

DeSSC report
October 22nd , 2014
UNOLS Annual Meeting



DeSSC membership

Amanda Demopoulos

David Emerson

Vicki Ferrini

Peter Girguis, Chair (2nd term)

Breea Govenar

Nick Haymon

Laura Lapham

George Luther

John Wiltshire

committee composition

3 early-career scientists

3 mid-career scientists

3 senior scientists

4 female, 5 male

ex-officio, WHOI

Tim Shank

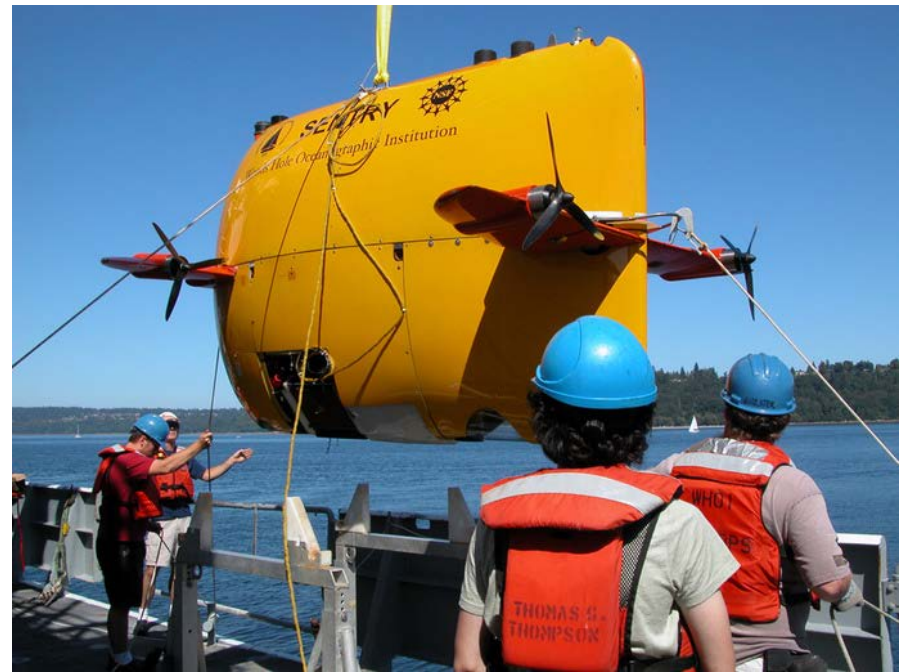
Chris German

Rob Munier

AUV Sentry - 2014

AUV Sentry continues to perform well

- Gaining popularity as a platform to deploy with HOV and ROV
- Maturing in operational efficiency (which is good!)
- Schedule is reasonable; also picked up some work that resulted from the loss of the *HROV Nereus*



