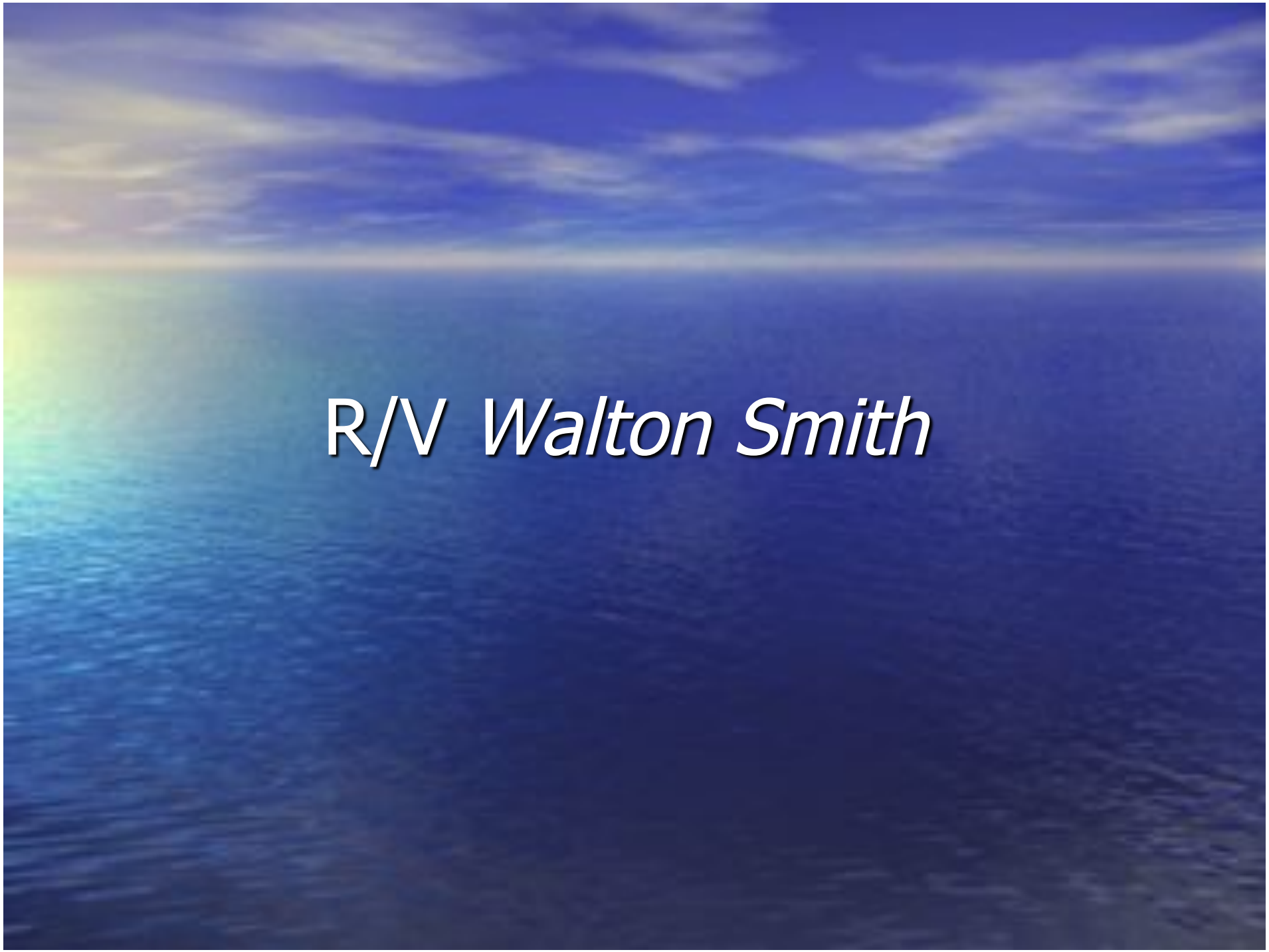
2012
Icebreaker Session

RVTEC Annual Meeting

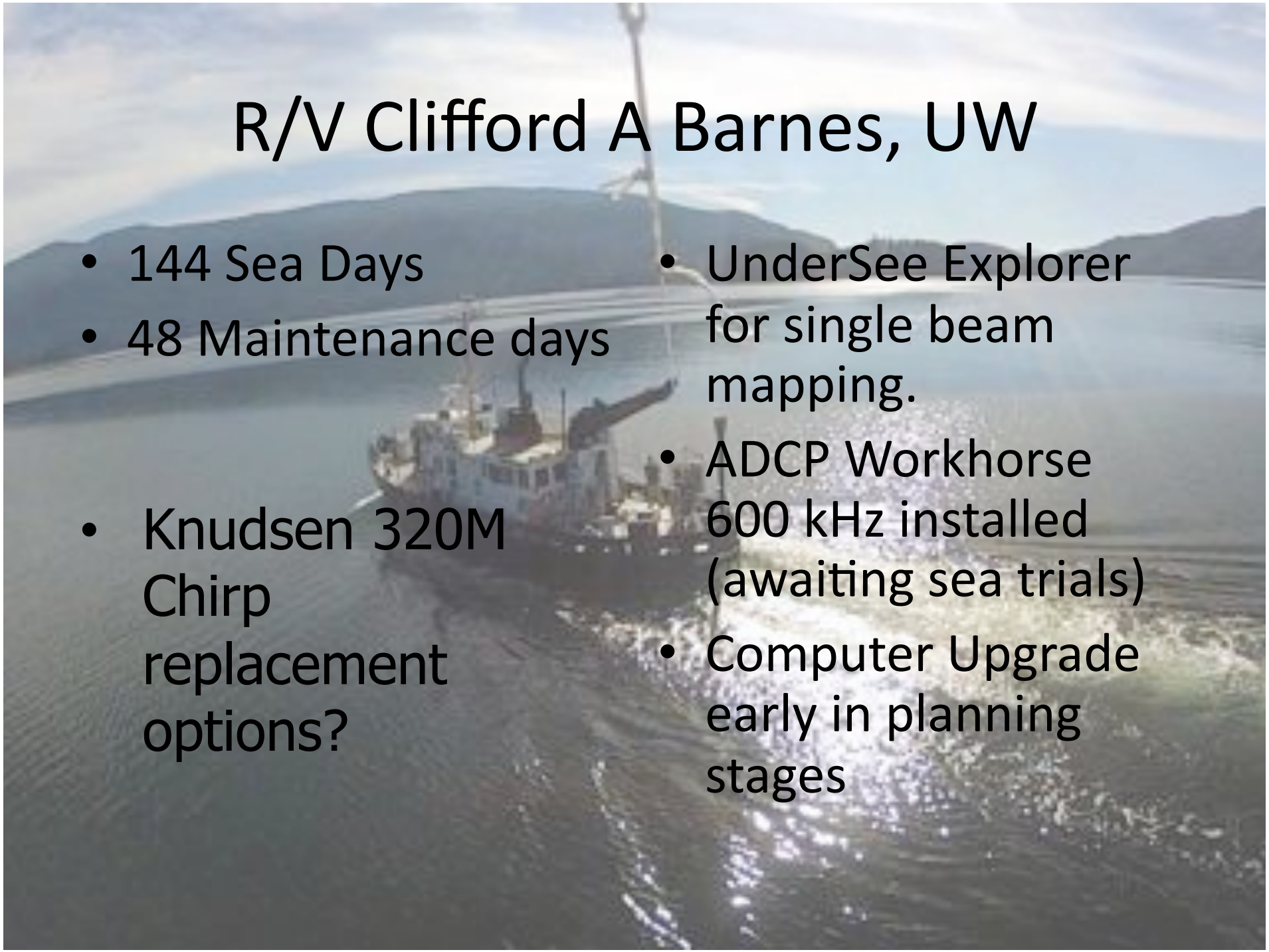
February 11-15, 2013


R/V *Walton Smith*

R/V *Clifford A. Barnes*

Stephen Jalickee

R/V Clifford A Barnes, UW



- 144 Sea Days
- 48 Maintenance days

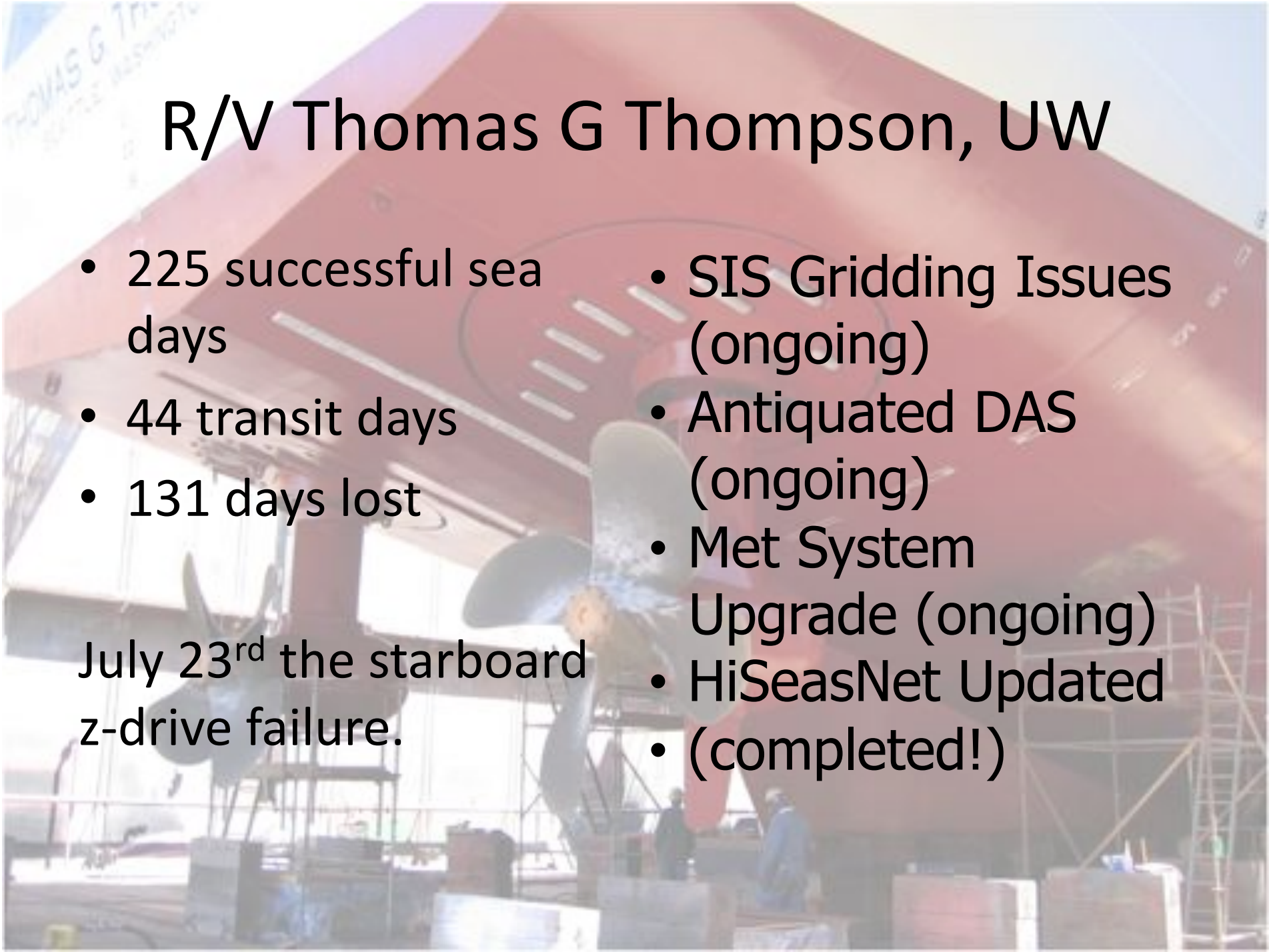
- Knudsen 320M Chirp replacement options?

