Naval Oceanography enterprise (NOe)

Protecting the Fleet from destructive weather and enhancing the warfighter through decision superiority

Multi-Function Phased Array Radar Symposium II
Norman, OK
CAPT Michael Angove, USN
Naval Oceanography Alignment

**WARFIGHTING FOCUSED**
- Anti-Submarine Warfare
- Naval Special Warfare
- Mine Warfare
- Intelligence Support
- Precise Time and Astrometry
- Navigation
- Fleet Operations
- Maritime Operations
- Aviation Operations

**KNOWLEDGE-CENTRIC**
- Speed to effect
- Precision to effect
- International influence
- Reduced uncertainty
- Safety of Operations

On a 24x7 readiness cycle, the people deliver strategic, operational and tactical effects that continually shape and provide advantage in the battlespace:
Leveraging MPAR Capability

Protecting the Fleet from Destructive Weather is the Naval Oceanography enterprise’s (NOe) Top Priority. MPAR Could Enhance CONUS Resource Protection By:

– Faster Volumetric Scans
– Adaptive Sampling to focus on the severe weather
– Better Tornado and Hail Prediction
– Increasing Hazardous Weather Warnings Lead Times

$150B of Ships, A/C and Shore Assets
MPAR and the Way Ahead with NOe

- NOe heavily dependent on NOAA/NWS in CONUS
  - Use of the Commander Naval Installation Command (CNIC) Wide Area Alert Network (WAAN) for auto-push of location relevant National Weather Service (NWS) warnings.
  - Dependent on the WSR-88D network for Installation/Airfield resource protection
  - Communications with Storm Prediction Center/National Hurricane Center when conditions warrant
  - Cover domestic “gaps” with organic capability (e.g., Fallon).
  - Significant investment OCONUS (Yokosuka, Iwakuni, Diego Garcia, GITMO, Souda Bay, Rota, Sigonellla)

- Share Information and Technology Related To Weather Detection Using Phased Array Radars
  - HWDDC/TEP (Tim Maese): Leverage SPS-48E/SPY-1 air search radar to display weather information. Scheduled to be deployed all carriers, large deck amphibious ships (SPS-48) and projected for Aegis (SPY-1) capable platforms. NRL Monterey linkage: NWP.
  - Leverage Open Arcitechture (Robert Sexton—DDR&E) and frequency deconfliction (Richard Soares—NSWC) work (outside NOe)

- Continue Participation in MPAR WG.
  - Maintain an active role/SA in the MPAR WG
MPAR Risk Reduction

- Minimize Mission Creep
  - Requirements Vetted and Finalized
  - “Perfect” enemy of “good enough”

- Agencies tailor R&D towards requirements

- Leverage Navy Lessons Learned from HWDDC

- Utilize COTS/GOTS Solutions

- Determine Cost/Benefits and Agency “stakes”
  - “If you’re not talking about money you’re not having a conversation” (CAPT Jim Etro, 1995)
Back-up
Weather Services Laydown

Naval Oceanography

Total Weather Services

Aviation: 134
Maritime: 132
Fleet Ops: 165

Presidential Support
0/3/0

NMFC-Norfolk
21/23/13

SGOT-Norfolk
13/29/34
10/8/7

NAFD San Diego
8/12/10

SGOT-San Diego
11/32/36
9/7(8)/6

NAFC-Norfolk
15/34/18

NAFD Sembach
2/12/0

SGOT-Fallon
2/8/0

NAFD Atsugi
2/7/5

Component Bahrain
0/3/3

JTWC/NMFC-PH
37/27/11

BA: Officer+Civilian+Chief/7412/0000
Big Decks/SGOT Teams/MET

Aviation: 134
Maritime: 132
Fleet Ops: 165
CONUS Resource Protection

- Enterprise Endorsement (CNIC)
  - CNIC N3 and EM
  - CNIC Semi-Annual Emergency Managers Meeting
- OPNAVINST 3140.24 – TS COR vice warnings, support use of NWS
- New CNIC 3140.24
  - Institutionalize a Standard Service Delivery (WAAN and Comms)
  - Explicitly lays out CONUS use of NWS and WAAN
  - Annex to address JB
  - NAFC RP cell provides T1/T2 for Naval Air Stations
MPAR Symposium / Implementation Strategy

MPAR Risk-Reduction Implementation Strategy

Navy Leveraging Opportunities

Program Council

Crosscut Studies (cost/benefit)

Detailed Rqmts/ CONOPS

RDT&E Leverage HW Dev

NSWC

ONR

NOe