



National Transportation Safety Board

Research Vessel Operators Committee
NTSB relationship

University of Rhode Island
April 17-19 2018

Discussion

- Introduction
- About our agency
- NTSB investigative process
- El Faro VDR recovery
- Summary

Introduction

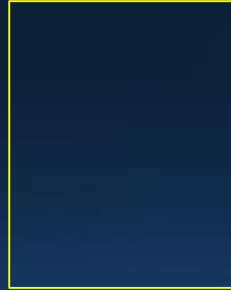
- Deck officer 1987-1998, Maritime Overseas Corp.
- Instructor at license training schools
- Master, Thomas G. Thompson
- Project manager, UW Marine Operations
- Investigator, NTSB, 2003-2007
- Vice President of Investigations, Princess
- NTSB Chief of Investigations
- Deputy Director, Office of Marine Safety

Mission

The NTSB is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant accidents in other modes of transportation—marine, railroad, highway, and pipeline.

The NTSB determines the **probable cause** of the accidents and issues **safety recommendations** aimed at preventing future accidents. In addition, the NTSB carries out special studies concerning transportation safety and coordinates the resources of the federal government and other organizations to provide assistance to victims and their family members impacted by major transportation disasters.

Organization



Vacant



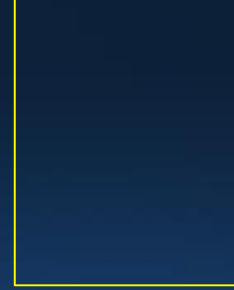
Earl F. Weener
Member



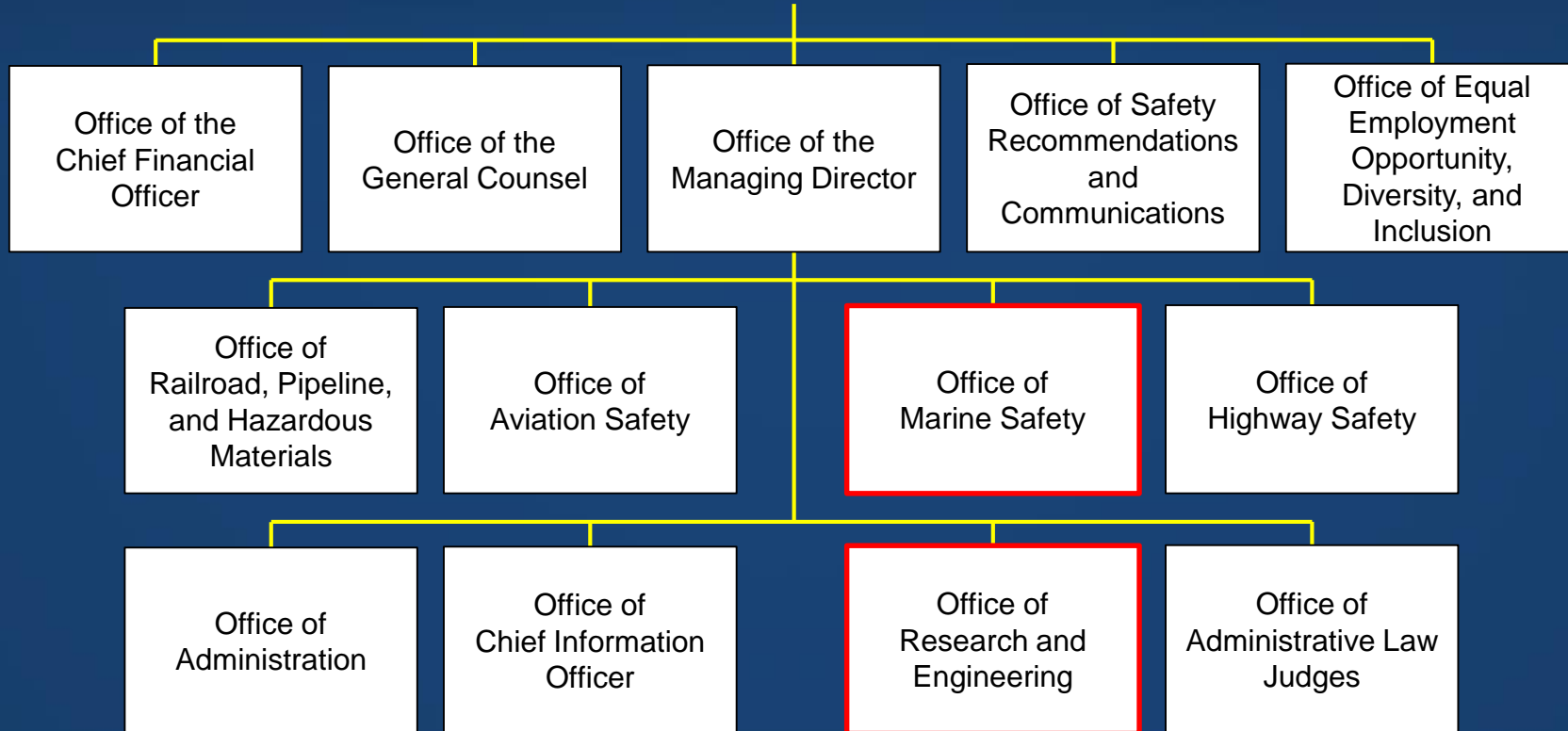
Robert L. Sumwalt
Chairman



T. Bella Dinh-Zarr
Member



Vacant



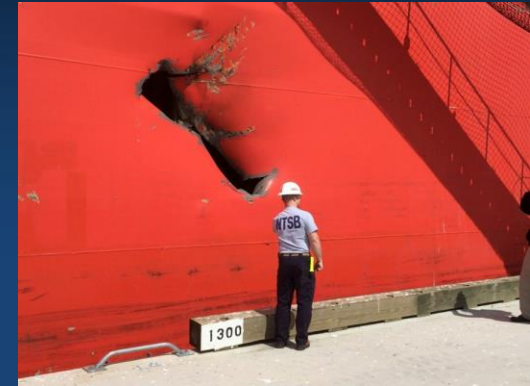
NTSB Mission in Marine Safety

- Investigate
- Assist USCG
- Safety Studies
- Outreach
- Advocacy
- Safety Recommendations