- UnderSee Explorer for single beam mapping.
- ADCP Workhorse 600 kHz installed (awaiting sea trials)
- Computer Upgrade early in planning stages

R/V *Thomas G. Thompson*

Patrick A'Hearn

R/V Thomas G Thompson, UW



- 225 successful sea days
- 44 transit days
- 131 days lost

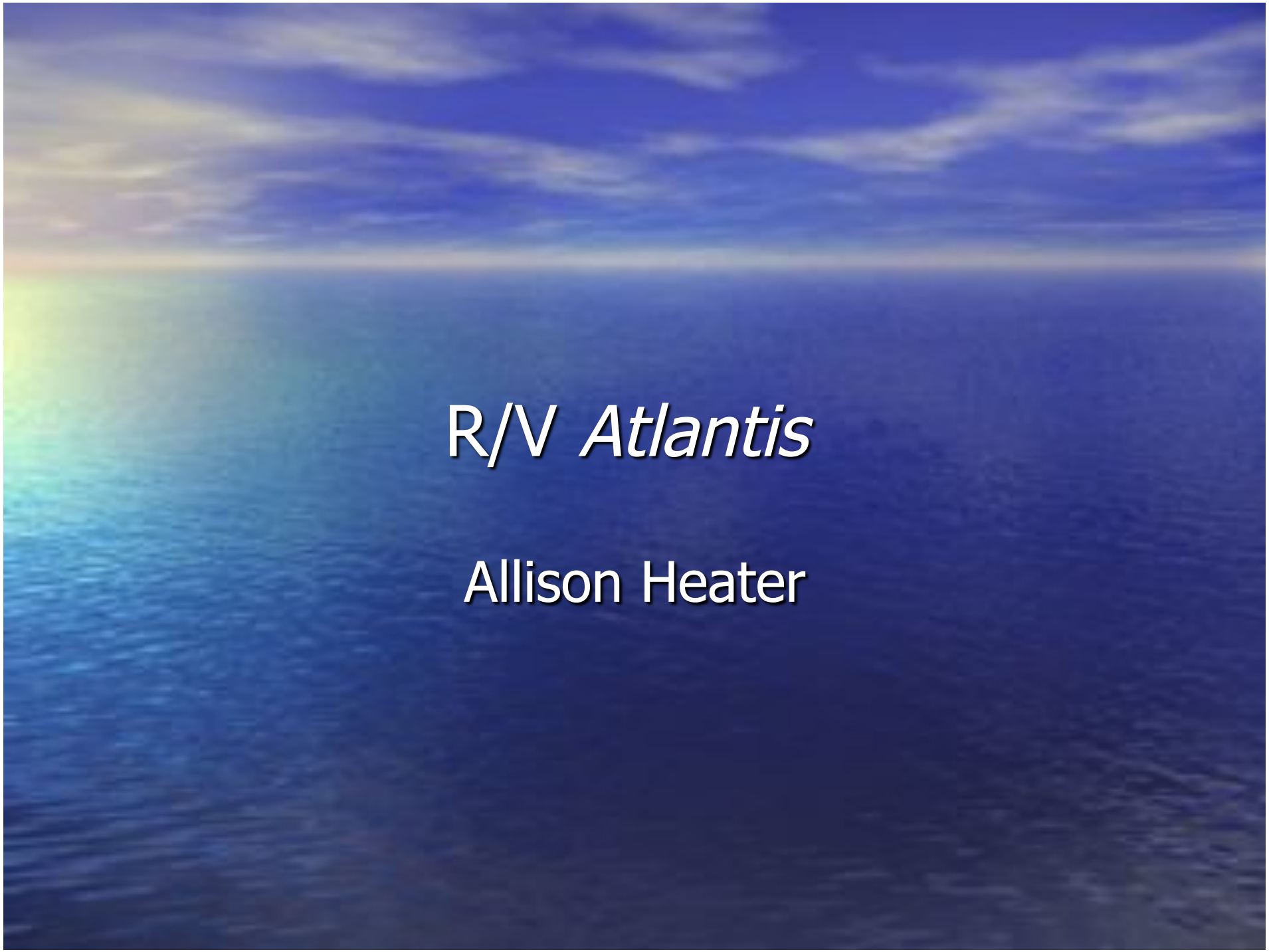
July 23rd the starboard z-drive failure.

