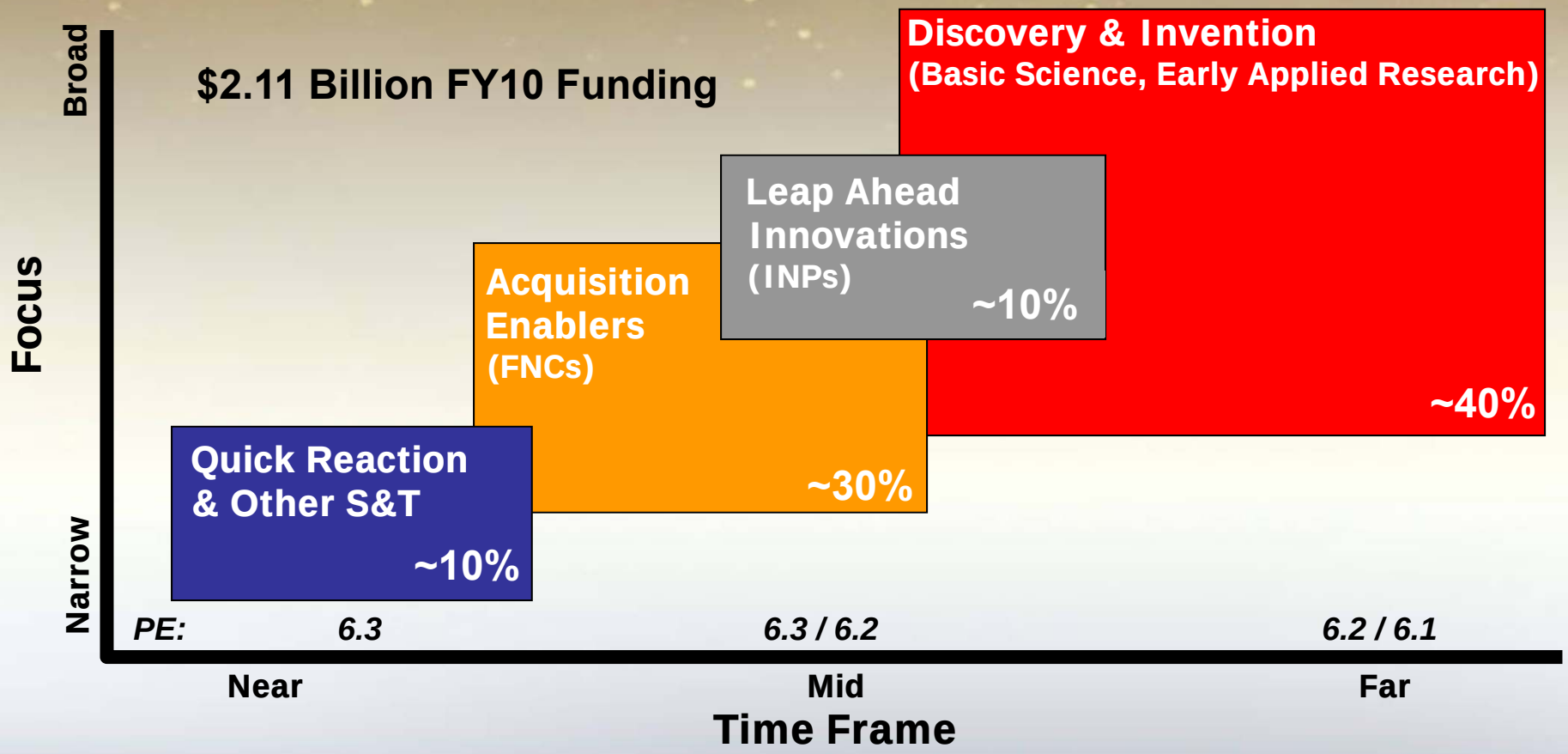
Code 34

Air Warfare and Weapons



Code 35

S&T Focused on Navy and Marine Corps Needs