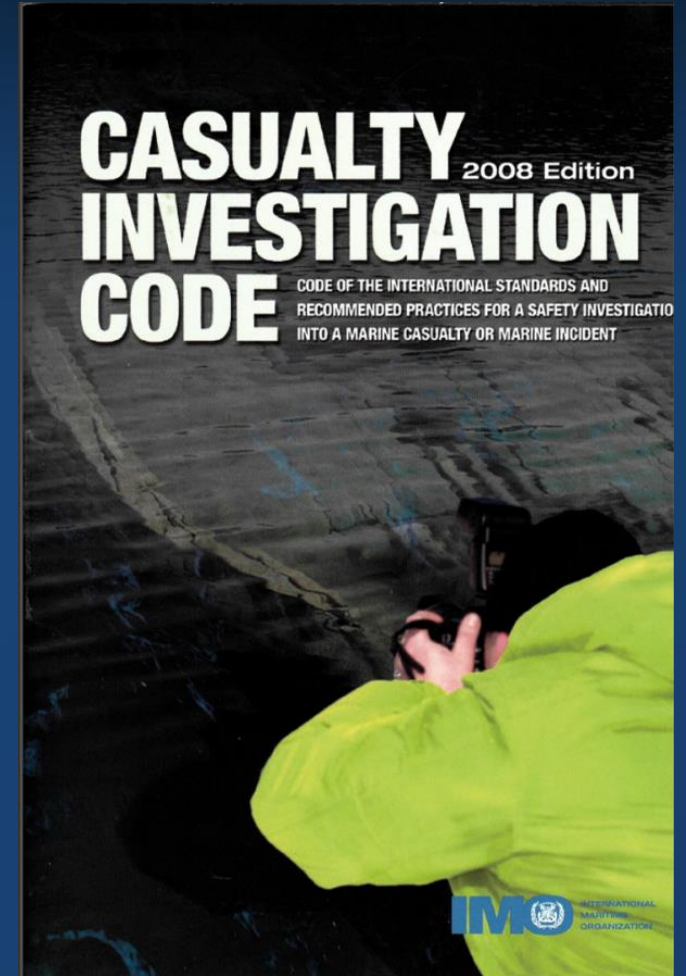
NTSB Mission in Marine Safety

- Investigate major marine casualties
 - Within US waters
 - US casualties anywhere in world
 - Public/non-public accidents
 - Assist other nations when US interests are impacted by maritime accidents
- Make findings
- Determine probable cause
- Make recommendations



NTSB Authorities and Guidance

- *Independent Safety Board Act of 1974*
- 49 *CFR* Part 831
- 49 *CFR* Part 850
- 2008 MOU NTSB/USCG
- IMO MSC/84/24 Add. 1
 - *Casualty Investigation Code*



Investigation Organization

- Investigator in charge (NTSB)
- Party Coordinators
 - USCG IO
 - Lead company representatives
- Group Chairmen (NTSB)
 - Lead technical groups
 - Party representative



NTSB Party System

- Naming of Parties
 - Organizations
 - Technical support
- Participation
 - Factual development
 - Testing of components
 - Witness interviews
 - Technical Review



Investigative Process

- Notification
- On Scene
- Naming of Parties
- Factual Development
 - NTSB hearing
 - USCG Marine Board
- Technical review
- Party Submissions
- Draft Report
- Board Meeting
- Safety Recommendations
- Advocacy





Safer Seas 2016- Lessons

- Fatigue
- Use of Medication while Operating Vessels
- Standard Maintenance and Repair Procedures
- Operational Testing Procedures
- Operating in Strong Currents
- Familiarization with Local Recommendations
- Bridge Resource Management
- Distraction
- Safety Equipment
- Access to High-risk Spaces