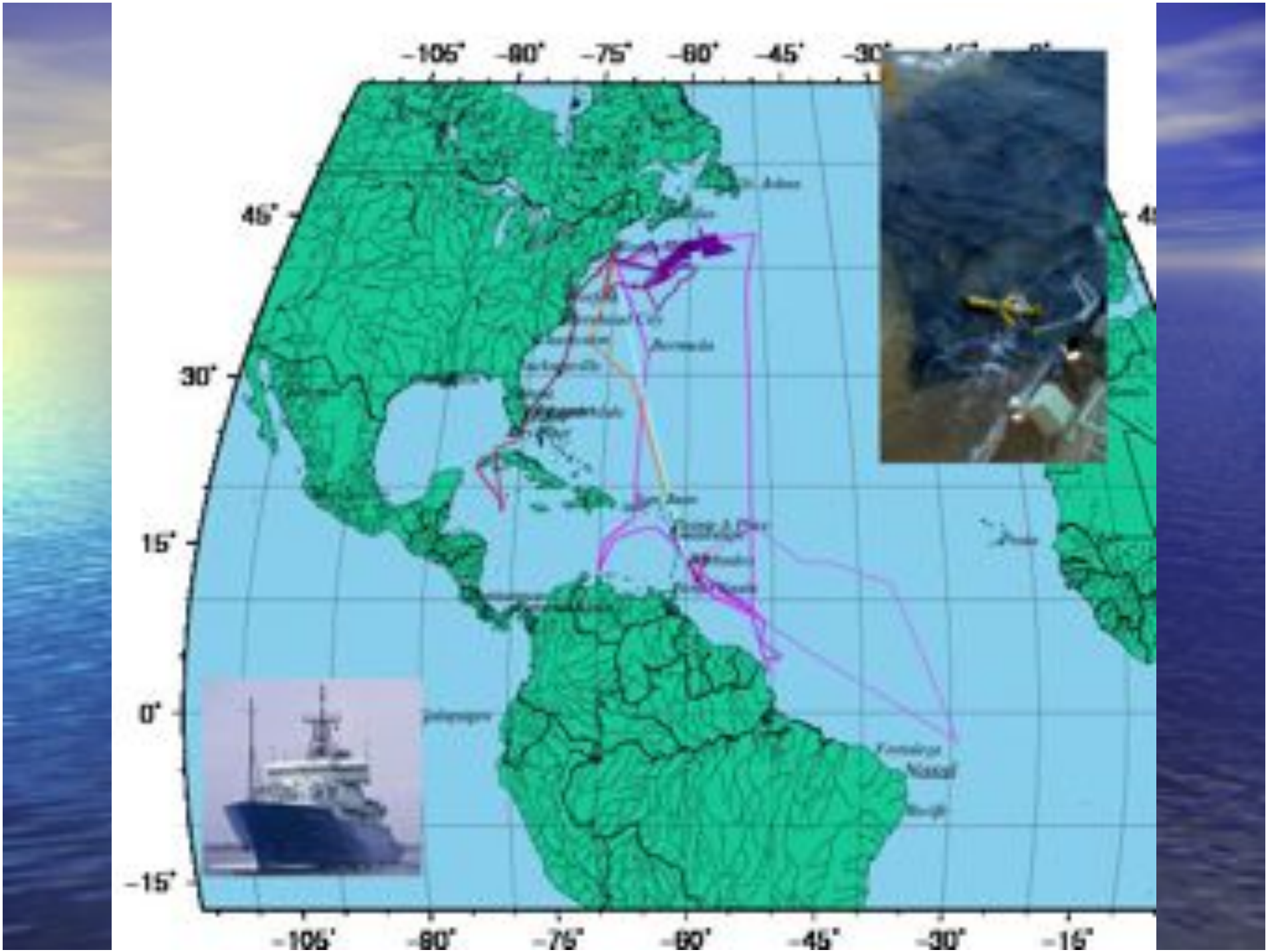
- SIS Gridding Issues (ongoing)
- Antiquated DAS (ongoing)
- Met System Upgrade (ongoing)
- HiSeasNet Updated
- (completed!)

