

U. S. NAVY SEABORNE TARGETS

New Directions in a Time of Change

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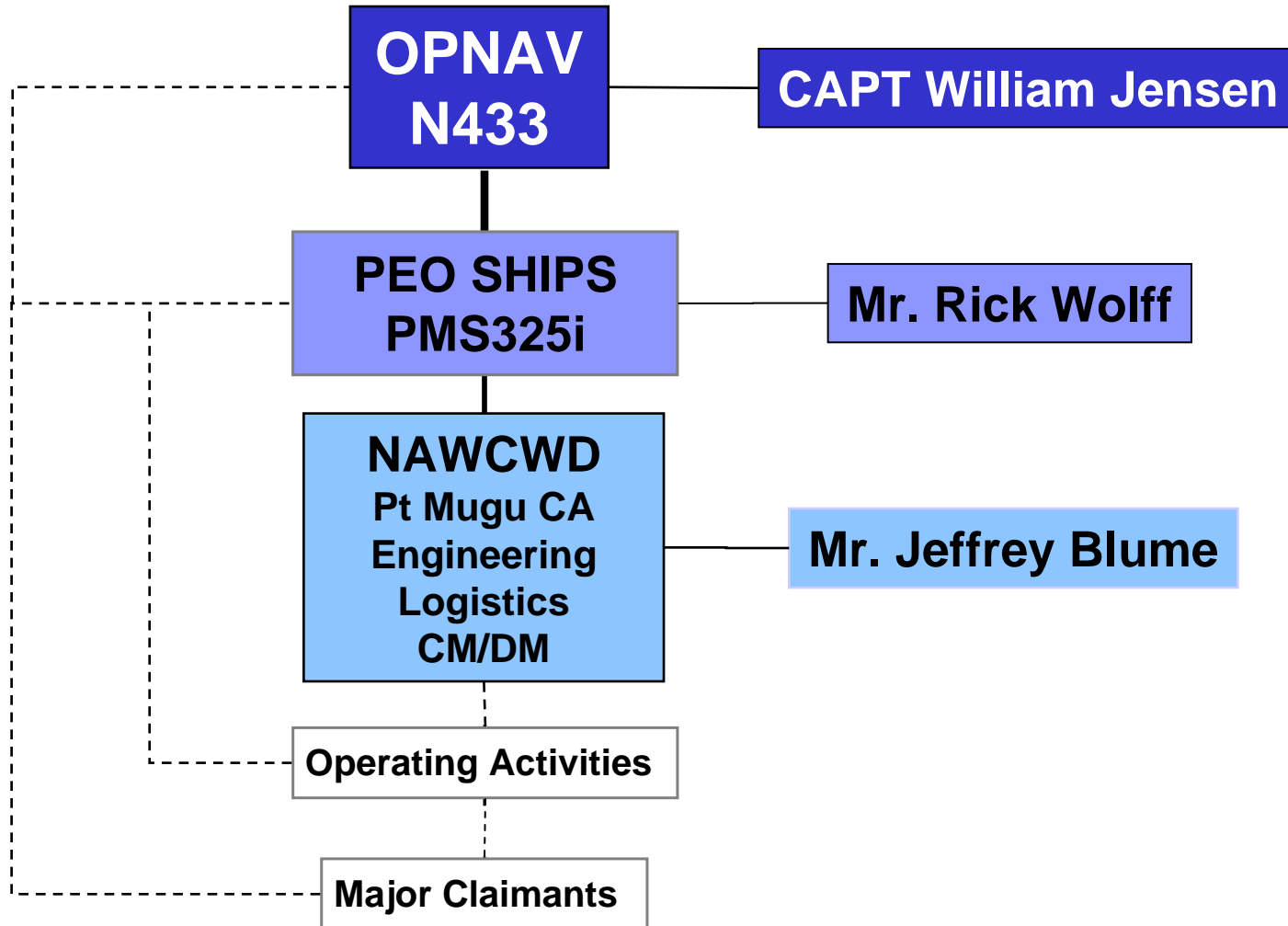
**47th Annual NDIA
Targets, UAV's & Range Operations
Symposium and Exhibition**

