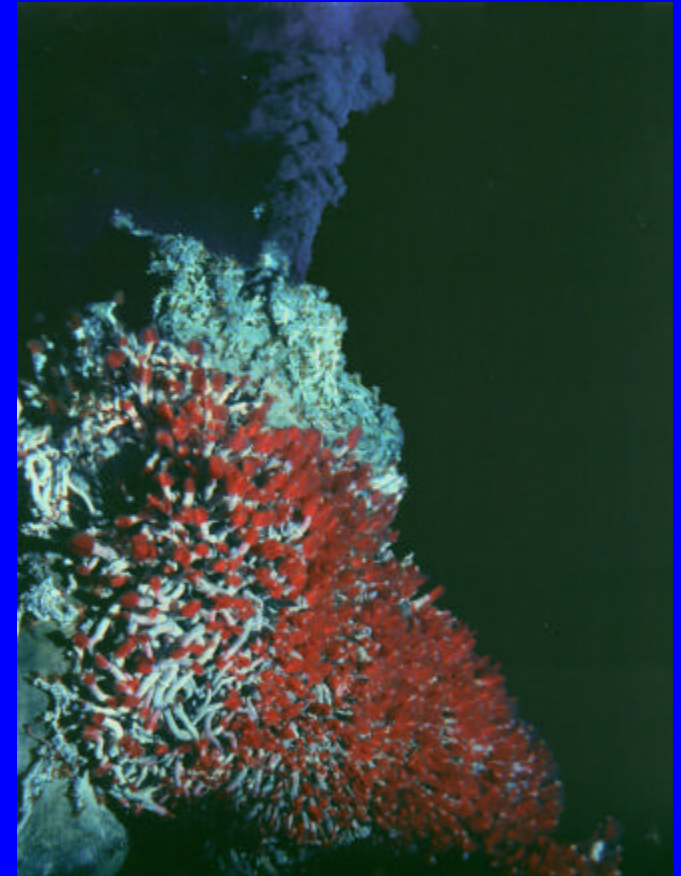


Deep Submergence Science Committee



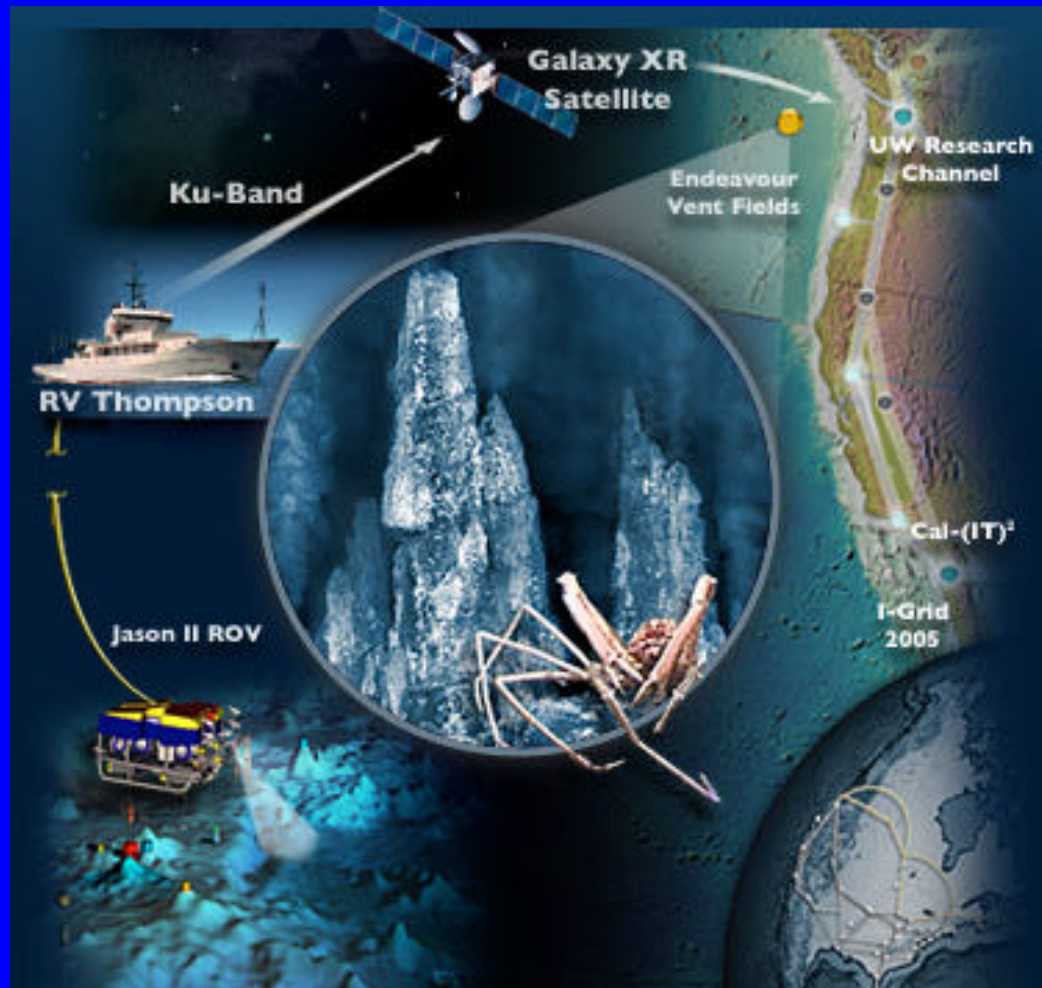
Photo by Mitch Elend



Report to the UNOLS Membership

October 14, 2005

VISIONS '05 - Expedition to the Underwater Volcanoes of the Northeast Pacific



- 1 September to 4 October 2005
- Expedition aboard R/V *Thomas G. Thompson* to the underwater volcanoes of the Juan de Fuca Ridge.
- Operations with *ABE* and *Jason II* and a high-definition underwater video camera.
- Co-chief scientists: John R. Delaney and Deborah S. Kelley (UW)
- VISIONS '05 featured real-time broadcast of high-definition video from the seafloor.

Issues and Activities – 2004 / 2005

Meetings:

DESSC Annual - San Francisco, December 12, 2004

Spring Meeting - WHOI, June 13-14, 2005

- **Reports from vehicle science users, Agency representatives, and NDSF Operator**
- **Status reports on NDSF Vehicle operations, tools and upgrades**