R/V *Atlantic Explorer*

Emily Dougan


R/V Atlantic Explorer


R/V *Atlantis*
Allison Heater


-105°
-90°
-75°
-60°
-45°
-30°
45°
30°
15°
0°
-15°


ATLANTIS


R/V *Knorr*
Robbie Laird


WHOI
KNORR
WHOI
ATLANTIS
WHOI
WHOI


R/V *Blue Heron*

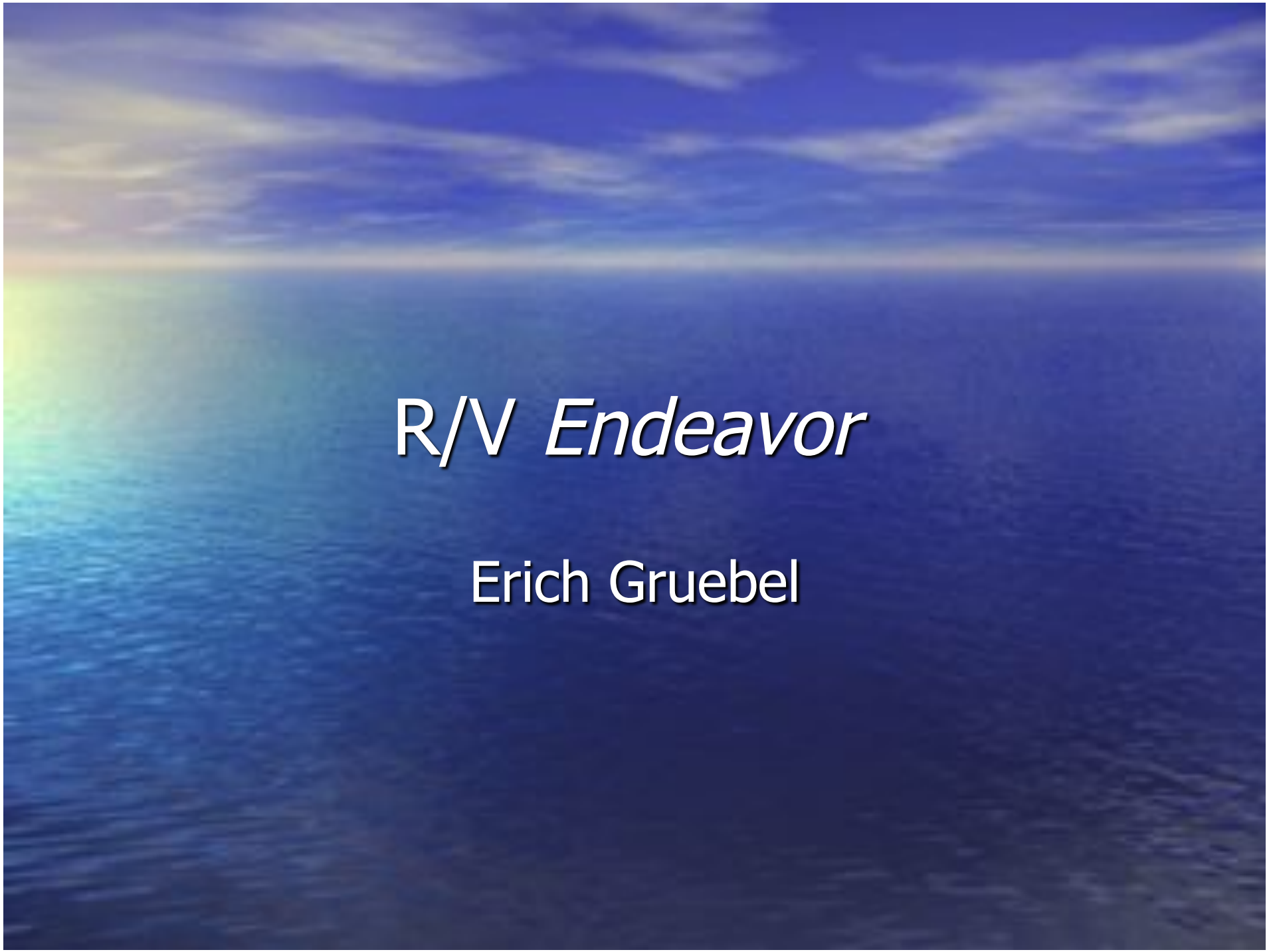
R/V *Cape Hatteras*

Tina Thomas

R/V Cape Hatteras

1/4 MOCNESS

Tina Thomas

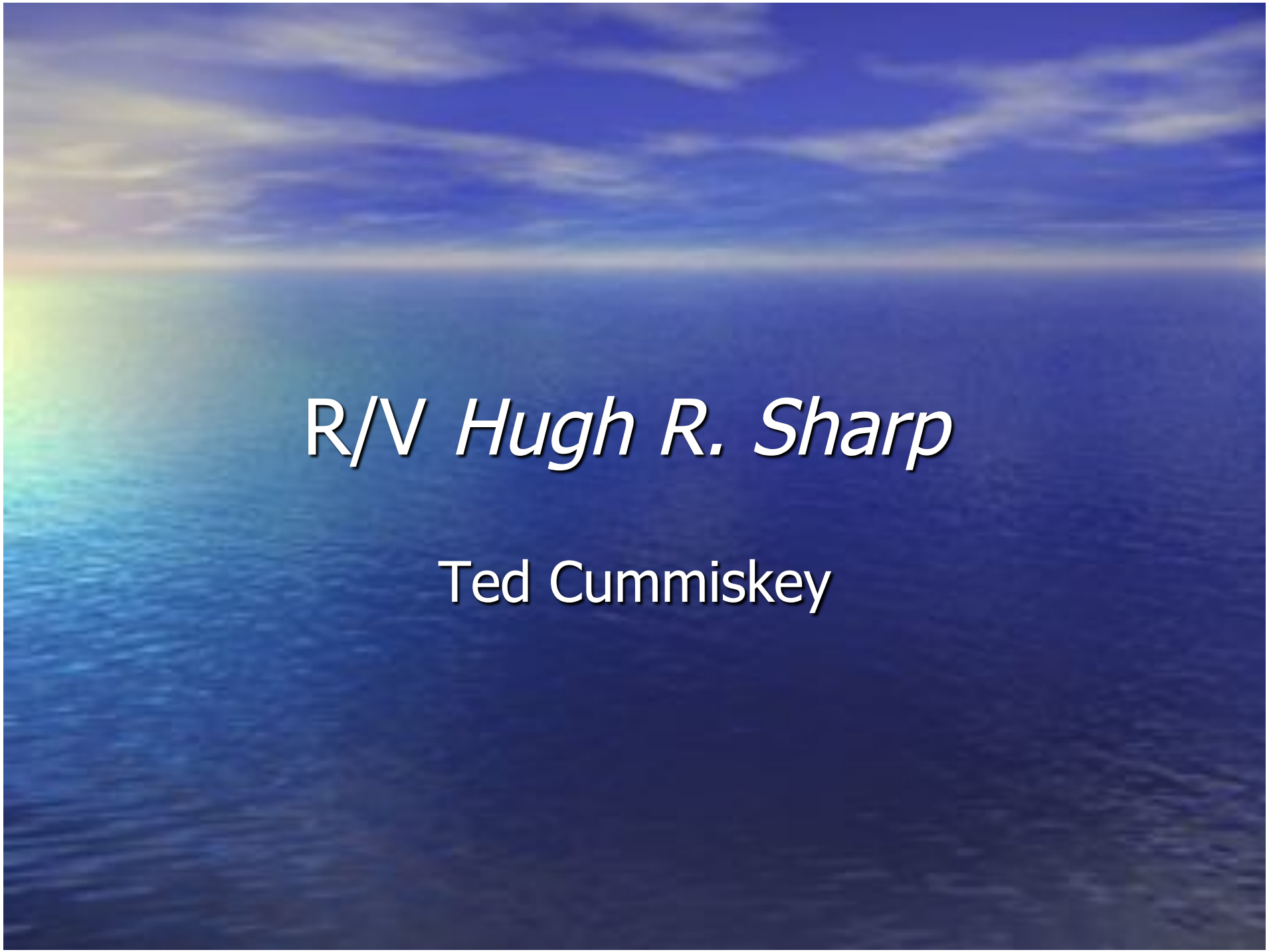

R/V *Endeavor*
Erich Gruebel

R/V Endeavor

University of Rhode Isla

- **Nov 20th (2 days before Thanksgiving) MOB for the final cruise of the year in the Gulf of Maine**
- **Custom CTD frame with SBE 9, Optical Plankton Counter, and Video Plankton recorder required all three conductors of .322 cable**
- **Crisis! (1 of 2)… Low insulation resistance on two of our .322 conductors (~8 megohms)**
  - Began splitting the system to find the faulty component (please don't let it be the reel!)
  - Low IR would periodically go away. Very puzzling
  - Damaged slip rings
- **Crisis! (2 of 2)… OPC telemetry requires 75-125 Ohms loop resistance**
  - Both of Endeavor's .322 winches have over 9000m reels with ~350 Ohm loop resistance
  - We need to have <3500m
  - Thanksgiving is tomorrow followed by a long holiday weekend

Option A) Reel out 6000m, cut and re-terminate
Option B) Modify our 1/4" reel to accept a short piece of .322
Option C) Borrow a winch and short piece of wire from the WHOI winch pool


R/V *Hugh R. Sharp*
Ted Cummiskey

R/V Hugh R. Sharp


R/V *Kilo Moana*
Scott Ferguson

Univ. of Hawaii – R/V *Kilo Moana*

Jan 6, 2012

KILO MOANA DESIGN ISSUES

- All pumps were in one Pump Room in each hull
- Breach occurred in the starboard pump room
- Hull plate thickness is 0.600-inch
- The suction limit of sea water is 33 feet
- The Main Deck is 39 feet above keel

CAUSES?

