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

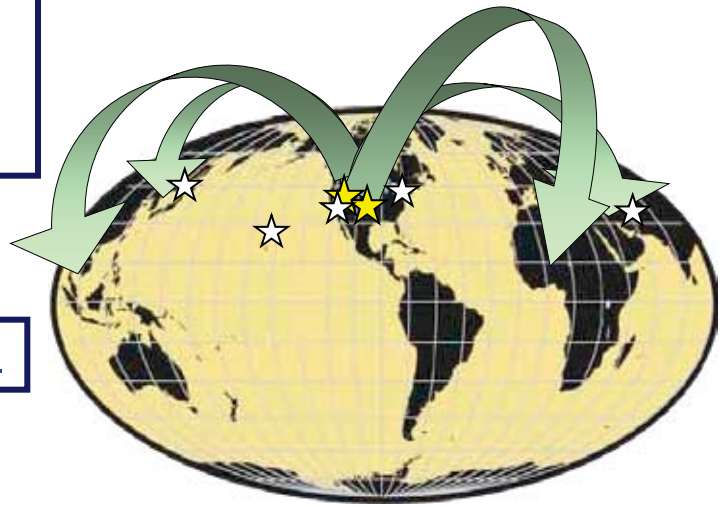
CAPT Michael Angove, USN

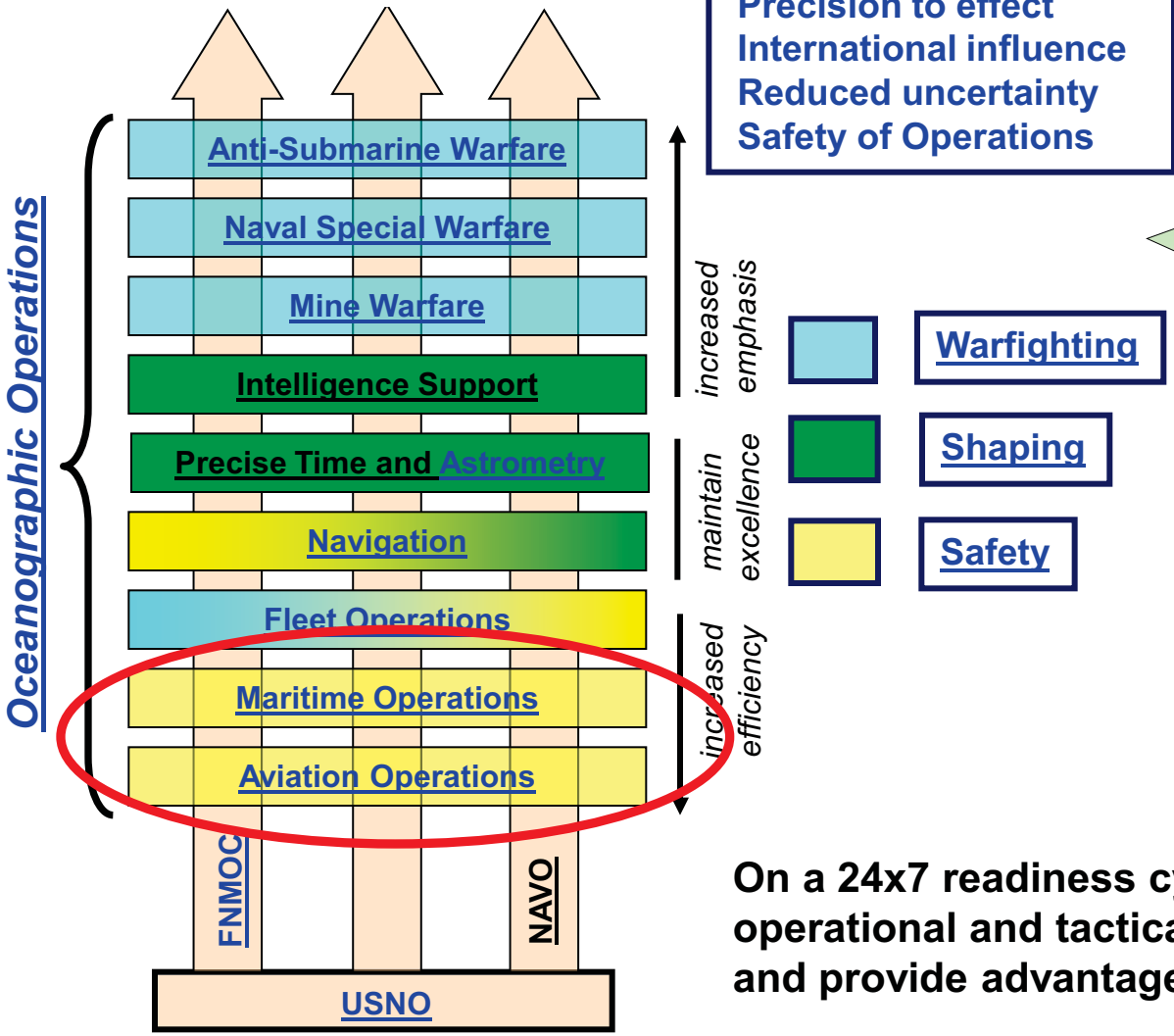
Naval Oceanography Alignment

WARFIGHTING FOCUSED

Speed to effect
Precision to effect
International influence
Reduced uncertainty
Safety of Operations