Dive 02
CURV 21
USN SUPSALV

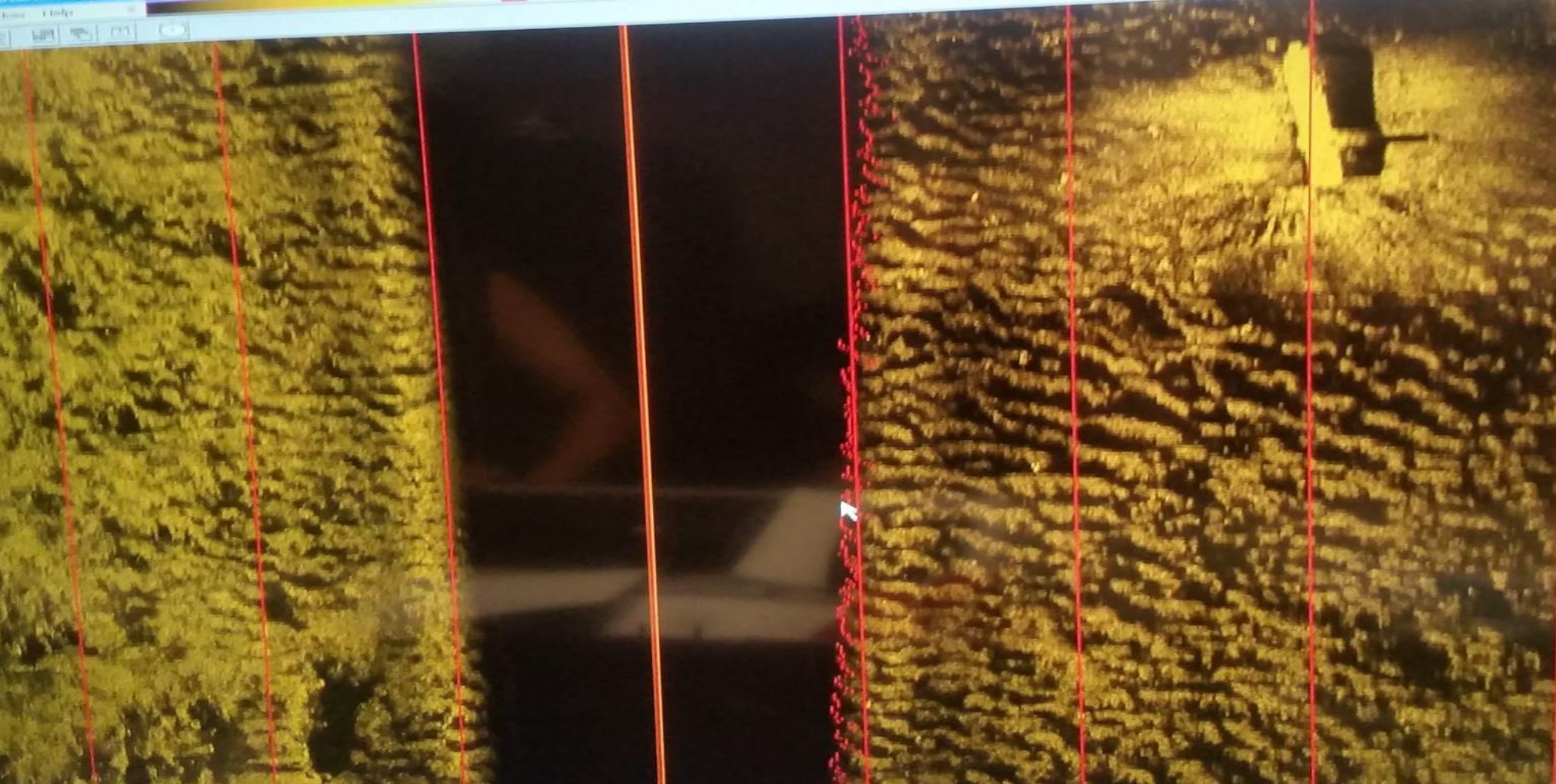






First Mission Oct/Nov 2015 USNS APACHE, ORION, CURV21





CV El Faro
Dive 08 Debris field survey