- Galvanic corrosion
- Electric cell during high velocity flow
- Erosion
- Stray currents
- Other sites, only slight pitting

LESSONS LEARNED

- Mount pumps in other spaces
- Place submersible electric pumps in the pump room
- Be careful how you use dissimilar metals
- Ultrasonically inspect (UT) test the hull, even on a relatively young hull

TECHNICIANS' RESPONSE

- Make lemonade, use the two-month period while the Kilo Moana was offline to deal with a host of maintenance issues


Mar 6, 2012

R/V *New Horizon*
R/V *Melville*

Mary Huey

R/V New Horizon

operation area:

San Diego, CA · Port Hueneme, CA · Newport, OR

days at sea:

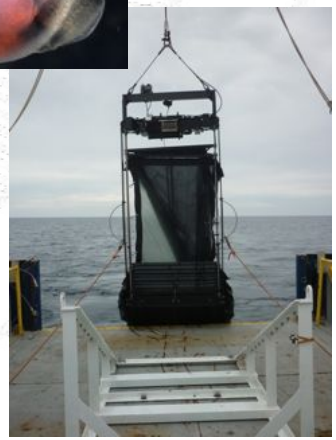
146

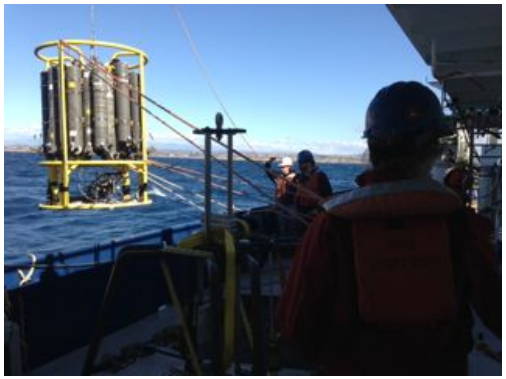
projects:

CalCOFI · mooring work · coring · hydrography · acoustics studies · biological sampling · instrument testing · UNOLS training

highlight of the year:

increased automation of cruise data aggregation





challenge of the year:

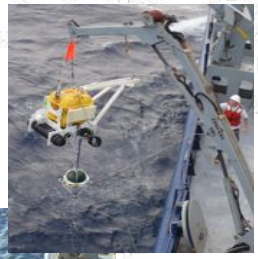
cruise adjustment logistics following engineering repairs

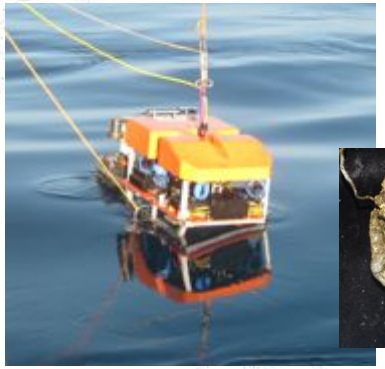
SCRIPPS INSTITUTION OF OCEANOGRAPHY
GLOBAL DISCOVERIES FOR TOMORROW'S WORLD

R/V Melville

operation area:

South Africa · Chile · Ecuador · California · Hawaii





days at sea:

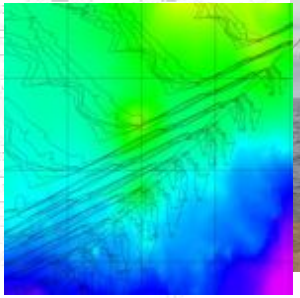
289

projects:

mooring work · seismics · magnetometer surveys · dredging · coring · AUV operations · ROV operations · multibeam surveys · hydrography · biological sampling

highlight of the year:

platform for ROV *Trident* operations



challenge of the year:

Ocean Surveyor ADCP transducer and deck unit issues and replacement

SCRIPPS INSTITUTION OF OCEANOGRAPHY
GLOBAL DISCOVERIES FOR TOMORROW'S WORLD

R/V *Robert Gordon Sproul*
R/V *Roger Revelle*

Brent De Vries

R/V Robert Gordon Sproul

operation area:

Coastal California

days at sea:

45

projects:

SIO student education cruises · Ecological Transitions in the California Current Ecosystem · CCE-LTER · Developing and Improving Scripps Shallow Water Mapping Capability

highlight of the year:

Navy UAS (Unmanned Aerial System) testing

challenge of the year:

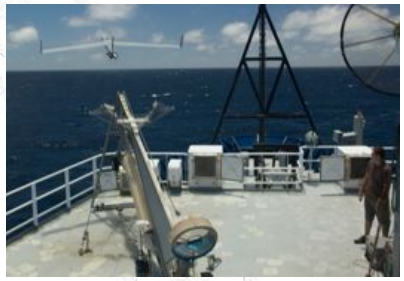
removal of A-frame for UAS testing

SCRIPPS INSTITUTION OF OCEANOGRAPHY
GLOBAL DISCOVERIES FOR TOMORROW'S WORLD

R/V Roger Revelle

operation area:

Indian Ocean · Southern Ocean · Philippine Sea · Vietnam · South Pacific



days at sea:

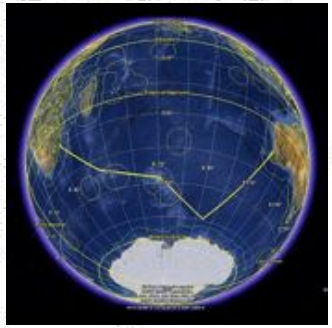
292

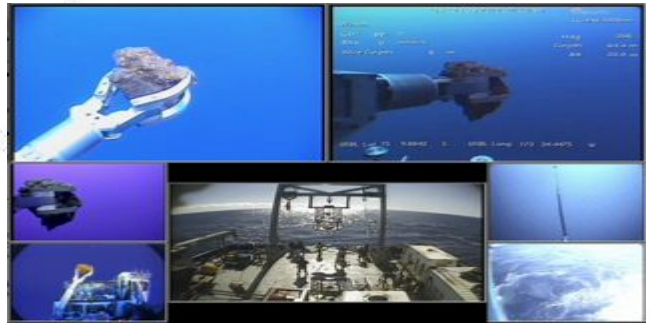
projects:

DYNAMO moorings · The Great Cocco Belt · Lamon Bay Study · Vietnam diplomatic visit · Internal Waves/Mixing in the Samoa Passage · Tonga Trench Microbes Study · NOAA-VENTS ROV Undersea Hydrothermal Venting Exploration · AUV testing

highlight of the year:

video streaming of ROV ops





challenge of the year:

relocation of the HiSeasNet radome

SCRIPPS INSTITUTION OF OCEANOGRAPHY
GLOBAL DISCOVERIES FOR TOMORROW'S WORLD


R/V *Pelican*


R/V *Point Sur*


R/V *Savannah*

R/V *Oceanus*

Erik Arneson

Oregon State University
Marine Technician Group
Year In Review

2012

- 156 Sea Days
  - Oregon
  - Ca/Wa/Canada
  - 128 NSF
  - 22 NOAA
  - 6 INST
- Highlights
  - "New" ship
  - Panama Canal
- Difficulties
  - "New" ship
  - Emergency shipyard
  - Deep Sea Winch
  - DAS


R/V *Langseth*
Lisa Hawkins


Lamont-Doherty Earth Observatory
Columbia University | Earth Institute
R/V Marcus G. Langseth
ROV Jason II
Coring

