



SHIP OPERATIONS COOPERATIVE PROGRAM

Business ▪ Government ▪ Education ▪ Workforce

Catalyst for Change™

**SOCP 2017 SUMMER
WEBINAR/ONSITE MEETING**
JULY 18, 2017 (09:00 - 17:00 EDT)

Serving the Needs of the
Maritime Industry through
Collaboration &
Innovation

EXTREME WEATHER EVENTS – TECHNOLOGY & EQUIPMENT

(RELATED TO VOLUNTARY AUTOMATED WEATHER OBSERVATION REPORTING)

Notes:

Joe Sienkiewicz, NOAA - Ship Forecasting, Forecast Process

- Observations are critical to warning and forecast loop
- Regions over oceans are very uncertain with forecasting
- SOLAS Ch. V – Safety of Navigation

TECHNOLOGY & EQUIPMENT (CONT)

Notes:

Mike Potochney , NOAA VOS – AWS

- Pros/Cons of AWS + Challenges facing the captain and crew
- Keys for Development and integration for AWS
- Weather Observation Process:
 - Ship or Company Integrate Info into Application (Finish)
 - NOAA Distributes Products
 - NOAA Forecasting + Product Development
 - NOAA Receiving + Processing Observations
 - Ship Observations + Transmission (Start)
- Video on VOS

TECHNOLOGY & EQUIPMENT (CONT)

Notes:

Jim Luciani, NOAA – Easily Automated Items, Visual Required Automation & Challenges Facing It

- VOS Observation Levels – Manual, Enhanced Manual Observing System (EMOS)
Some automation, Automated Weather System (AWS) Completely automated
- VOS Observation Elements
- Port Meteorological Officers (PMO's)

TECHNOLOGY & EQUIPMENT (CONT)

Notes:

Mike Potochney, NOAA VOS - Next Steps

- Partnering with shipping companies
- Foster Spirit of cooperation with private sector companies

Q & A 1

- Talk to Companies not captains, hope companies make it a matter of safety, maybe include NOAA on the “noon” Report with weather

Doug Mansel, NTSB VDR – Timely Dissemination, Quality Control, Documentation, Standards Development, System Demonstration, SOCP efforts could be harmonized with international efforts, Owner/operator role for improving weather modeling and forecast services

TECHNOLOGY & EQUIPMENT (CONT)

Notes:

Brian Tetreault, USACE – Leveraging AIS for ship reporting of weather observations

- Increasing info provided through AIS (Automated Identification System)
- AIS Methods: Ship to shore, Shore to ship, Ship to Ship
- AIS capabilities: Transmit info, received via satellite & shore based network
 - Existing Weather Messages: Met Hydro (old), Environmental (Complex), Wx report from ship
- Weather Observation Report from Ship: 2 types, Developed by WMO using common coding scheme
- Integration software – NMEA + Manual ⇌ Together ⇌ AIS, Other Software
- Issues: Portrayal on vessels, routing, legal issues, quality assurance
- Suggested Approach: Establish pilot project to partner between industry & government agency software, build on existing capabilities (sensors & equipment), Use existing messages, develop “middleware” for testing

TECHNOLOGY & EQUIPMENT (CONT)

Notes:

Todd Ripley, MARAD – Autonomous Vessels

- Commercial & DOD autonomous vessel initiatives
- Weather considerations: Vessel observations, current conditions, route adjustments, course adjust for safety

Q & A 2

- Who's responsible for the equipment and risk mitigation?
- Is there a need for standard portrayal or international standard, or just have standard format and free method of choice?

THANK YOU MITAGS FOR HOSTING THIS EVENT ONSITE!



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