- **HOV Safety Standards**
- **Establishing Criteria for New Assets**
- **Vehicle Scheduling**
- **Long Range Planning**
- **Facility Renewal**



Photo by Debbie Kelley

Safety Standards for Human Occupied Vehicles (HOVs)

Establish Safety Standards for the use of Human Occupied Vehicles:

- NSF and NOAA have provided a draft task statement to establish safety standards for HOVs.
- The safety standards should address certification of:
 - The vehicle
 - The ship
 - The handling system
 - The operation
 - Training (vehicle and ship crew)
- UNOLS action - form a subcommittee.

Safety Standards for Human Occupied Vehicles (HOVs)

Suggested Membership:

- Science users (including a DESSC rep)
- RVOC Safety Committee representative
- HOV operators from WHOI, HBOI, and HURL
- HOV pilots
- Marine Superintendent
- Ship Captain
- Navy representative (NAVSEA Certification)

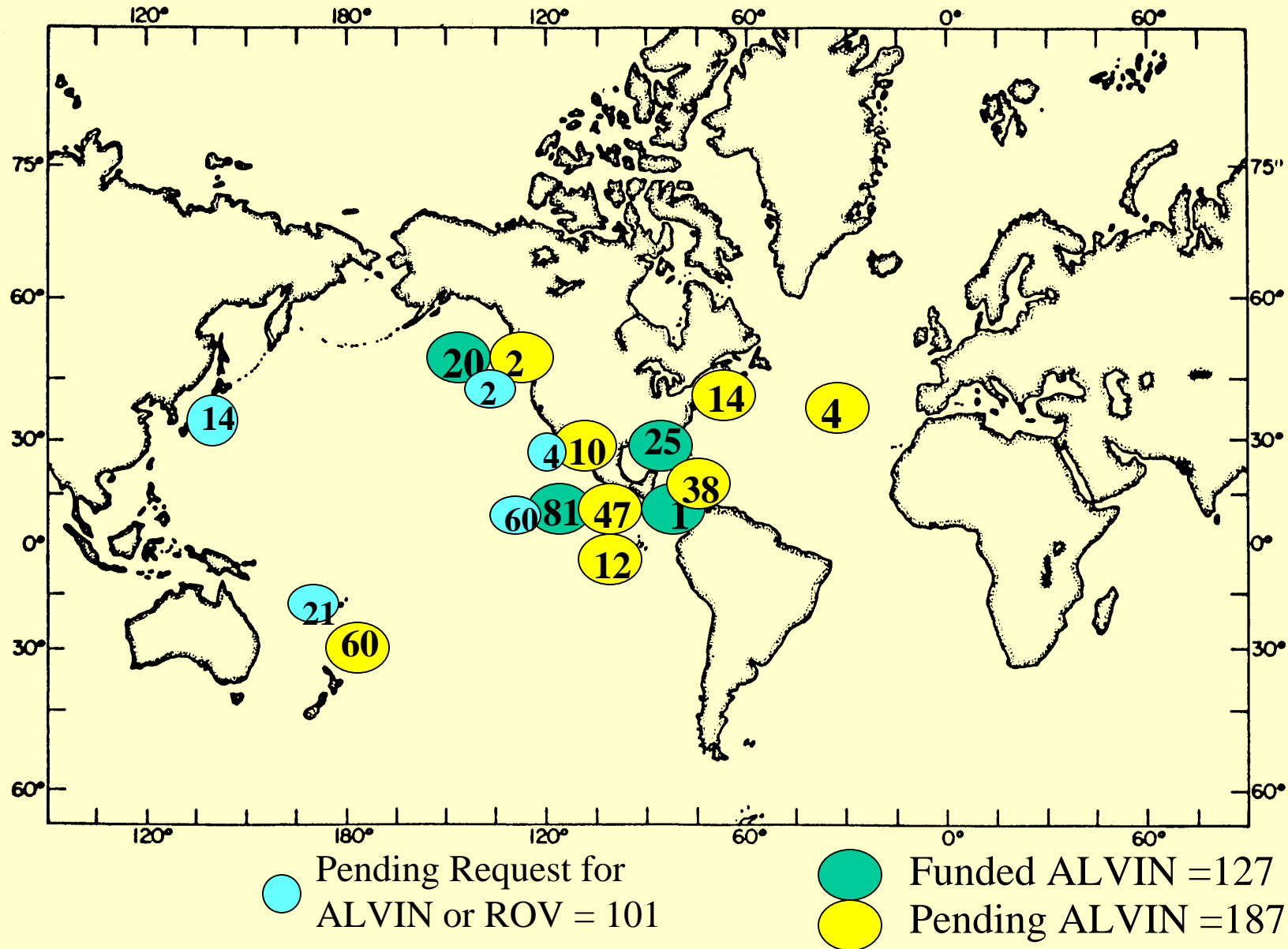
This effort might span 2 years.

