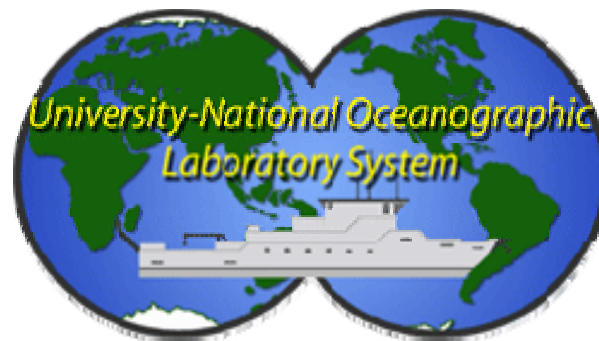


**Update on the activities of the Deep Submergence Science Committee  
(DESSC)  
2011**

*Peter R. Girguis  
Associate Professor, Harvard University  
DESSC Chair*



## Four major topics to be addressed

### 1) NDSF vehicle status and updates

*DSV Alvin upgrade*

*ROV JASON launch and recovery system upgrade*

*Performance of AUV Sentry in the NDSF*

### 2) NDSF policies

*photo attribution*

*video copyright*

### 3) NDSF personnel

*disparities in management at the NDSF*

### 4) December DESSC meeting (AGU 2010)

*Establishing a broader user base*

*informing the community about Alvin upgrade*



## ***DSV Alvin upgrade***

Susan Humphris (WHOI DSV project lead) presented to DESSC at both meetings last year

- *Presentation, in general, well received*
- *Ongoing concerns about the HD camera system*
- *Recent, major concerns about cost and completion resulting from NAVSEA compliance*

## **POTENTIAL CONSEQUENCES of continued cost/time overruns**

- Even greater delays in the deployment of *DSV*
- Further de-scoping to save costs might severely limit science capacity



## ***JASON launch and recovery system upgrade***

Matt Heinz (JASON group leader) is currently fabricating a new launch and recovery system that will enable single-body (JASON) or dual-body (JASON and MEDEA) operations

### **RESULT of implementing the new LARS**

- Much improved safety*
- Reduced turnaround time*
- Increased payload*
- CONCERN: Will JASON always need <9 people?*



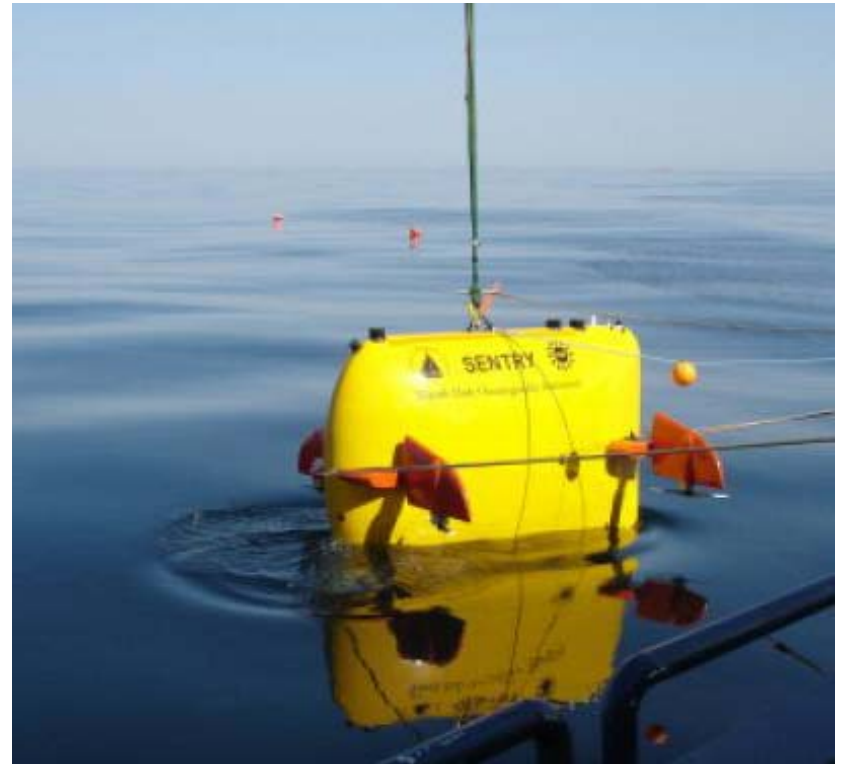
## **AUV Sentry and the NDSF**

*AUV Sentry played a major role in the BP oil spill(summer 2010)*

- Lauded by the community*
- Continues to perform well*
- Issues have arisen regarding data management and processing post-expedition*