CURV 21
USN SUPSALV

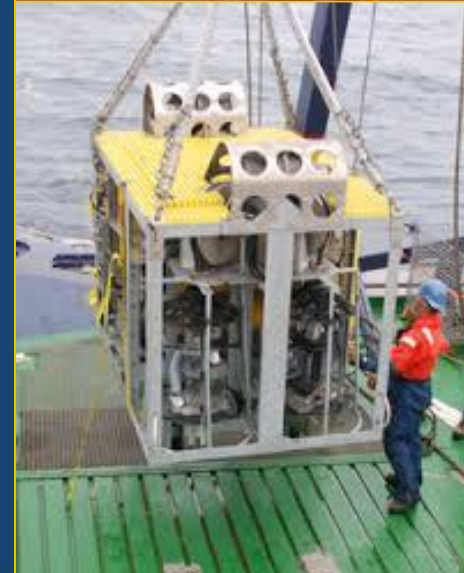


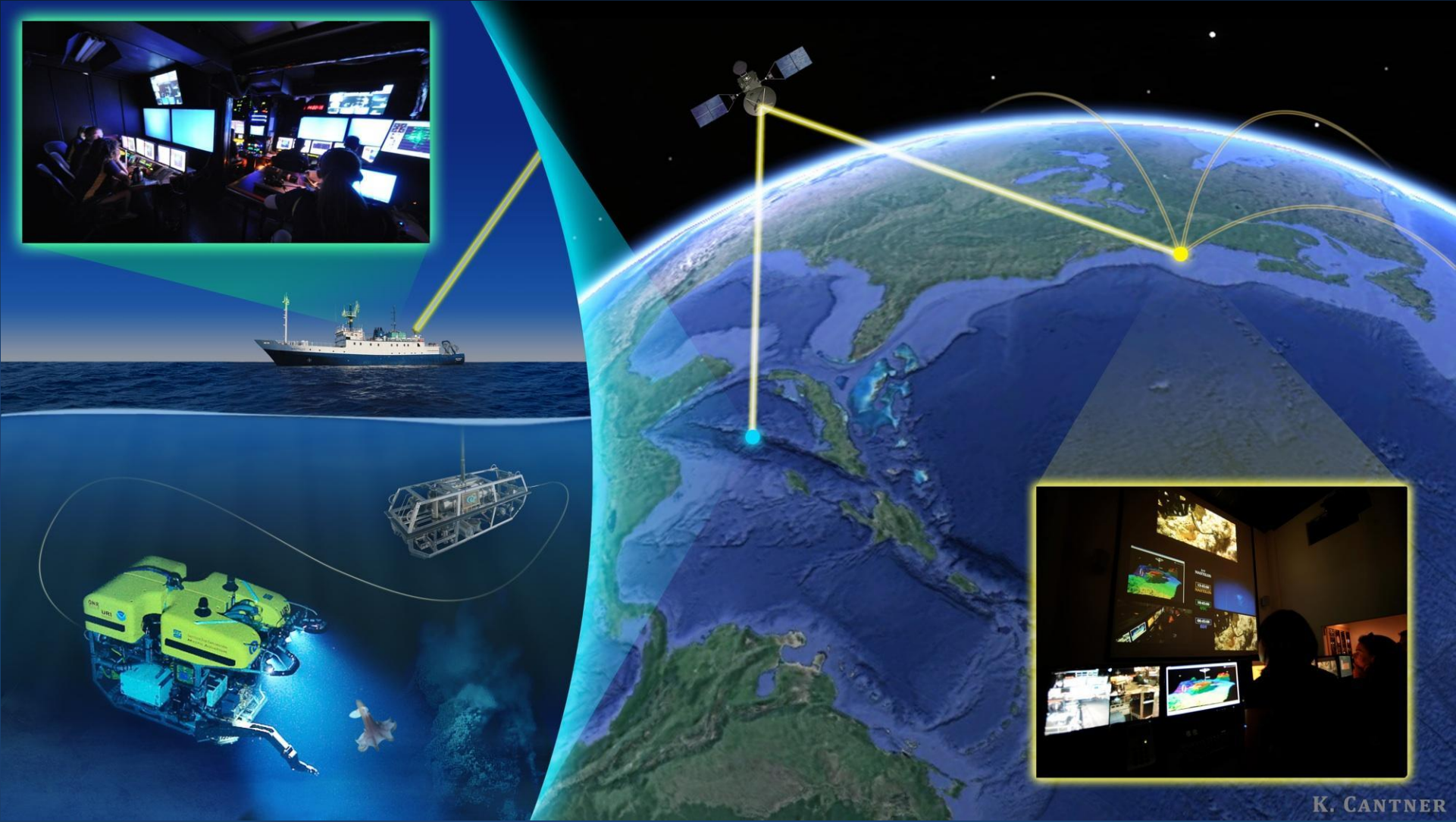
CV El Faro
Dive 08 Debris field survey
CURV 21
USN SUPSALV