Establishing Criteria for Transitioning Assets into the NDSF

- Background – In the coming years significant demand for new suites of deep submergence assets is anticipated. In response, DESSC has drafted criteria for transitioning assets in the NDSF.
- Some considerations:
 - Significant and broad demand for asset
 - Provides a unique capability
 - System is robust
 - Asset operation and support costs are affordable
- Pending revision, the draft criteria will be sent to the UNOLS Council for approval.

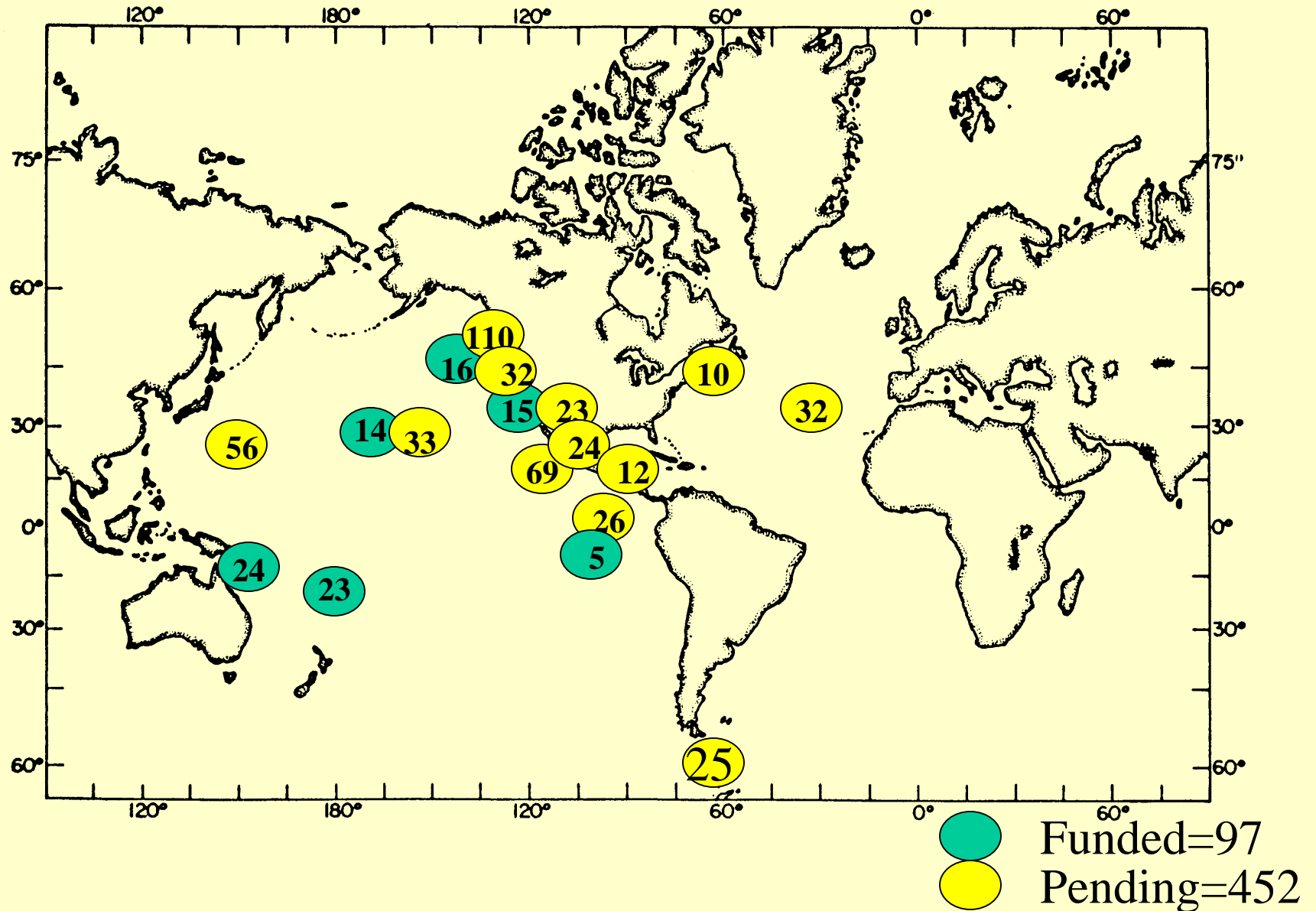
Updated June 2005

ALVIN Requests - 2006



Updated June 2005

JasonII, DSL-120 & Argo II Requests - 2006



Replacement HOV – Design Update



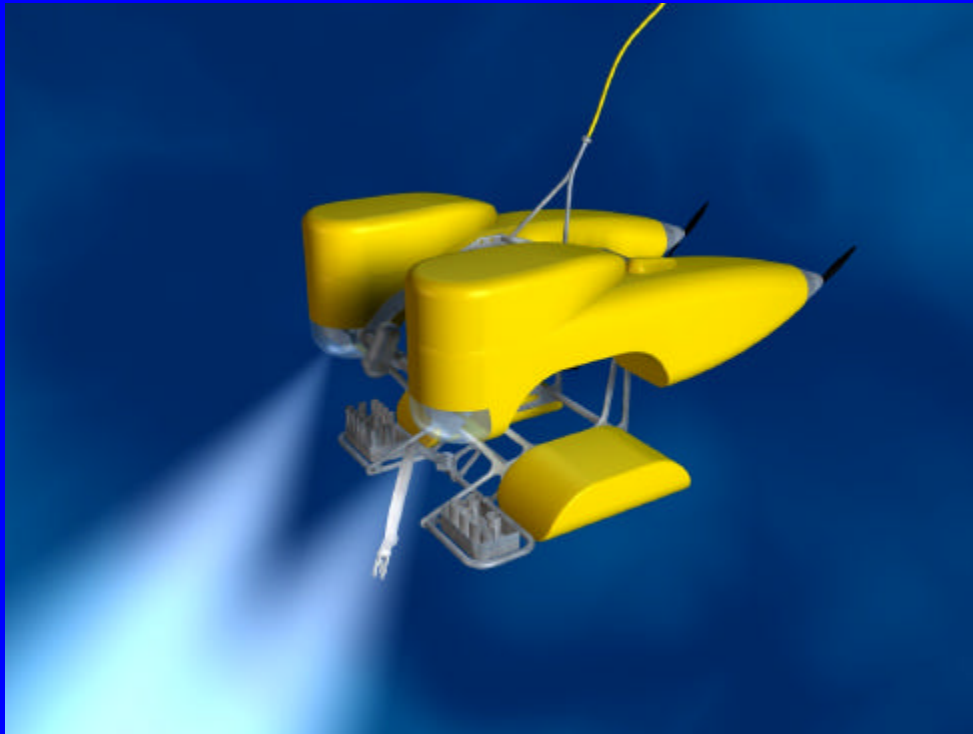
**Project underway
at WHOI -
Anticipated vehicle
final assembly and
testing/technical
support in late
2008.**

Science operations begin in 2009

http://www.unols.org/committees/dessc/replacement_HOV/replacement_hov.html

HROV Project Update

11,000 meter depth capability



This project is underway at WHOI with expected testing and trials of the vehicle system in late 2006.



DESSC Membership

- Dave Mindell completes his 2nd term in 9/05.
- Nominations are needed to fill his position. Individuals associated with Margins or Archeology research are desired.

Winter DESSC Meetng

MEETING ANNOUNCEMENT

The science community is invited to attend the

DEep Submergence Science Committee - Annual Planning Meeting

Sunday, December 4, 2005

The Marriott Courtyard at San Francisco Downtown

*** Rincon Hill Room***

299 Second Street

San Francisco, CA 94105