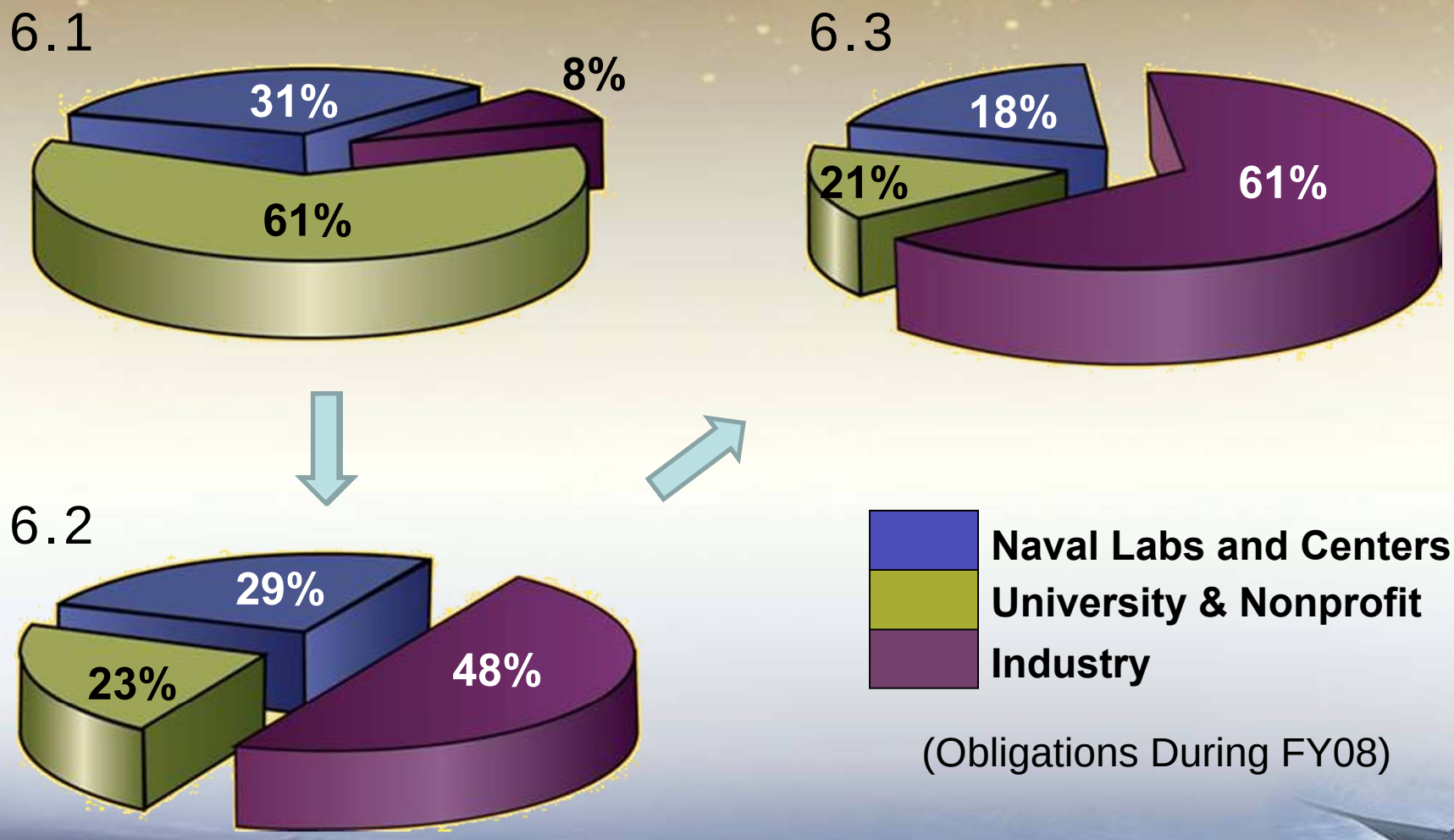
Quick Reaction (10%)
- Tech Solutions
- Experimentation
- MC S&T (MCWL, JNLW, etc.)

