# Subcommittee Report:

# **Establishing Safety Standards for Human Occupied Vehicles**

Report to the DESSC November 9, 2006

Prepared by

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#### The situation:

- NSF and NOAA have traditionally provided support for science cruises on the NAVY owned and inspected DSV Alvin.
- NOAA routinely supports science using other vehicles, including the institutionally-owned *Pisces* and *JSL* subs, which are certified and inspected by ABS.
- NAVY is moving away from HOV operations and have indicated they are not interested in certifying the Alvin replacement.
- For many years, the science community has expressed interest in using HBOI and HURL submersibles for appropriate NSF-sponsored projects.

### A timely opportunity:

- ★ The new HOV will be ABS certified (as presently are the Pisces and JSL submersibles.)
- NAVSEA is now advising ABS on certification procedures for deep diving submersibles.
- NOAA and NSF share a commitment that all HOVs (and their operators) utilized by the science community continue to meet rigorous safety standards.
- Unification of safety standards for research HOVs (which must be compliant) is essential for NSF funding.



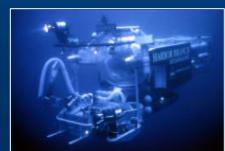
# Committee Membership:

- Dana Wilkes (Chair) NOAA Representative
- Tim Askew (HBOI) HOV Operator, UNOLS Safety Committee
- Colleen Cavanaugh (Harvard U.) Science HOV user
- Pat Hickey (WHOI) HOV pilot
- Terry Kerby (HURL) HOV Operator and Pilot
- Dan Schwartz (UW) Marine Superintendent, former Submersible-Support & R/V Ship Captain
- Barrie Walden (WHOI) HOV Operator
- Craig Young (U. of OR) Science HOV user, DESSC

#### **Agency Representatives:**

- NSF- Dolly Dieter, Holly Smith
- NOAA Barbara Moore





#### Meetings to Date:

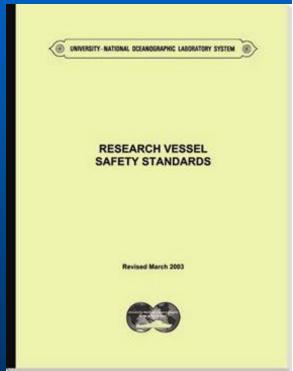
January 25, 2006. Tampa, FL May 4, 2006. Phone Conference May 25, 2006. Woods Hole, MA August 22, 2006. Phone Conference October 31, 2006. Phone Conference

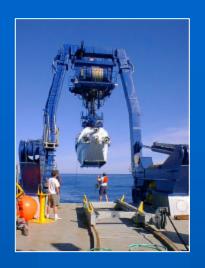
- Reviewed Project Background and Task Statement
- Heard reports on current standards and operating manuals from HOV Operators (WHOI, HURL, HBOI)
- ∠ Identified areas that should be addressed by an HOV Safety Standards Document...and as a new chapter of the existing UNOLS RVSS book
- Defined writing and research assignments for committee members
- Reviewed Progress on Writing assignments

# Proposed Model - Research Vessel Safety Standards

"These standards are based in major part on applicable laws and regulations. In addition and where appropriate, they supplement, extend, and assist in the interpretation of the legal requirements. Nothing herein is intended to conflict with the legal standards, but rather to encourage and assist the operator to not only meet, but to go beyond the legal minimums, as may be desirable and practicable..."

As adopted, these standards are what we will be judged by in any post-accident/incident investigation or litigation -- paraphrased from D. Nixon, Counsel to UNOLS.







#### **Document Chapters**

- HOV Operations
- HOV Support Ship
- HOV Handling Systems
- Training Procedures for HOV Crewpersons
- Science User Safety Guidelines



## **Project Timeline and Meetings**

<u>▼ Timeline:</u> Multi-year

#### **∠** Meetings:

- Phone and Web conferencing every other month
- Next Conference December, 2006
- Completion Deadline: before the new HOV comes into service.

#### THANK YOU!

- If you have any questions, Craig Young and Dan Schwartz will be here for this meeting
- ....or send us your ideas, suggestions or comments by e-mail to office@unols.org (Attention to Annette DeSilva)
- Our appreciation to NSF and NOAA for participating in and supporting this effort!