ROV Jason- 2014

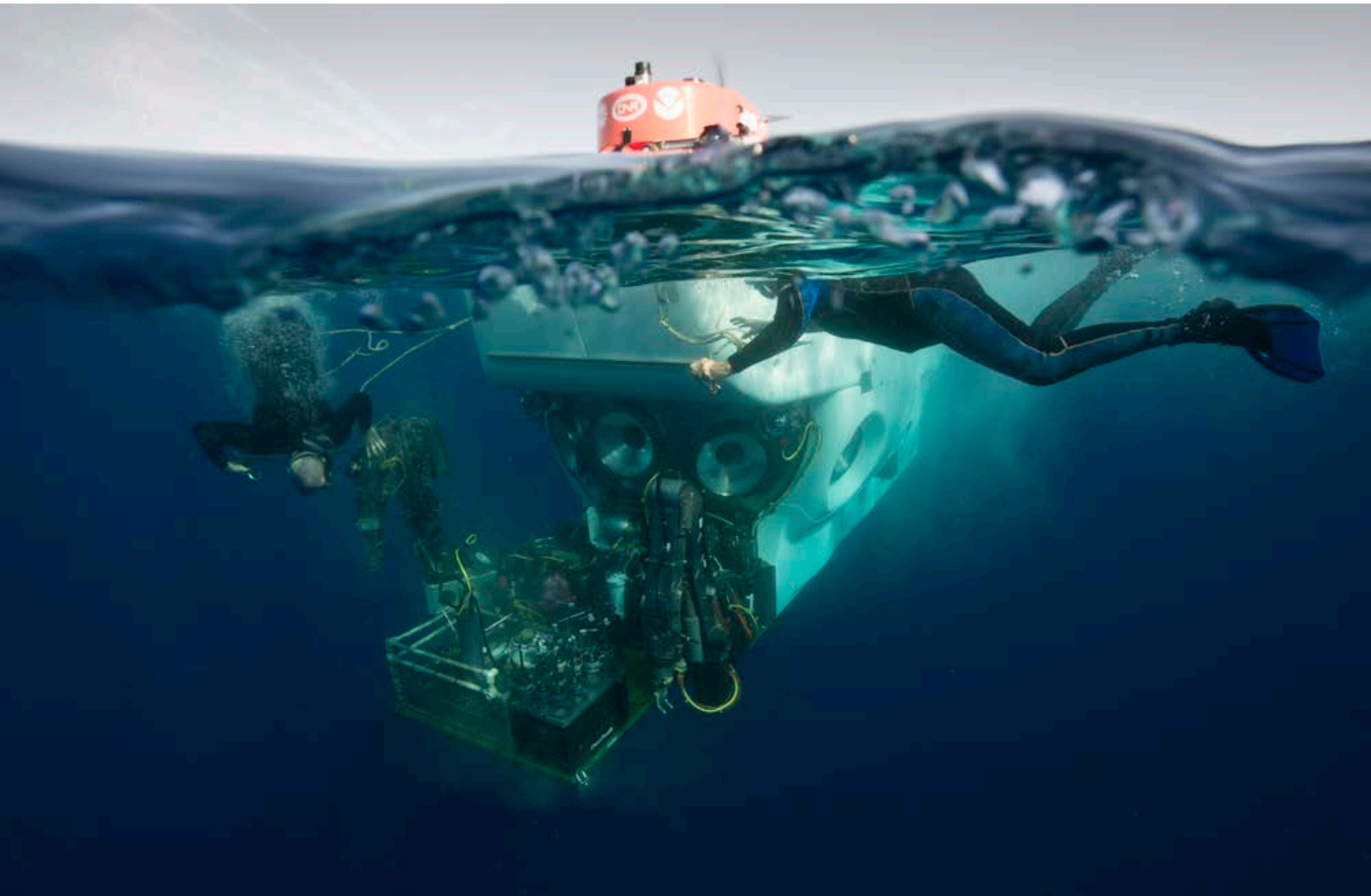
ROV Jason also continues to perform well

- Relatively new launch and recovery system is great
- Continued minor upgrades to lighting, video, etc.
- Schedule is almost full



Science Verification Cruise (SVC)

RV Atlantis (AT26-12); March 14-28, 2014



Science Verification Cruise (SVC)

- *RV Atlantis* (AT26-12); March 14-28, 2014
- Participants selected by an SVC committee for SVC version 1.0 slated to dive on the Cayman Rise Vents and the Florida Escarpment
- Delays in *Alvin* upgrade led to a re-framing of the expedition, shorter dive series
- SVC participants were wonderfully patient while we sorted out details of expedition
- Finally, the SVC participants did an amazing job of writing up and disseminating a thorough assessment of the *Alvin*'s new and existing capabilities!

Science Verification Cruise (SVC) participants

legs one and two

Name	Institution
Bourque, Jill	USGS
Chunyang Tan	Univ. Minn.
Delaney, Jenny	Harvard
Demopoulos, Amanda	USGS
DeSilva, Annette	UNOLS
Ding, Kang	Univ. Minn.
German, Chris	WHOI
Girguis, Peter	Harvard
Howland, Jonathan	WHOI
Humphris, Susan	WHOI
Linder, Chris	WHOI
Lippsett, Lonny	WHOI
Luther, George	UDel
MacDonald, Dan	Udel
Marlow, Jeff	Caltech
McCue, Scott	WHOI
Nuzzio, Don	UDel
Schnoor, Tim	ONR
Soule, Adam	WHOI
Wanless, Dorsey	WHOI
Wu, Shijun	Univ. Minn.