KNOWLEDGE-CENTRIC





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

BA:Officer+Civilian+Chief/7412/0000

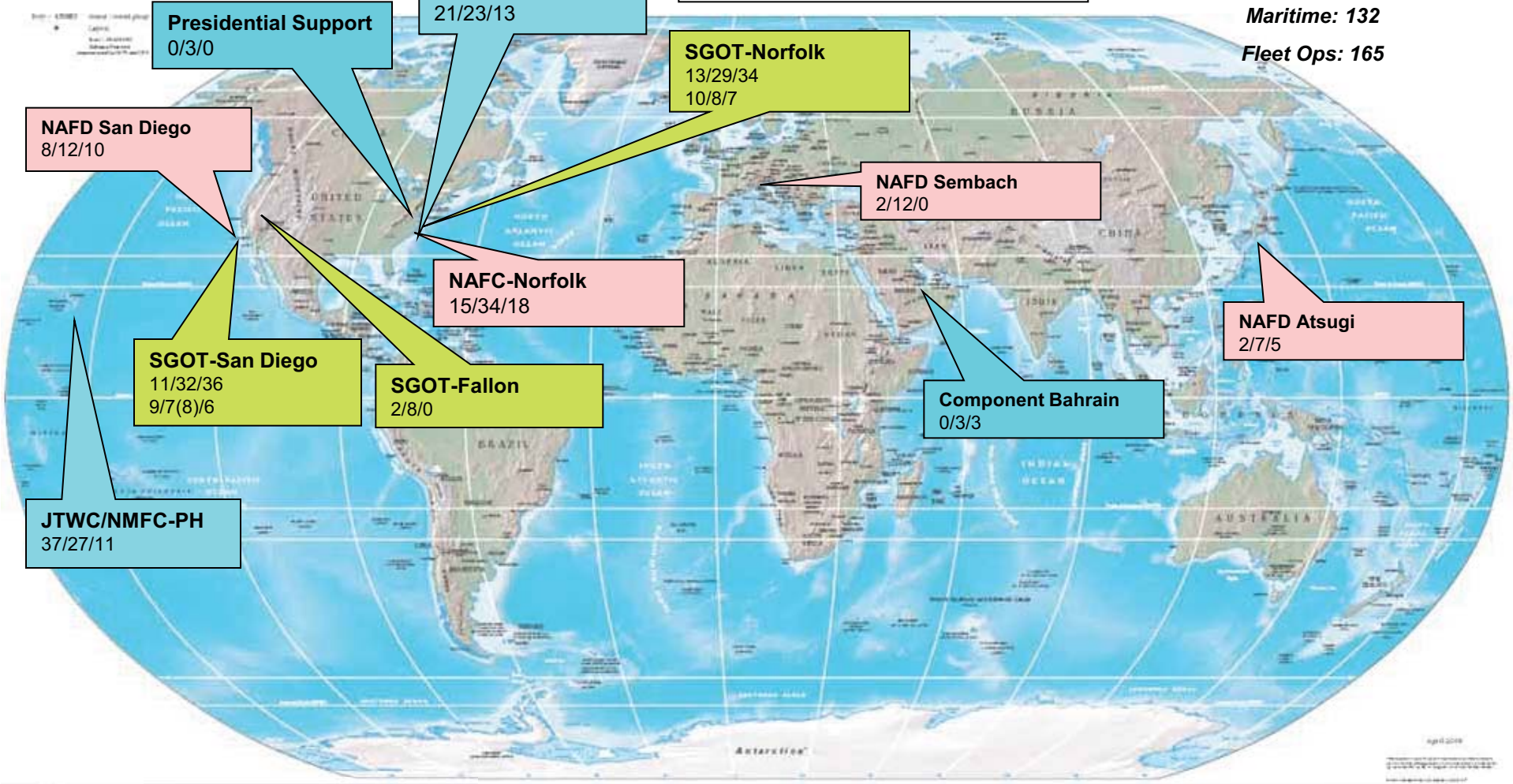
Big Decks/SGOT Teams/MET

Total Weather Services

Aviation: 134

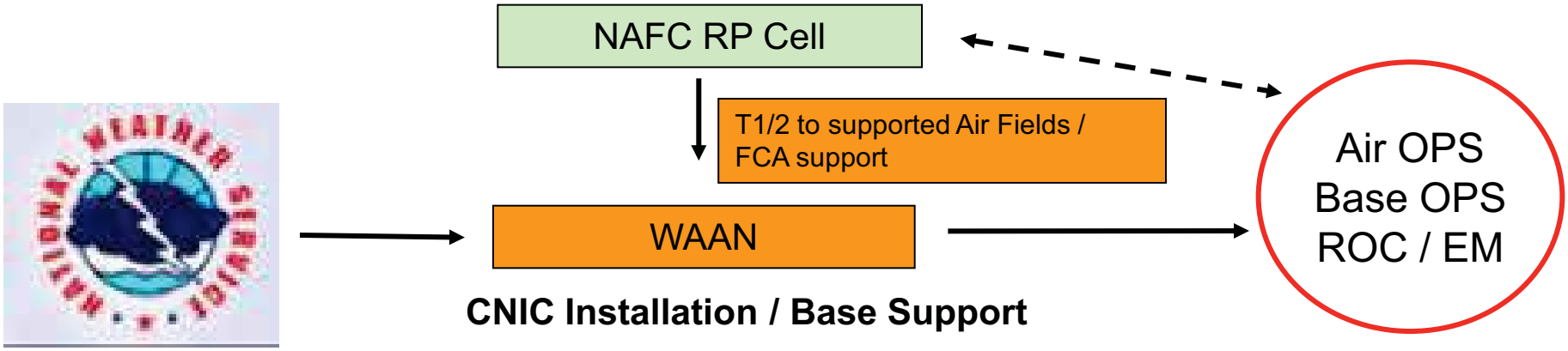
Maritime: 132

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