

DeSSC report November 30, 2017 UNOLS Annual Meeting

– Updates on NDSF vehicles

– Other DeSSC activities



DeSSC membership

Current members

Craig Dawe (*MBARI*)

Amanda Demopoulos (*USGS*)

Dave Emerson (*Bigelow*)

Brian Glazer (*Univ. Hawaii*)

Nick Hayman (*UTIG*)

Laura Lapham (*Univ. Maryland*)

Anna-Louise Reysenbach, Chair (*Portland State U*)

Cindy Van Dover (*Duke*)

Scott White (*Univ, SC*)

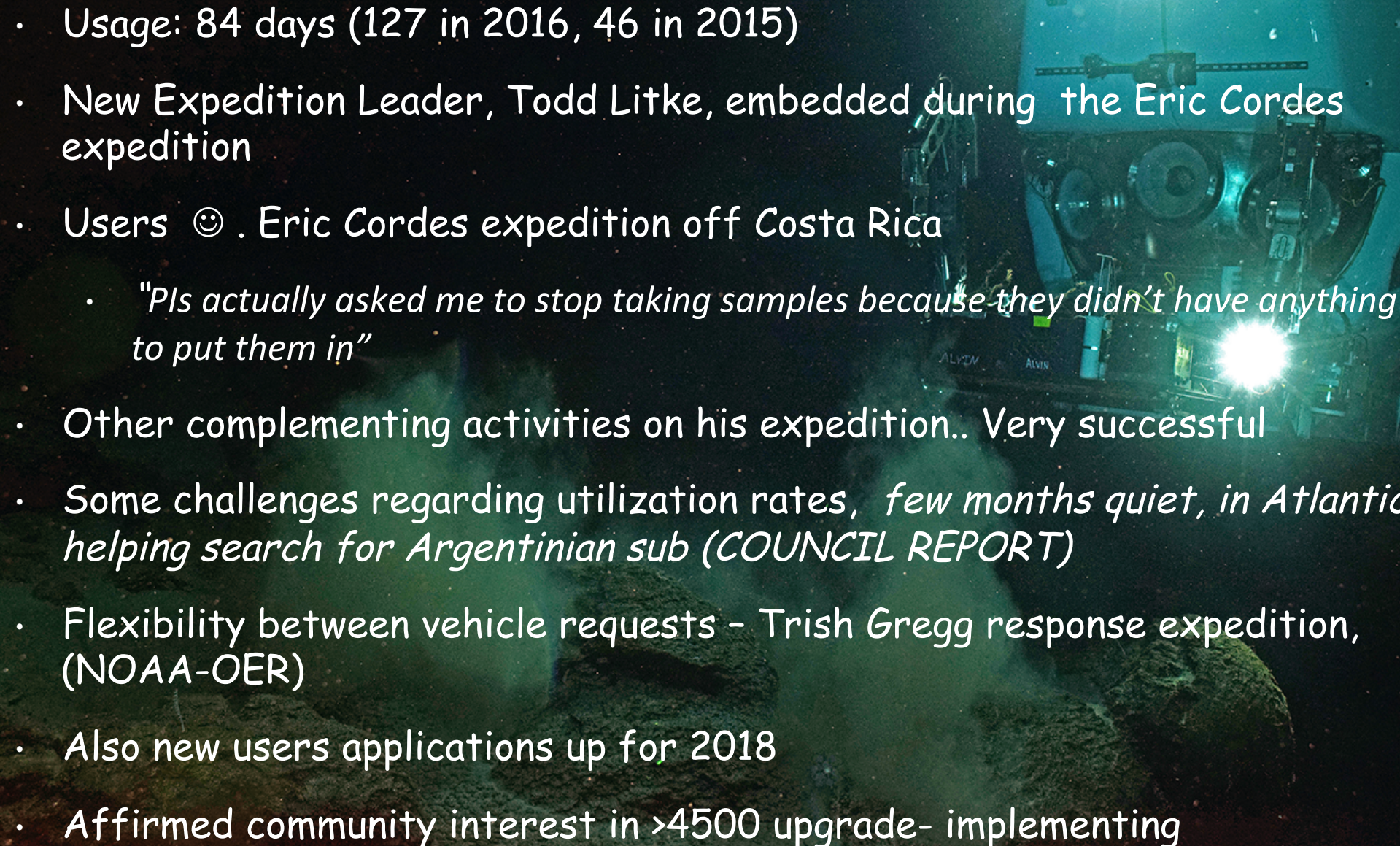
Peter Girguis, (*ex-officio, Harvard*)

Rob Munier (*ex-officio, WHOI*)

Tim Shank (*ex-officio, WHOI*)

Adam Soule (*ex-officio, WHOI*)

Alvin

- Usage: 84 days (127 in 2016, 46 in 2015)
 - New Expedition Leader, Todd Litke, embedded during the Eric Cordes expedition
 - Users 😊 . Eric Cordes expedition off Costa Rica
 - *"Pls actually asked me to stop taking samples because they didn't have anything to put them in"*
 - Other complementing activities on his expedition.. Very successful
 - Some challenges regarding utilization rates, *few months quiet, in Atlantic helping search for Argentinian sub (COUNCIL REPORT)*
 - Flexibility between vehicle requests - Trish Gregg response expedition, (NOAA-OER)
 - Also new users applications up for 2018
 - Affirmed community interest in >4500 upgrade- implementing
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Jason

- Usage: 173 (117days-2016; 126 days-2015)
- Jason was busy with OOI - 49 dives in 26 days
- Heavy lift capability still positive investment... some winch problems reported.
- Also North Pond (Jeff Wheat) for cork experiment.
- Next year- work on procedures to be more integrated in OOIs activities



Sentry



- Usage: 118 days
 - (139d -2016, 197d -2015)
- Continues to be an excellent tool especially in conjunction with other vehicles (much improved integration with Pisces)
- successful with Eric Cordes Alvin cruise
- -Nitizinki “deepwater canyons and slope habitats off the coast of North Carolina”
 - Operations improved 100% over last year.
 - Completed seven dives in five canyons
 - Documented (70 000 photos) deep-sea corals in southern canyons
 - Geology of canyons much different than northern canyons
- Ken Rubin on Falkor. So port and multibeam issues
- Hurricanes...
- Future...
 - Modernization of control software which will allow for new science capabilities added quicker and at much lower risk
 - a planned test of an autonomous surface tender (wave glider)

OUTCOMES: Deep submergence chief scientist training program- 2016

- 24 asst. professors, senior postdocs and grad students with ~56 remotely signed up! (July-Aug 2016)
- EOS and PNAS papers
- And recently--

Netburn et al. 2017. First HOV Alvin study of the pelagic environment at Hydrographer Canyon (NW Atlantic). Deep-Sea Research Part II <http://dx.doi.org/10.1016/j.dsr2.2017.10.001>

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- Plan another bootcamp for 2018.....



Other activities:

- Telepresence white paper (for Deep-sea Research)-Chris German lead
- Recommendations ---Environmental monitoring for seabed mining... workshop ideas, time critical- Cindy van Dover lead
- Interagency evaluation of NDSF performance and management to foster improvements
- Based on continued success---AGU, New Orleans Dec 9, New Users Program (32)
 - Trish Gregg invitation for new users to apply for response cruise
- Annual DeSSC meeting at AGU, Dec 10. New- breakout session
 - “DESCEND to ACTION”
- Thanks!