Second Mission April/May 2016 ATLANTIS/SENTRY/CAMPER

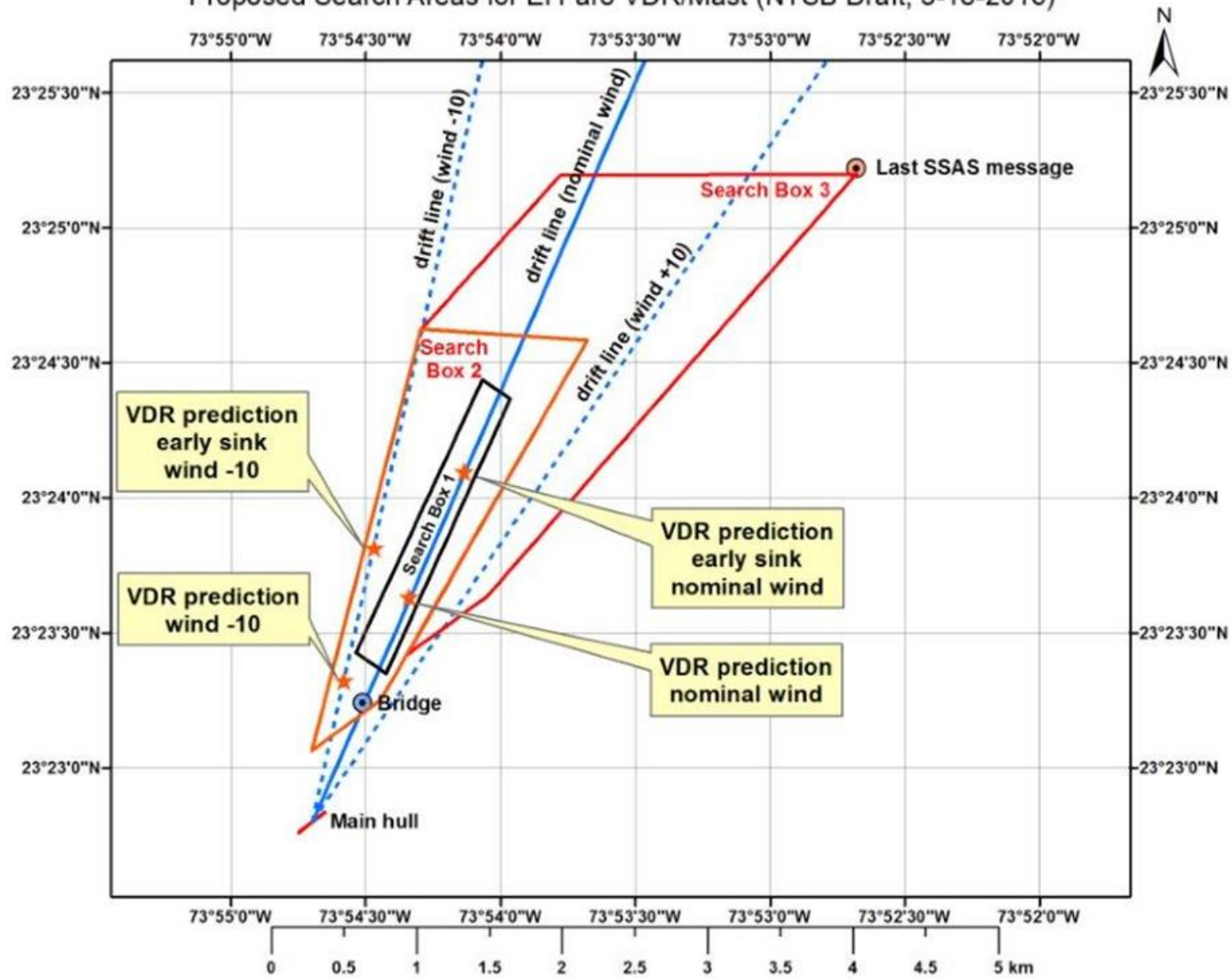




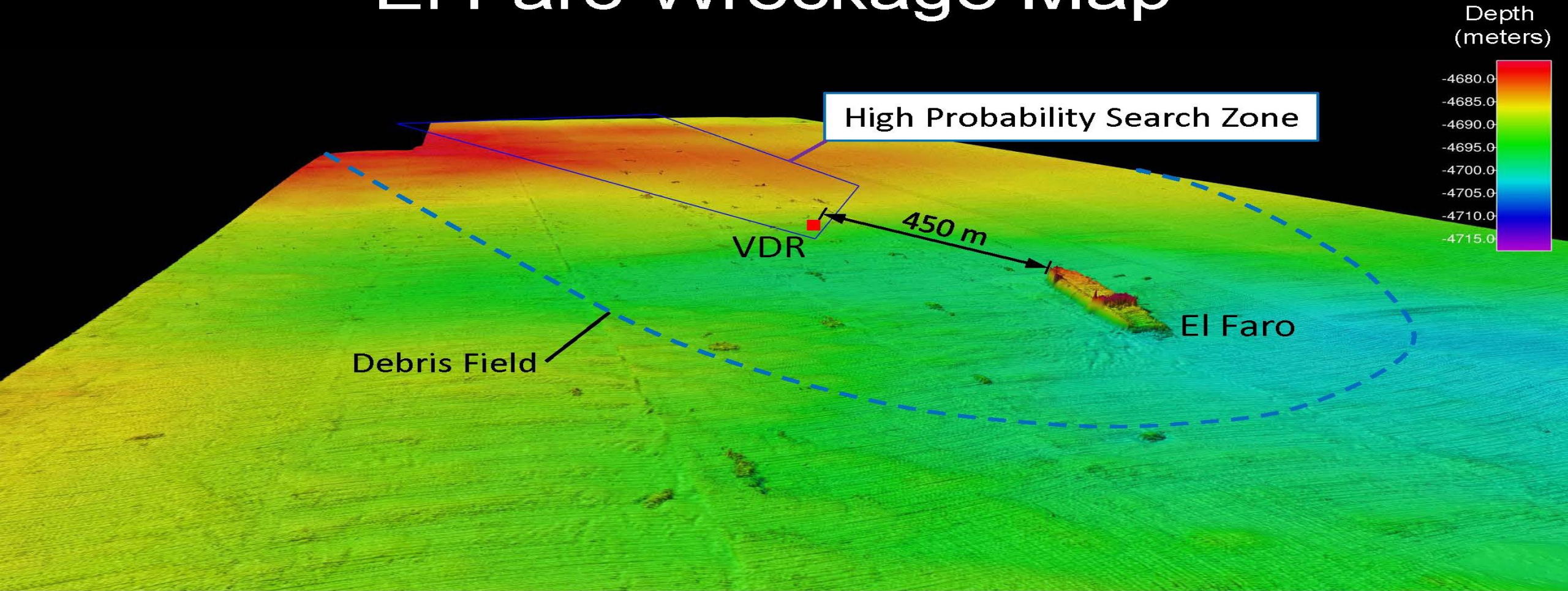
K. CANTNER

Ship-to-Shore Telepresence

Proposed Search Areas for El Faro VDR/Mast (NTSB Draft, 3-18-2016)