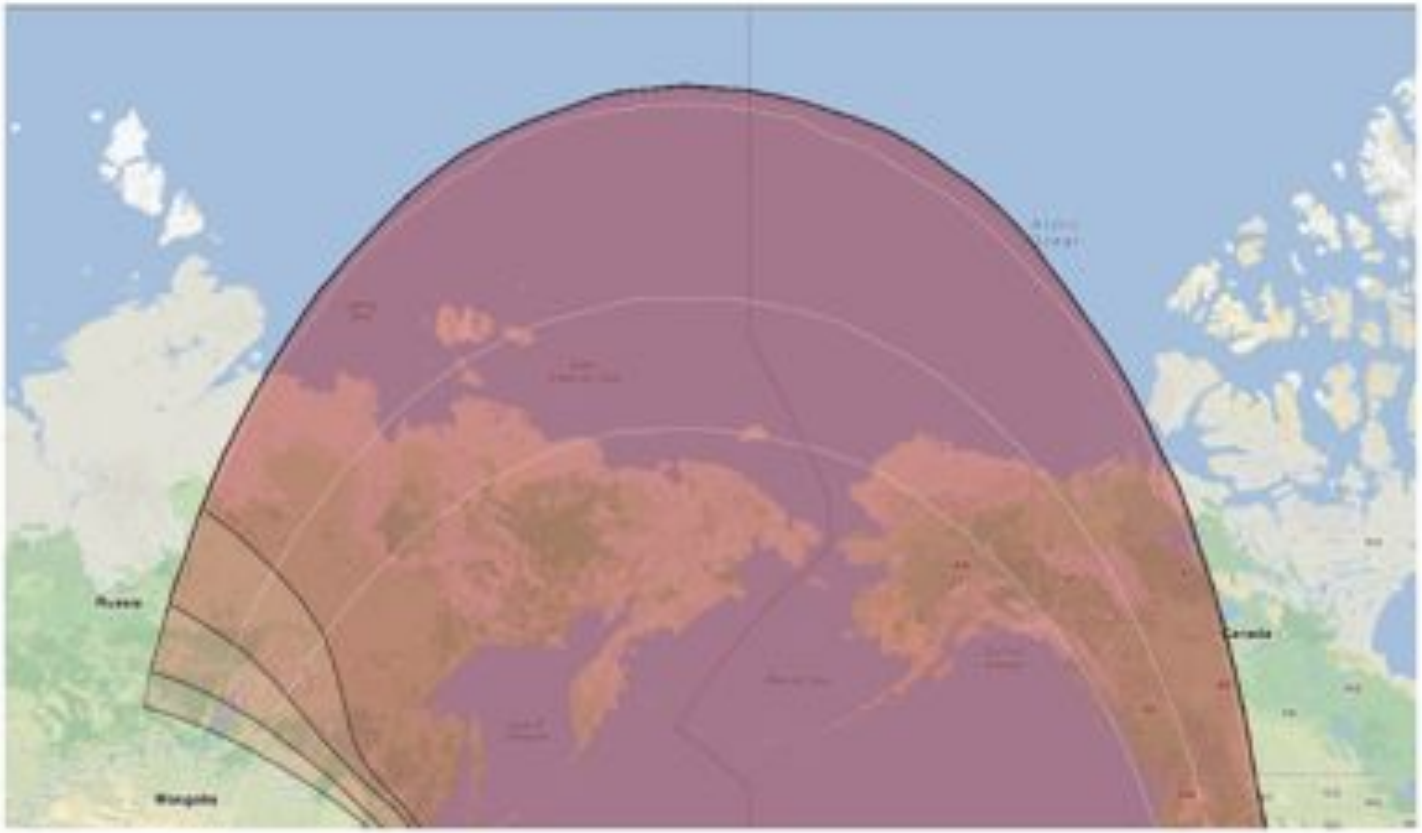
NOAA Vessels

Douglas Perry

USCG Vessel: Healy

Sarah Kaye

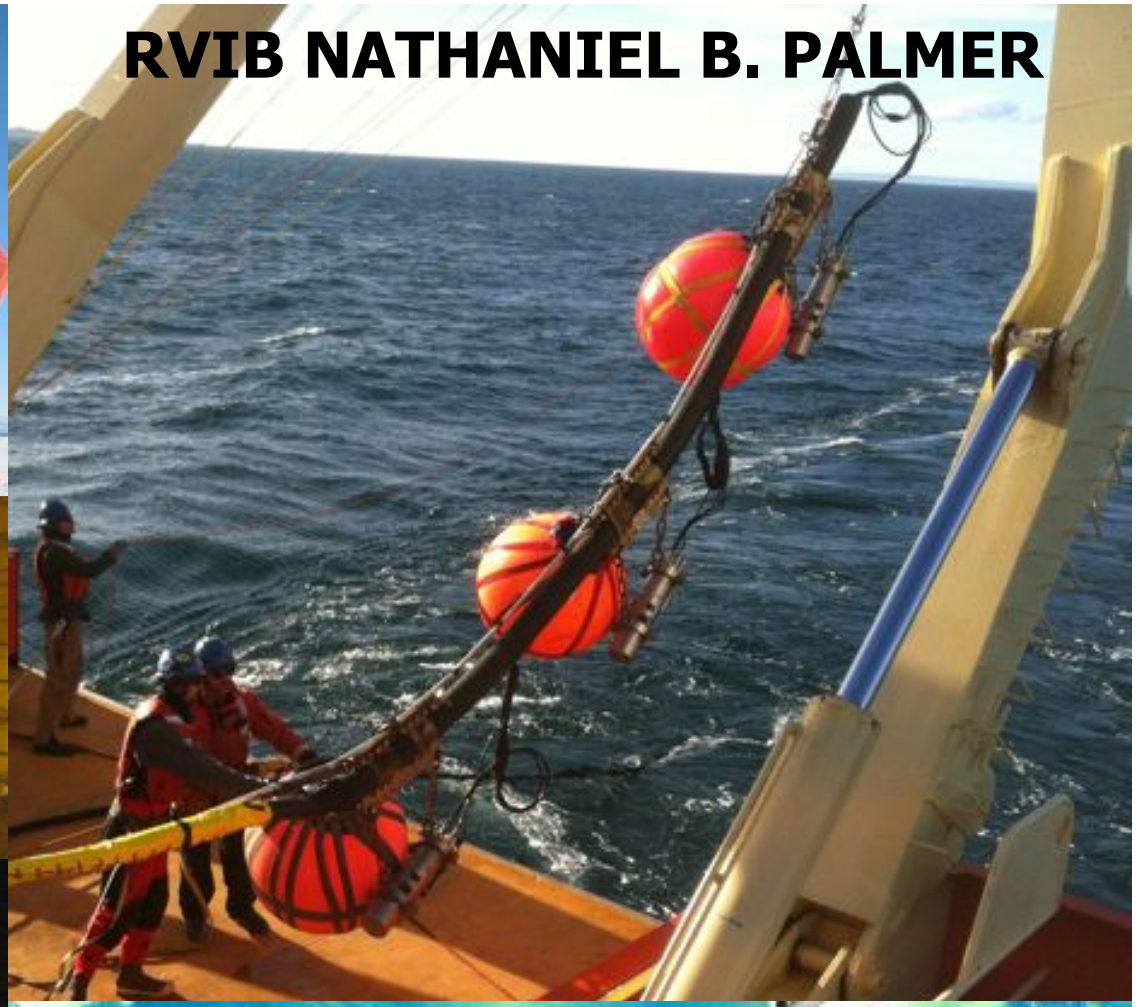
High Latitude Data: Multimodal is key

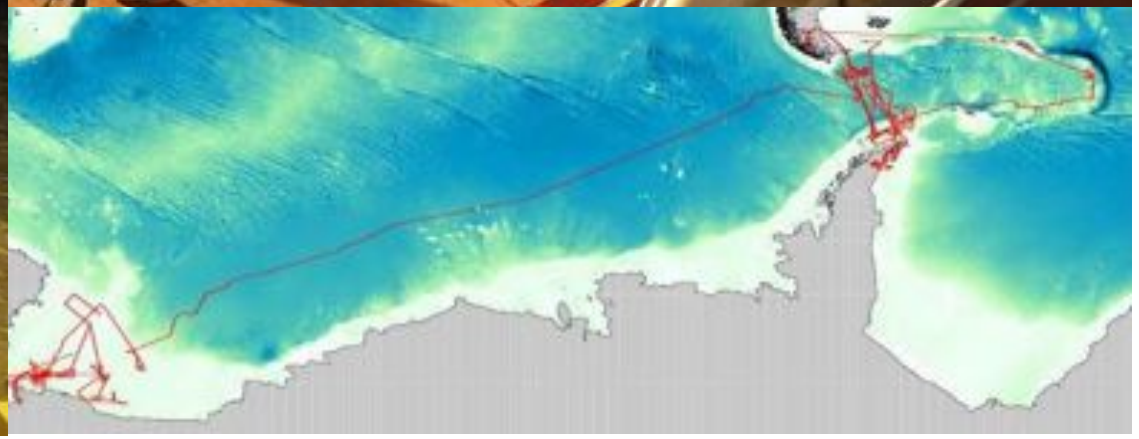


Nathaniel B. Palmer

Ross Hein

RVIB NATHANIEL B. PALMER

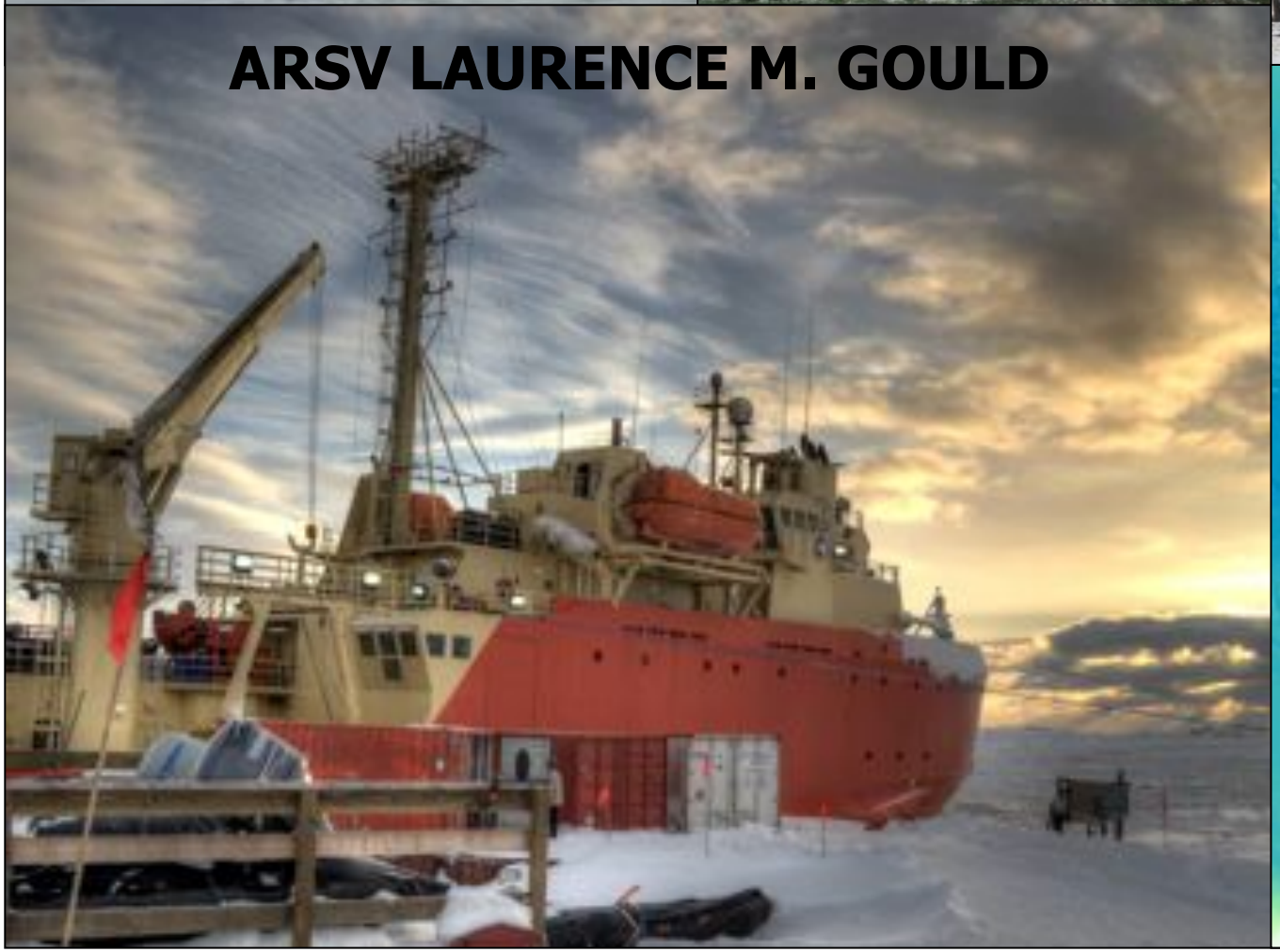


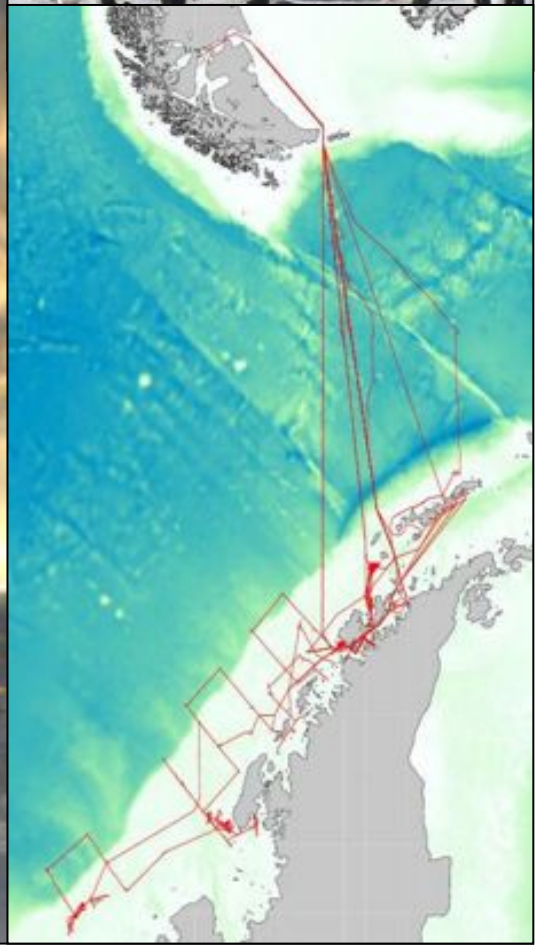


Lawrence B. Gould

Ross Hein

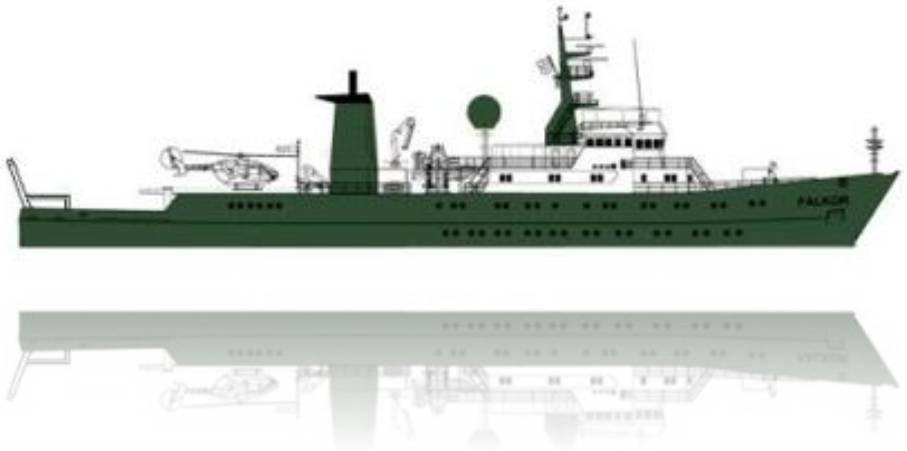
ARSV LAURENCE M. GOULD






R/V Falkor
Colleen Peters

RV Falkor



Marine Technician
Colleen Peters

SCHMIDT OCEAN INSTITUTE

The Great Debate

A hose clamp or hose clip is a device used to attach and seal a hose onto a fitting such as a barb or nib.

http://en.wikipedia.org/wiki/Hose_clamp

A Jubilee Clip is a a circular metal band or strip combined with a worn gear fixed to one end. It is designed to hold soft, pliable hose onto a rigid circular pipe (or sometimes a solid spigot) of smaller diameter.