Unclassified



New Challenges = New Capabilities

Seaborne Targets Structure



Surface Targets Team

Mission

- Navy life-cycle lead for Seaborne Targets and augmentation systems
- Tri-Service Lead for Seaborne Targets
- Seaborne target services to the Fleet, DoD, and Foreign Military Customers in support of weapon system T&E and Fleet Training

Surface Targets Team

Who we support

- SEABORNE TARGET DEVELOPMENT AND PRODUCTION
 - OSD
 - Chief of Naval Operations
 - PEO Ships
 - Army and Air Force
- OPERATIONS
 - Navy Weapon System T & E
 - Naval Fleet Training
 - USAF Test and Evaluation
 - Foreign Military Customers



Changes

- Powered targets
- Towed targets
- Control System
- Augmentation
- New roles



Seaborne Target Resources

Powered Targets



High-speed terrorist threat



Self-propelled ship simulator

Generic threat. Also tow tractor



Ship deployable for at-sea training.



Fast-Attack Craft Target

Powered Targets

- QST-35A to QST-35B
 - Tow tractor and manned harassment
- Sinkable HSMST
 - Increased use of HE
- Production FACT
 - Missile-capable FIAC threat



Fast-Attack Craft Target FACT



Towed Targets

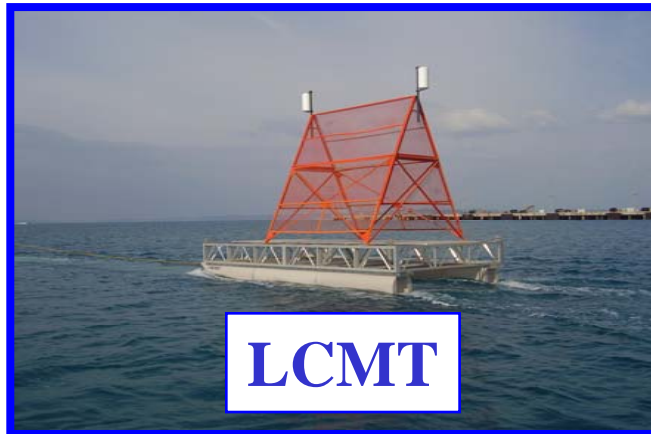
- Low-Cost Modular Target (LCMT)
 - Single platform with mission kits for HARM, Gunnery, Hellfire, and Harpoon
 - Lower cost, increased survivability, and reduced inventory
 - Some current targets will phase out

