

**Tentative Agenda**  
**Research Vessel Technical Enhancement Committee (RVTEC)**  
**Meeting**  
**Scripps Institution of Oceanography (SIO)**  
**La Jolla, California 92093**  
**November 1-3, 2016**

**Monday October 31, 2016**

6:00-7:00pm Pre-meeting Check-in at the La Jolla Shores Hotel Lobby

**Tuesday, November 1, 2016**

Scripps Institution of Oceanography, Sumner Auditorium

- 8:00am Meeting Check-in, coffee, and informal discussion
- 8:30am Meeting Call to Order (Scott Ferguson, RVTEC Chair)
- Introductory Remarks
  - Welcome Remarks (SIO) – Bruce Appelgate
  - Science Talk - Geophysics Research Activities at SIO – Guy Masters
  - Accept minutes from 2015 meeting
- 9:00am RVTEC Participant Introductions
- 9:15am Icebreaker Session - Tell us about this year's technical/operational crisis and how you resolved it. A representative from each of the following vessels is requested to make a presentation. Presentations should be limited to 5 min with 1 slide per ship. Please consider having a junior member of your group make the presentation. Acceptable slide formats are PPT and PDF. Your slide must be sent to the UNOLS Office no later than Wednesday, October 26<sup>th</sup>.
- Order of Presentations:
- University of Miami – *Walton Smith* – Annette DeSilva
- University of Washington
- *Clifford A. Barnes* – Michael Foy
  - *Thomas G. Thompson* – Loren Tuttle
- Bermuda Institute of Ocean Sciences– *Atlantic Explorer* - Mason Schettig
- Woods Hole Oceanographic Institution - Cris Seaton & Joseph McCabe
- *Atlantis*
  - *Neil Armstrong*
- University of Minnesota – *Blue Heron* - Jason Agnich
- University of Rhode Island – *Endeavor* – Lynne Butler
- University of Delaware – *Hugh R. Sharp* - KG Fairbarn
- University of Hawaii – *Kilo Moana* – Jeff Koch
- 10:05am Break

- 10:20am Icebreaker Session (cont.)  
 Scripps Institution of Oceanography – Drew Cole & Melissa Miller
- *Robert Gordon Sproul*
  - *Sally Ride*
  - *Roger Revelle*
  - *FLIP*
- LUMCON – *Pelican* – Marshall Kormanec  
 Skidaway Institute of Oceanography – *Savannah* – Zachary Tait  
 Oregon State University – *Oceanus* – Brandon D’Andrea  
 Lamont-Doherty Earth Observatory – *Marcus G. Langseth* – Jeff Rupert  
 University of Alaska, Fairbanks – *Sikuliaq* – Steve Hartz  
 Tech Pool – Tina Thomas  
 NOAA Vessels – Don Jones  
 STARC – *Healy* - Brett Hembrough  
 USCG – *Healy* –Ensign Taylor Peace  
 USAP Vessels - Valerie Warner
- *Nathaniel B. Palmer*
  - *Laurence M Gould*
- Schmidt Ocean Institute - *Falkor* - Stian Alesandrini  
 Stony Brook University – *Seawolf* – Tom Wilson  
 Sea Education Association (SEA) Vessels – Sarah Fuller  
 Ocean Exploration Trust – *Nautilus* – Justin Lowe  
 Others – Other vessel presentations are welcome, Please notify the UNOLS Office in advance of the meeting if you wish to make a presentation.
- 11:40am Agency Reports
- NSF – Jim Holik
  - ONR – Mike Prince
  - NOAA – Donald E Jones
  - USCG – David Forcucci
- 12:10pm Multidisciplinary Instrumentation in Support of Oceanography (MISO)  
 Group Update – Jim Holik, NSF
- 12:25pm Introduction of Friday Training Sessions:
- In-depth HiSeasNet Training – Kevin Walsh, SIO HSN
  - Transducers and Transducer Testing – Dale Chayes/University of New Hampshire, Center for Coastal and Ocean Mapping & Jay Turnbull/SIO
- 12:40pm Introduction of afternoon sessions
- 12:45pm Lunch

1:30 pm Afternoon Sessions:

2ea 90min sessions	Auditorium	Martin Johnson House	Robert Scripps Room	STS Data Lab
1:30pm – 3:00pm	Getting Started In Electronic Design <i>Tom Wilson/Stony Brook University</i>	An Intro to using the Cyberoam and Peplink on a Ship's Network <i>Jon Meyer/SIO</i>	Data Acquisition Systems - What is being used? What is being developed? Future directions?*	<i>David Fisichella/WHOI</i>
3:00pm – 3:20pm	Break			
3:20pm – 4:50pm	Lithium Battery Shipping, Storage and Handling <i>Gary Lain/SIO</i>	Troubleshooting Serial Comms <i>Toby Martin/UH ADCP group</i>		Data Acquisition Systems – Show & Tell **

6:00-8:00pm Reception at the Birch Aquarium hosted by SIO

## Wednesday, November 2, 2016

On Wednesday, the meeting will be broken into 2 groups (1 & 2). One group will visit the SIO Marine Facility (MarFac) in the morning and one will visit MarFac in the afternoon. Note that the breakout sessions at the SIO La Jolla campus will be different in the morning and afternoon. Participants should sign up for Group 1 or Group 2 on Tuesday during check-in.

### **Important Notes Regarding MarFac Tours:**

1. Closed toed and closed heel shoes are required for the ship tours at Marfac.
2. It would be very helpful if all TWIC holders brought their TWIC with them on the day of the tours. We will have a streamlined badge system in place for the groups to enter the facility.

### **Group 1 Agenda**

- 8:00am          Group 1 Motor Coach transportation from La Jolla Shores Hotel to Nimitz Marine Facility (MarFac), 297 Rosecrans St, San Diego, CA 92106 – Group 1 participants should meet in the hotel lobby by 7:50 am.
- 9:00am          Group 1 will be split into 3 groups to participate in 3 different tours at MarFac – a tour of R/V *Sally Ride*, R/V *Sproul* and the R/P *FLIP*.
- 11:30pm        Motor Coach back to SIO La Jolla Campus
- 12:15pm        Lunch for both groups at the SIO La Jolla Campus, Sumner Auditorium
- 1:30pm          Breakout Sessions – SIO La Jolla Campus

2ea 90min sessions	Auditorium	Martin Johnson House	STS Conference Room	STS Data Lab
1:30pm – 3:00pm	Appendix B: MCDs, MCD Component Booklets, and OHS Operator's Manuals <i>Josh Eaton/WHOI &amp; Aaron Davis/SIO</i>	The MOCNESS update <i>Carl Mattson/SIO</i>		Data Acquisition Systems – Show & Tell **
3:00pm – 3:20pm	Break			
3:20pm – 4:50pm	How do Sliprings work? <i>Josh Eaton/WHOI</i>	HiSeasNet Equipment – An overview <i>Kevin Walsh/SIO HSN</i>		Data Acquisition Systems – Show & Tell **

- 6:30pm          Dinner at La Jolla Shores Hotel

## Group 2 Agenda

8:00am Scripps Institution of Oceanography, Sumner Auditorium  
Coffee and informal discussion

8:30am Introduction to Wednesday's logistics and the AM sessions

8:45am Breakout Sessions – SIO La Jolla Campus

2ea 80min sessions	Auditorium	Martin Johnson House	STS Conference Room	STS Data Lab
8:45am – 10:15am	Multibeam Advisory Committee <i>Vicki Ferrini/LDEO &amp; Paul Johnson/UNH</i>	Ship/Shore Comms Panel Discussion and Q&A		Data Acquisition Systems – Show & Tell **
10:15am – 10:35am	Break			
10:35am – 12:05am	Acoustic Noise – Identification, Diagnostics and Mitigation at sea <i>Tim Gates/ManTech</i>	Ship/Shore Comms Technical Discussion		Data Acquisition Systems – Show & Tell **

12:15pm Lunch for both groups at the SIO La Jolla Campus

1:15pm Motor Coach to SIO MarFac (assemble at entrance of the auditorium)

2:00pm Group will be split into 3 groups to participate in 3 different tours at MarFac – a tour of R/V *Sally Ride*, R/V *Sproul* and the R/P *FLIP*.