El Faro Wreckage Map



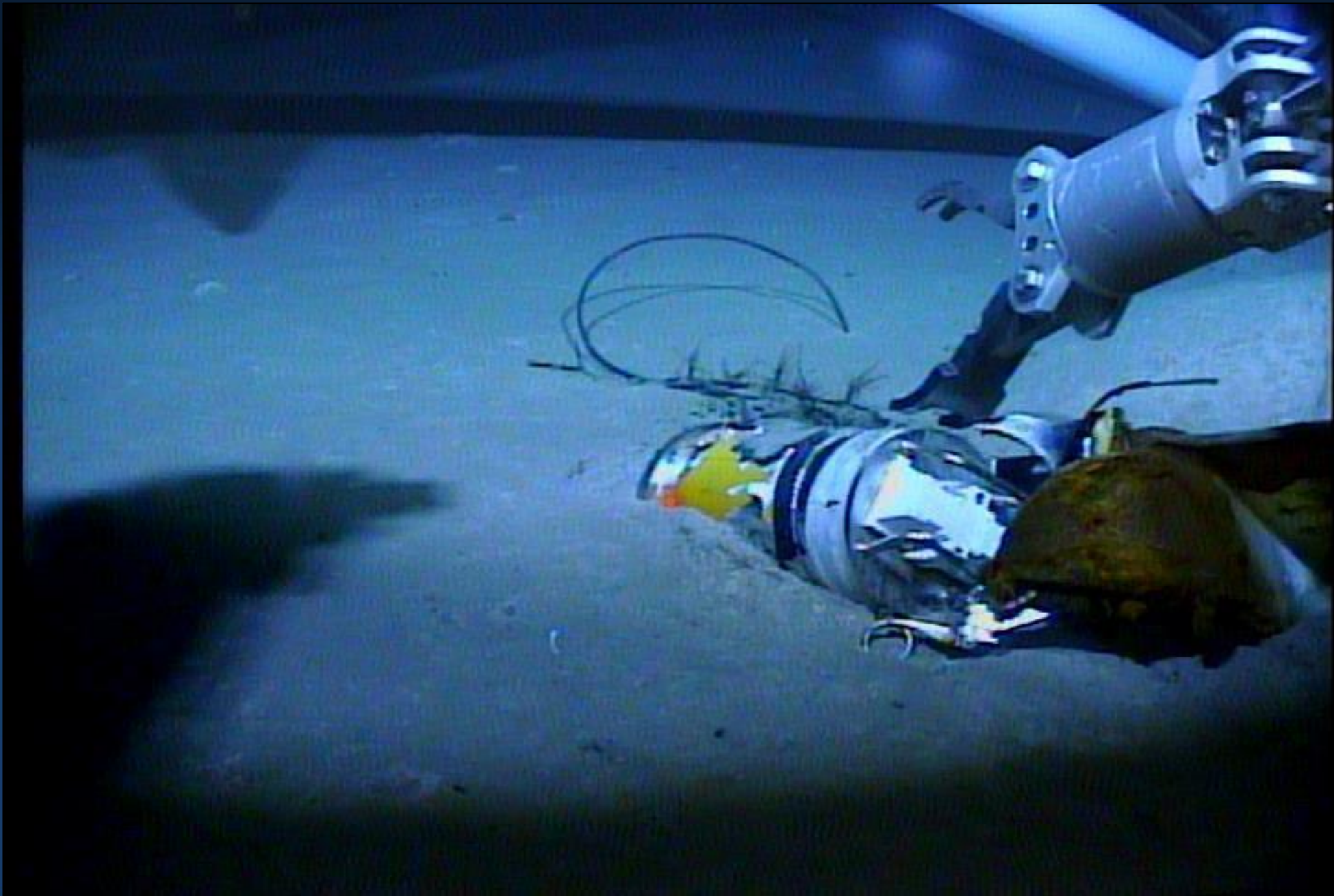
El Faro VDR found



Tuesday, April 26, VDR found at 0206
CAMPER imagery

Third Mission August 2016 USNS APACHE, CURV21









Lessons from El Faro at sea operations

- Aviation and Marine accidents
- Collaboration with federal agencies
- Understanding the technologies
- Scoping the problem and cost
- Capabilities, coordination and communications
- Sharing of sensitive information

Lessons from El Faro at sea operations

- Availability of necessary assets
- Navigation and mapping of wreckage
- Likelihood of two mission approach
- Human Remains recovery
- Post mission requirements
- Need for table top exercises and workshops

Actions

- Working group with partner agencies
 - NSF, UNOLS, SUPSALV, MARAD, USCG
- Table top exercises
- Communications planning
- MOUs
- Inventory of assets, planning
- Two mission plan
 - Vessel of opportunity and AUV
 - Second mission with more capability and personnel

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