DeSSC report
November, 2018
UNOLS Annual Meeting

• DeSSC membership update
• NDSF vehicle updates
• Other activities
DeSSC Membership

Current members
Amanda Demopoulos (USGS)
Dave Emerson (Bigelow)
Brian Glazer (Univ. Hawaii)
Nick Hayman (UTIG)- left to NSF
Anna-Louise Reysenbach, Chair (Portland State U)
Andrew Thurber (OSU)
Cindy Van Dover (Duke)
Scott White (Univ, SC)

Peter Girguis, (ex-officio, Harvard)
Rob Munier (ex-officio, WHOI)
Tim Shank (ex-officio, WHOI)
Adam Soule (ex-officio, WHOI)

Changes to Terms of Reference- Acting Vice Chair (Hayman, now Emerson)

Nominations being sought for one new member
**ROV Jason**

- Humphris expedition (on Thompson)
  - Pre-drilling leg - geological geochemical and microbiological investigations
  - Thompson dirty power issue
  - accomplished goals even with weather days and generator pickup
- Tivey (on Kilo Moana)
  - Endeavor inactive sulfide sampling
- Nooner (on Kilo Moana)
  - JdF Axial volcano pressure measurements
- Lang (on Atlantis)
  - Lost City,
  - "Hydrothermal Organic Geochemistry" sampler
**ROV Jason**

- Single body operation – developments
  - ROV Engineering Workshop – national & international participation.
  - Resolution of issues around cable torque
- OOI cabled array work (June-Aug) using single body operation (aboard *Melville*)
  - Goals accomplished, 58 dives, 95 instruments/platforms installed or turned, 24 undergrad and grad students involved
- Continued updates to control van; new 4K camera; total overhaul of Virtual Van in progress.
HOV *Alvin*

- Kurz - MAR, 14° N, ‘Popping Rocks’ Expedition
  - 18 dives, marginal weather w/no loss of dives
- Cordes (NOAA funded), discovery of largest coral reef off S Carolina, lots of media coverage
- Gregg - EPR, UNOLS-ECS new user training cruise
- Dec 22 Open house in San Diego

* NSF funding secured for 6500m refit; hardware modifications to be done during Atlantis midlife.
AUV Sentry

• Installed new software operating system, no glitches
• Successfully tested use of Waveglider that will allow ‘far from ship’ ops with other vehicles in the water.
• Evaluation of new multi-beam system for Sentry with option for a ‘fly-away’ system for Alvin & Jason.
Vehicle Highlights Overview

• AUV Sentry completed its 500th dive on October 16th this year.

• HOV Alvin will highly likely have its 5000th dive in this year.

• ROV Jason has now logged more than 1100 dives.
Other activities:

- DeSSC Dec 2018 and New User meeting
  - 51 applicants to new user - see Annette’s presentation for details

- Plan for EOS Alvin capability paper, prep community for Alvin coming out of rebuild.

- Early Career Scientist EPR cruise w/HOV Alvin
  - 59 applications!
  - 13 shortlist
  - Series of preparation Webinars
Other activities:

- Special session at AGU
  - “Investigating Mid-Ocean-Ridge Processes with Deep Submergence” Technologies
  - Linked to the early career EPR cruise

- New NDSF website [http://www.whoi.edu/](http://www.whoi.edu/)


- Thanks!