4:30pm Motor Coach return to La Jolla Shores Hotel

6:30pm Dinner at La Jolla Shores Hotel

**Thursday, November 3, 2016**

Scripps Institution of Oceanography, Sumner Auditorium

- 8:00am Coffee and informal discussion
- 8:30am Summary of Wednesday Sessions
- 8:45am MATE update – Nandita Sarkar, MATE program
- 9:00am Ship/Shore Communications
- HiSeasNet – Kevin Walsh
  - Fleet Express – Al Suchy
- 9:30am Tech Pool/Tech Exchanges – Jim Holik, NSF & Piers Chapman, TAMU
- 9:45am JMS Inspection Report – Ted Colburn, JMS
- 10:00am Break
- 10:20am UNOLS Reports
- UNOLS office – Annette DeSilva
  - FIC – Woody Sutherland, SIO
  - RVOC and Safety Committee – Bill Fanning, URI
  - AICC – Steven Hartz, UAF
  - SCOAR – Steve Hartz, UAF
  - RCRV – Jim Holik, NSF
- 10:55am INMARTECH 2016 Summary – Justin Smith, BIOS
- 11:10am The 2016 Telepresence Cruises – Lessons learned from the Shipboard Techs
- Laura Stolp - WHOI
  - Ken Feldman - UW
  - John Haverlack - UAF
  - Kevin Walsh - SIO
- 11:25am Synthetic Rope Testing Cruise – *Endeavor* April 2016 – Jim Holik, NSF
- 11:40am R2R Report – Bob Arko, LDEO/R2R
- 12:00 noon Establishing Community Standards for Underwater Video Acquisition, Tagging, Archiving and Access – Vicki Ferrini, LDEO
- 12:05pm Lunch
- 12:55pm Winch Pool Report – Josh Eaton, WHOI & Aaron Davis, SIO
- 1:10pm ADCP Update – Julia Hummon, UH Currents
- 1:25pm Introduction of afternoon sessions
- 1:30pm Break

1:45 pm Breakout Sessions

	Auditorium	Martin Johnson House	Robert Scripps Room	STS Data Lab
1:45pm – 3:10pm	Appendix A Training <i>Ted Colburn/JMS</i>	R2R: exchange of ideas and response to 2016 Advisory Panel recommendations <i>Karen Stocks/SIO-R2R</i>	LC190i - Tips, Tricks, Versions, Gripes, and discussion <i>Josh Eaton/WHOI</i>	
3:10pm – 3:25pm	Break			
3:25pm – 4:45pm	Appendix A Training (cont.)	How to contribute to SAMOS using NOAA SCS <i>Shawn Smith/FSU &amp; Jeremy Rolph/FSU</i>	Manager's Meeting	CCTV Systems <i>Amy Simoneau/WHOI</i>

4:45pm Meeting Adjourned

**Footnotes:**

**\* Data Acquisition Systems (DAS) Breakout Session**

Tuesday, November 1, 1:30pm-3pm, STS Conference Room

A discussion of the current data acquisition systems and future needs including talks by:

- Open Vessel Data Management – Webb Pinner / Capable Solutions
- The US Antarctic Program Data Acquisition System Development – Pablo Cohn & Valerie Warner/ASC
- CTD and bottle file data collection database system – Joseph Gum/SIO STS-ODF
- The NOAA SCS system and its latest development - John Katebini/NOAA
- The WHOI DAS update - WHOI
- The UH OTG DAS System Development - UH
- Introduction of Data Acquisition System Show-n-Tell demonstrations

**\*\* DAS Show & Tell Breakout**

- Open Vessel Data Management – Webb Pinner / Capable Solutions
- Data Presence with the RCRV (poster) - Chris Rosmos/OSU
- The US Antarctic Program Data Acquisition System Development – Pablo Cohn & Valerie Warner/ASC
- CTD and bottle file data collection database system – Joseph Gum/SIO STS-ODF
- The NOAA SCS - John Katebini/NOAA
- The WHOI DAS - WHOI

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## **Friday Training November 4, 2016**

SIO Marine Facility (MarFac)

**In-depth HiSeasNet Training** – Kevin Walsh, SIO HSN

In-depth, hands-on training session with HiSeasNet hardware.

**Transducers and Transducer Testing** – Dale Chayes/University of New Hampshire, Center for Coastal and Ocean Mapping & Jay Turnbull/SIO

A one-hour slide/discussion session covering:

- What is impedance (in relatively simple terms)
- Why transducer impedance matters
- What other electrical measurements matter
- Useful test equipment for transducers (and other uses)
- How to test transducers (and their cables, junction boxes, etc) with simple test equipment
- How to test w/ more sophisticated equipment
- How to test w/ dedicated equipment
- How to develop an appropriate test plan and schedule

Followed by small group breakout sessions to cover bench and in-tank testing.