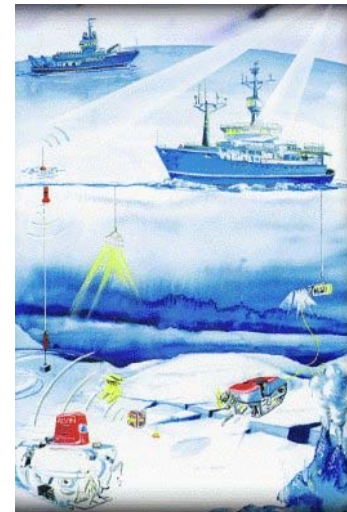
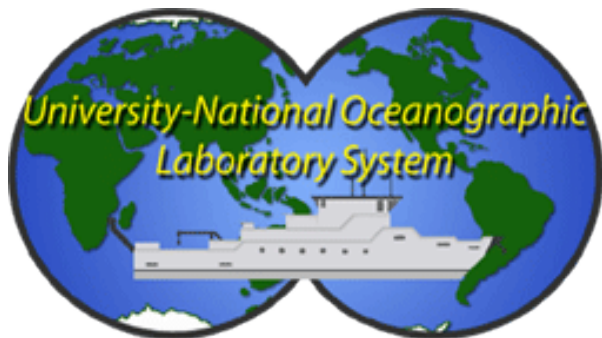


Update on the activities of the Deep Submergence Science Committee (DESSC) Fall 2012

Peter R. Girguis
Associate Professor, Harvard University
DESSC Chair



Topics to be addressed

1) NDSF vehicle status and updates

ROV JASON

AUV Sentry

DSV Alvin

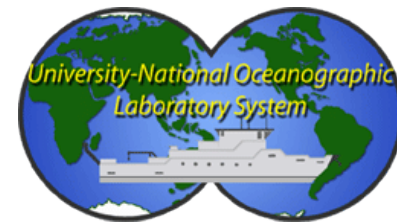
2) NDSF policies

photo attribution and video copyright

3) Outreach

Early career scientist program at AGU 2011

4) Emerging Topics



ROV JASON

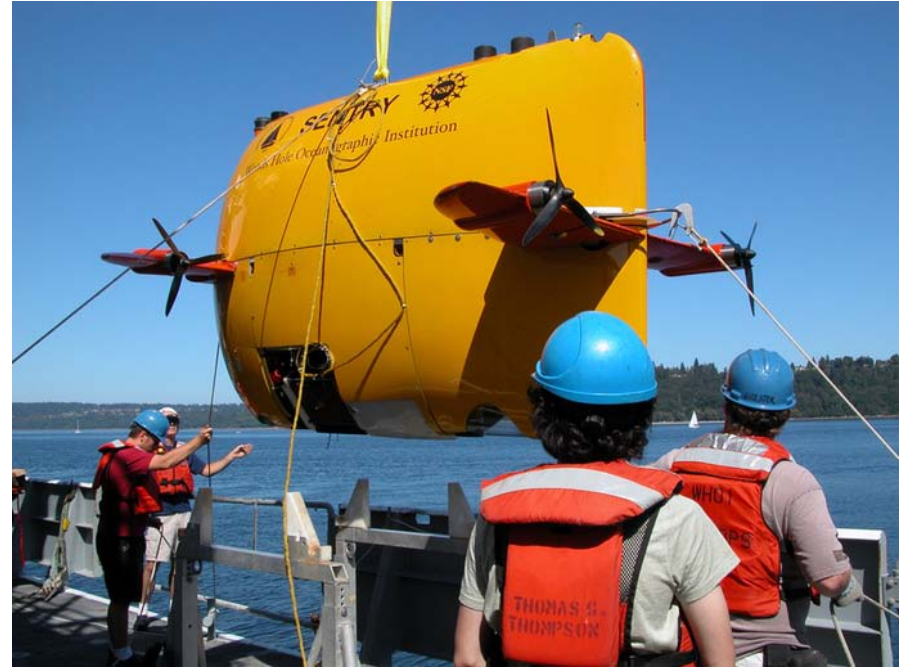
- *Upgrades to imaging and illumination*
 - New HD video cameras (Incite HD)*
 - New LED lighting = better imagery, more payload*
- *Launch and recovery system (LARS)*
 - Been tested in field, excellent results*
 - Reduced turnaround time*
 - Can operate with 9 people*



AUV Sentry

AUV Sentry continues to perform well in shallower settings

- *Failures at 6000 m suggest some issues need to be resolved to increase reliability*
- *Issues regarding data management and processing post-expedition seem to be less problematic*
- *DESSC still working on reply to the 1.5 year report*
 - *Will likely suggest that Sentry components be more rigorously tested prior to deployment*
 - *Will likely suggest that Sentry group request additional engineering dive(s) if needed to ensure a successful mission*



HOV Alvin upgrade

- *Certification issues largely resolved*
- *New sphere has been delivered, integration and assembly are ongoing*
- *A frame modifications etc underway*
- *HOV Alvin is slated for Sea trails in early 2013; Science Verification Cruise (SVC) circa May 2013*



Old and new sphere, side by side. Note different viewport layout



HOV Alvin returns home

HOV Alvin: Science Verification Cruise

- *Objective: Provide assessment of vehicle capabilities before resuming regular operations*
- *Engage early career scientists in this activity*
- *Use the SVC as a catalyst for engaging the broadest possible community in HOV Alvin use (e.g. proposal requests)*



Alvin sphere mockup allowed users to provide feedback on ergonomics



HOV Alvin will be assessed by experienced and new users during a 2.5 week expedition in 2013

Emerging topics

1) Data management and archiving

DESSC ad hoc committee is examining the issue

2) Enhanced internet access on board global ships

may be a cost-effective means of data analyses while at sea

3) Outreach

Continuing early career program; partnering with FIC E&O

Partnering with the Inner Space Center (URI-GSO)

Fall DESSC meeting webinar??

4) DESSC coordination with OOSC

How do we facilitate conversation?