Name	Institution
Baums, Iliana	Penn State
Bourque, Jill	USGS
Bronk, Debbie	NSF
Chunyang Tan	Univ. Minn.
Cohen, Jon	Univ Delaware
Delaney, Jenny	Harvard
Demopoulos, Amanda	USGS
Ding, Kang	Univ. Minn.
Frank, Tammy	Nova Southeastern
German, Chris	WHOI
Girguis, Peter	Harvard
Howland, Jonathan	WHOI
Humphris, Susan	WHOI
Linder, Chris	WHOI
Lippsett, Lonny	WHOI
Luther, George	UDel
MacDonald, Dan	UDel
McCue, Scott	WHOI
Nuzzio, Don	UDel
Olins, Heather	Harvard
Soule, Adam	WHOI
Van Dover, Cindy	Duke
Wanless, Dorsey	WHOI

Science Verification Cruise (SVC) website

http://unols.org/committees/dessc/SVC_March2014/SVC_Products_and_Assessment.html

Alvin Science Verification Cruise



Image credits: Alvin in the Hanger (left), George Luther (U. Delaware), DSV-2 Alvin print (right)

[Project Background](#)

[Cruise Objectives](#)

[Cruise Assessment](#)

[Cruise Products](#)

[Alvin Upgrade -
Science Traceability
matrix](#)

Cruise Outreach & Publications:

SVC website, cont'd

Wired.com, by Jeffrey Marlow:

<http://www.wired.com/wiredscience/2014/03/re-introducing-deep-submergence-vehicle-alvin/>

<http://www.wired.com/wiredscience/2014/03/alvins-return-sea/>

Oceanus Article:

At 50, Alvin Gets an Extreme Makeover - Same name, but dramatically upgraded submersible

By Lonny Lippsett :: Originally published online June 11, 2014 : In print Vol. 51, No.1, Summer 2014

<http://www.whoi.edu/oceanus/feature/at-age-50--alvin-gets-an-extreme-makeover>

EOS article on Alvin's 50th Birthday:

Fifty Years of Deep Ocean Exploration With the DSV Alvin

BY S. E. HUMPHRIS, C. R. GERMAN, AND J. P. HICKEY

Physics Today:

Researchers get back to the deep

by Toni Feder

Citation: Physics Today 67(6), 29 (2014); doi: 10.1063/PT.3.2415

View online: <http://dx.doi.org/10.1063/PT.3.2415>

A birthday wish from an *Alvin* alum who now works at MO BIO Inc:

<http://www.youtube.com/watch?v=0oXGT3YXTF8>

Deep-Sea Life:

Issue 3, May 2014

Welcome to the NEW Alvin!

by Jeffrey Marlow, California Institute of Technology

<http://www.indeep-project.org/sites/indeep-project.org/f/document/DSL3.pdf>

Marine Technology News:

Upgraded Alvin Sub Passes Scientific Sea Trials

March 28, 2014

<http://www.marinetechologynews.com/news/upgraded-alvin-passes-scientific-489179>

Smithsonian.com:

Fast Forward: The Alvin Will Make The Ocean More Accessible Than Ever Before - A League of Its Own

By Erica R. Hendry

Smithsonian Magazine | Subscribe

June 2014

<http://www.smithsonianmag.com/innovation/fast-forward-180951444/?no-ist>

Alvin Science Verification Cruise

Cruise Assessment Summary Documents:

- [Alvin Ergonomics](#) (Peter Girguis)
- [Alvin Basket Attributes](#) (Jill Bourque, Jon Cohen, Dan MacDonald)
- [Instrument Interface and Manipulators](#) (George Luther, Kang Ding, Donald Nuzzio, Chunyang Tan, Shijun Wu, and Dan MacDonald)
- [Alvin Video System and Post-Dive Processing](#) (Jonathan Howland, Scott McCue, and Peter Girguis)
- [Video and Stillframe Imaging](#) (Chris German, and Amanda Demopoulos)
- [Mapping, Navigation, and Sub Data](#) (Adam Soule)
- [Propulsion, Handling, and Navigation](#)

Cruise Participant Comments:

- [SVC participant comments on Alvin sphere and on Alvin vehicle attributes \(out of sphere\)](#)
- [Summary plots of the SVC participant rankings](#)

Education and Outreach

- AGU Early Career science program; ongoing for 2014
 - Program is approaching its 4th year
- In 2013, with agency support, we hosted another early career science program, which was very well received
 - *over 34 attendees*
- *Karyn Rogers and others* helped with E&O efforts
- This year, DeSSC move to form a sub-committee, chaired by a DeSSC member
- Their “charge”: To implement education and outreach activities at the behest of DeSSC, to develop and implement new activities (with the approval of DeSSC/UNOLS), and to assist UNOLS with E&O assessment activities
- J. Marlowe: Policy “club” continues along, albeit a bit quietly






DeSSC New-User Workshop – December 13-14, 2014


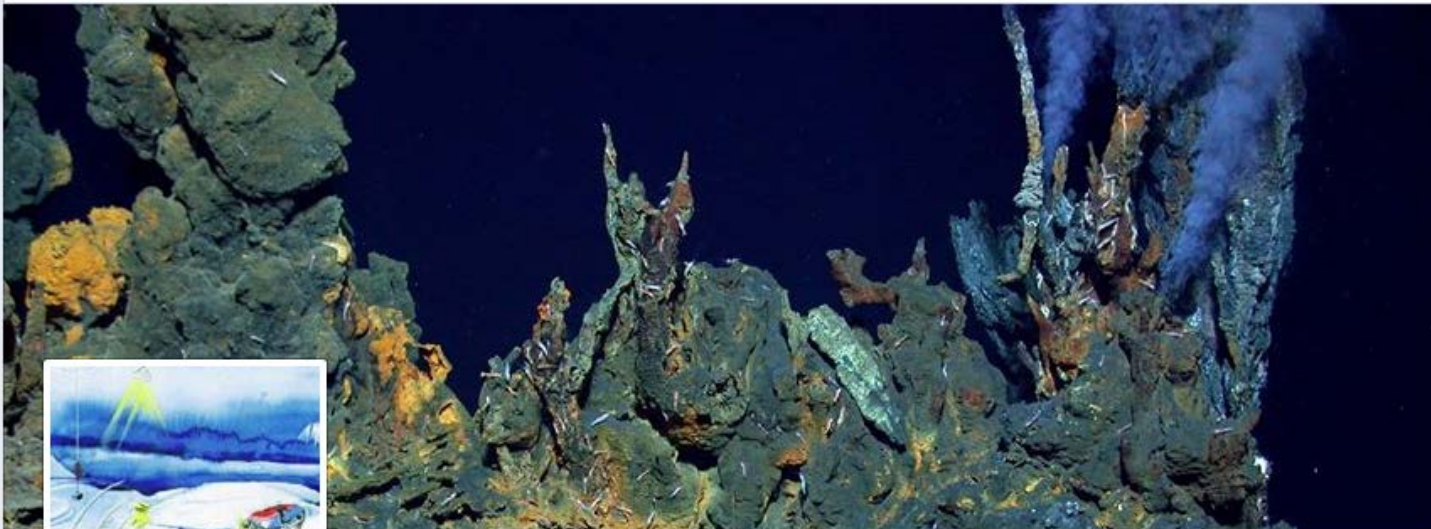
- Sub committee –Karyn Rogers, Breea Grovenar, Vicki Ferrini, and Pete Girguis (meetings via teleconference)
- ~40 Applicants → 30+ participants
- Introduction to UNOLS, DESSC, NDSF, and the Federal Agencies
- Introduction to Deep Sea Research
- Breakout sessions
 - Grant Writing Workshop
 - Emerging Technologies
 - Data Management
- Dinner Seminar: Guest Speaker – Dr Mandy Joye



- Disseminating information
- DeSSC's Facebook continues to be popular

facebook    Search for people, places and things  Peter Girguis  Home

Ads M



DeSSC (Deep Submergence Science Committee)

181 likes · 2 talking about this


Organization

DeSSC is a science advisory and oversight committee for USA's Deep Submergence Facility, which operates the Alvin, Jason and Sentry deep sea vehicles.

About

Photos

Likes

 181

Highlights ▾