Seaborne Target Resources

Towed Targets



Multi-purpose tow used with QST-35



Low cost tow for use with HSMST & SDST



11 Ship gunnery target



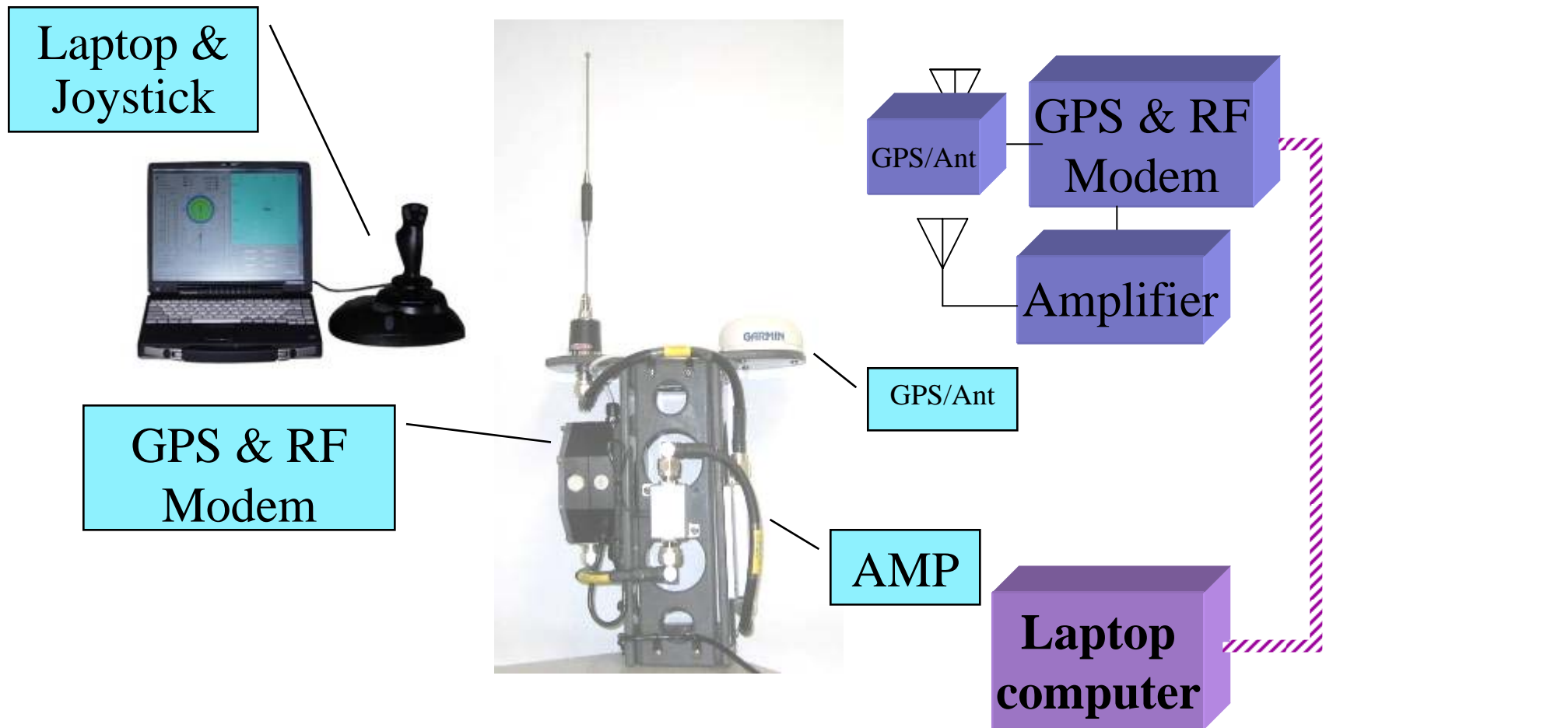
HARM target

**LCMT will Replace
ISTT,
Williams Sled,
HARM Barge**

Control Systems

- SeaCAN (Seaborne Controller Area Network)
 - A singular solution
 - Common architecture and hardware for **ALL** Seaborne powered targets
 - Operates with **ALL** Navy command links
- PCCU upgrades
 - Added PCCU data logging capability, user select PC time or GPS time to be recorded.
 - Updated drivers for Windows XP and Vista
 - Updated software for PCCU used as Tracker.

PCCU Block Diagram



Augmentation

- Focus on realistic and repeatable IR and RF signatures
 - Developing compendium of signature data for all POR targets
- Humannequin
 - Mannequin with realistic human features including IR signature characteristics
 - Instrumented to assess vulnerability

Humannequin

- Threat surface craft can be disabled by rendering either propulsion systems or the craft operator inoperative. Currently there is no real-time means to assess whether operator has been incapacitated.
- Commercially-available mannequins will be outfitted with heat sources and sensors to provide realistic human signatures and vulnerability measurements.



New Roles

- Seaborne targets as USV surrogates
 - Targets can be configured to execute other USV missions either operationally or as developmental prototypes
- Seaborne targets as UAV surrogate test beds
 - Good payload test beds
 - Impervious to traditional flight risks
 - Long endurance

Planned Procurements

- Focus on Program-of-Record Targets
 - HSMST, SDST, FACT, LCMT, and LCTT
- Adjust quantities annually based on requirements and budget.

Operating Sites and Resources

U. S. Navy Seaborne Targets												
Operating Activity	Powered						Towed / Static					
	MST	QST-35	FACT	HSMST	SDST	ATLS	HARM Barge	Williams Sled	ISTT	LCTT	LCMT	
NAWCWD, Point Mugu, CA	X	X	X	X	X	X	X	X	X	X	X	X
NAWCAD, Pax River, MD		X		X	X		X	X	X	X		
NAWCAD Det, Norfolk, VA		X		X	X				X	X	X	
CFAO, Okinawa				X	X		X	X	X	X	X	X
PMRF, Kauai, HI		X		X	X				X	X	X	
SCORE, San Diego, CA				X	X				X	X	X	
MCAS, Cherry Point, NC				X						X		
ATGL, Norfolk, VA					X					X		
ATGM, Mayport, FL					X					X		

Questions?

Seabornetargets.org

NAV  AIR