Acquisition Enablers (36%)
- Future Naval Capabilities
- Warfighter Protection
- Capable Manpower
- LO/CLO

Leap-Ahead Innovations (12%)
- Innovative Naval Prototypes
- NSPs
- Swampworks

Discovery & Invention (42%)
- Basic & Early Applied Research
- National Naval Responsibilities
- Education Outreach HBCU/MI

Naval S&T Investment by Performer



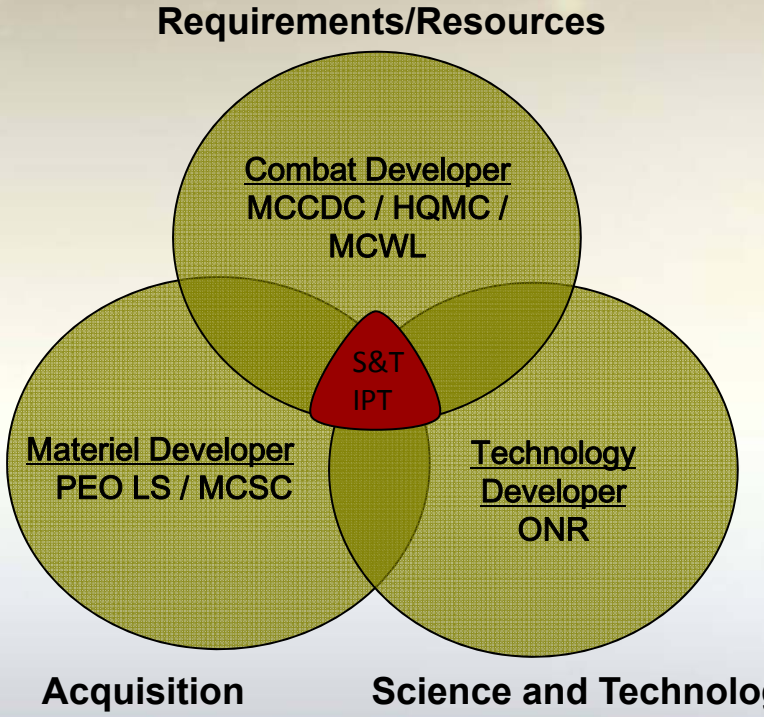
(Obligations During FY08)

Science &Technology Investment Strategy Input

Guiding Documents

Strategic Plans (Science and Technology Objectives (STOs))

USMC Science and Technology IPT and Functional Working Groups



Operational Objectives

Increase the warfighting capabilities and effectiveness of the Marine Corps Air Ground Task Force (MAGTF)

Advanced mobility and sustainment to increase operational tempo and gain temporal dominance to achieve positional advantage

Survivability across the battlefield environment to support Expeditionary Maneuver Warfare

Maneuver enabling technologies to separate Warfighters from hazardous missions, provide increased efficiencies and economy of force, and lighten the load of the MAGTF

Ground Vehicle Technology Areas of Interest

Mobility:

- Power and Energy
  - On Board Vehicle Power
  - Fuel Efficiency
    - Fuel Efficient Medium Tactical Vehicle Replacement (MTVR) - FY12 S&T new start (Mike Mimnagh, michael.mimnagh@navy.mil)
- Advanced Suspensions
- 3 Dimensional Mobility

Survivability:

- Lightweight Passive and Active Armors
- Blast Mitigation
- Occupant Based Survivability
- Signature Management/Reduction
- Invisibility

Ground Vehicle Technology Areas of Interest

Maneuver Enablers:

- Autonomy for Unmanned Ground Platforms
  - Support Distributed Operations/Enhanced MAGTF Operations
  - Perception in Complex Terrain Environments
  - Object Detection, Classification, Context Based Reasoning
  - Real time Adaptive Behavior Generation
  - Affordability/Low Cost Sensors
- Lighten the Load of the MAGTF and Dismounted Marine
- Exoskeletons
- Future Ground Combat and Tactical Vehicle Concepting

Details of Technology Areas of Interest Appear in ONR BAA 11-007

ONR Websites

Navy and Marine Corps S&T Strategic Plans located at:
https://www.onr.navy.mil/About-ONR/science-technology-strategic-plan.aspx

ONR Public Website:
https://www.onr.navy.mil/

ONR Public Website, Broad Agency Announcements:
https://www.onr.navy.mil/Contracts-Grants/Funding-Opportunities/Broad-Agency-Announcements.aspx

- ONR 30 Focused BAA is BAA 11-007.

- 2011 Long-Range Broad Agency Announcement for Navy and Marine Corps Science and Technology is BAA 11-001.

Summary

“I never, ever want my Sailors and Marines to be in a fair fight.”

ADM Roughhead, Chief of Naval Operations