http://en.wikipedia.org/wiki/Jubilee_Clip

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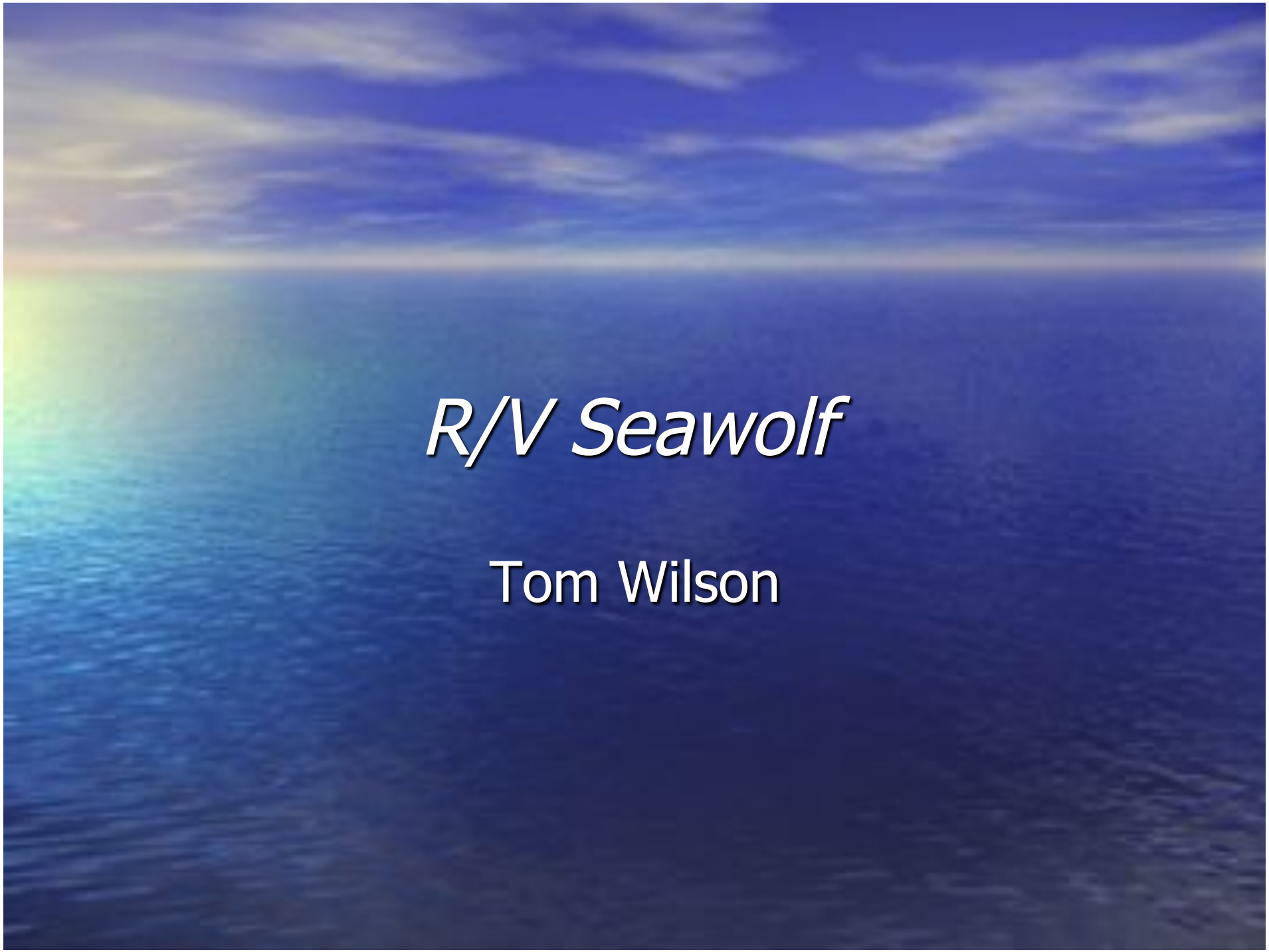
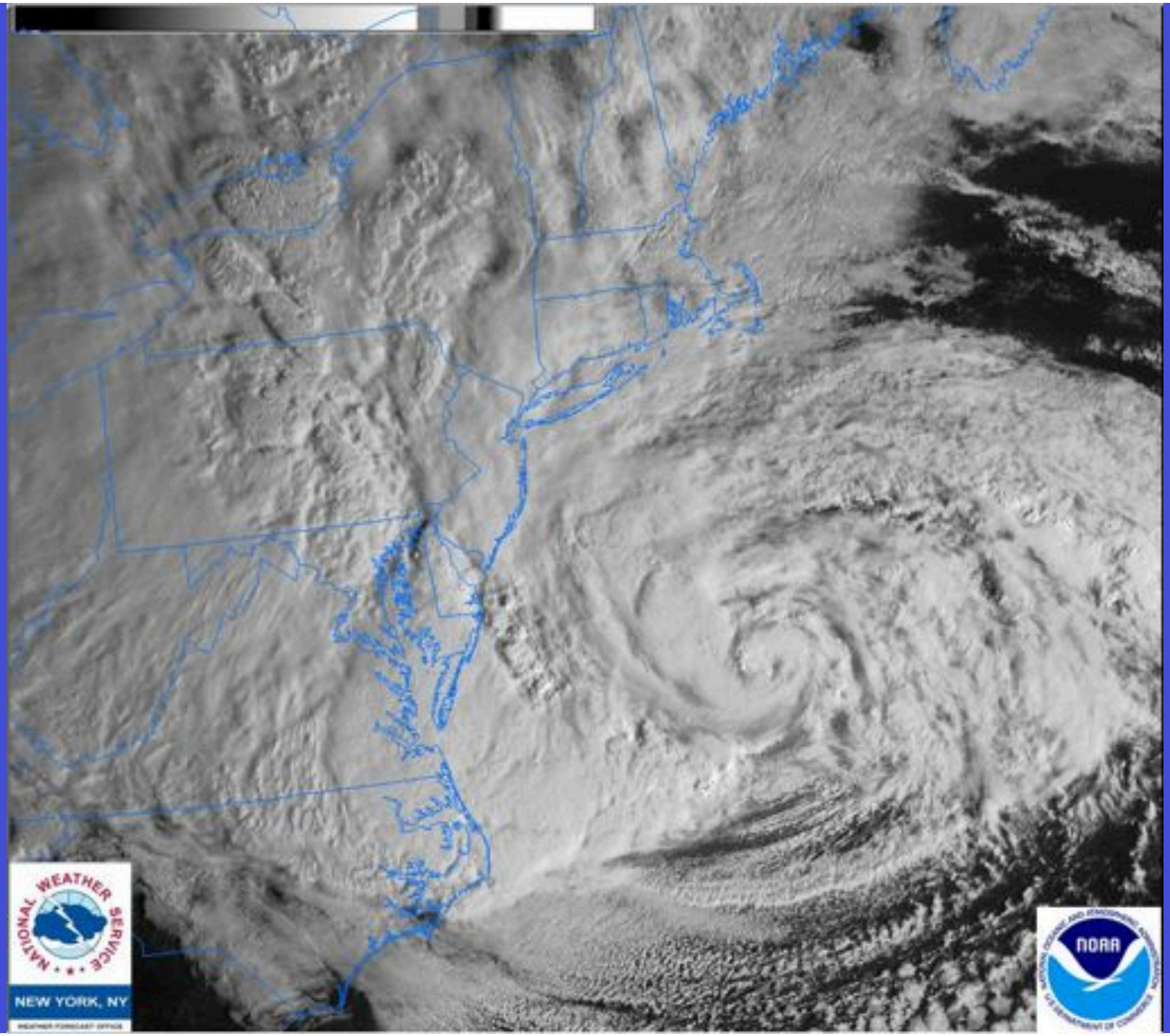
R/V Weatherbird II


R/V Seawolf
Tom Wilson

SoMAS

School of Marine and Atmospheric Sciences
Stony Brook University


NATIONAL WEATHER SERVICE
NEW YORK, NY
NOAA


500 ft
200 m


WARNING
DANGER
PIER CLOSES
AT DARK
NO
TRESPASSING


C34


E WATER YACHT CLUB


STOP


SEA Vessels
Mary Engels