**In 2010, DeSSC outlined milestones to insure the continued efficacy of Sentry**

- Personnel issues identified by DeSSC have largely been addressed*
- Ongoing efforts focused on addressing previous issues with data management*



*AUV Sentry being lowered into the Gulf during an oil spill response cruise*

# **NDSF policies: photo attribution and video copyright**

## *Attribution*

Long standing concerns about photo attribution and copyright

DESSC is still working with WHOI personnel to develop a simple, shipboard database to insure appropriate attribution.

## *Video copyright*

During a recent expedition, the question arose as to who retains copyright if the PI is OOI funded; led to agreements about copyright that will be further discussed at December AGU meeting

## **RESOLUTION**

After DeSSC and NDSF had an opportunity to ask an attorney question regarding copyright, it became apparent that the current system – though imperfect- was largely functional.

After the addition of the shipboard database, the program will remain largely intact



## Broadening participation: the AGU 2010 NSDF Booth

*Establishing a broader user base and disseminating information*

There is a ca. 30% reduction in demand for NDSF vehicles

A cursory examination revealed that a few “seasoned” PIs are responsible for the majority of the NDSF requests

The NDSF booth at the AGU 2010 Fall meeting

Purpose: to expose a broader group of scientists to the NDSF

*-Alvin upgrade*

*-JASON'S capabilities*

*-AUV Sentry's exemplary autonomy*

Featured the NDSF's involvement in the BP oil spill

Call media attention to NDSF















# Publicity resulting from AGU NDSF booth



**BBC NEWS** Watch **One-Minute World News**

Last Updated: Friday, 22 October, 2004, 14:34 GMT 15:34 UK  
E-mail this to a friend Printable version

## Science salutes its ocean giant

By Virginia Phillips  
BBC Science

**All great careers come to an end and the deep-sea manned submersible *Alvin* goes into retirement after 40 years of remarkable work in the world's oceans.**

The sub has taken 12,000 people on over 4,000 dives, to observe the lifeforms that must cope with super-pressures and move about in total darkness.

It is said *Alvin* research has featured in nearly 2,000 scientific papers.

It helped confirm the theory of plate tectonics and continental drift, and discovered hydrothermal vents.



Even with *Alvin* we know so little about the deep ocean

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## The Blowout Experiment

a nature network blog by Mark Schrope

HOME ARCHIVE ABOUT

### The End of an Era: Alvin's Last Dive?

Posted by Mark Schrope on Dec 13, 2010

SHARE

I'm currently holed up in Biloxi, Mississippi, though I was originally scheduled to be heading offshore for a short visit to Woods Hole Oceanographic's R/V *Atlantis*, mothership to their famed *Alvin* submersible. *Alvin* has been in the Gulf for nearly a month now studying the region's deep-sea coral reefs and methane seeps and in some cases studying the effects of the Deepwater Horizon spill in the depths.



About NPR > People at NPR

## Richard Harris

Correspondent, Science Desk

text size A A A

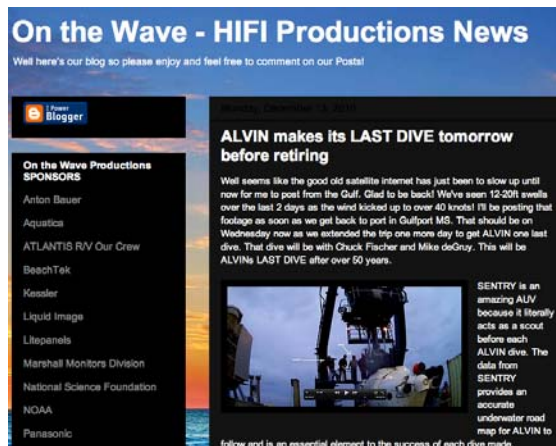


Steve Barrett

Award-winning journalist Richard Harris reports on science issues for NPR's newsmagazines *Morning Edition*, *All Things Considered*, and *Weekend Edition*.

Harris, who joined NPR in 1986, has traveled to the ends of the earth for NPR. His reports have originated from Timbuktu, the South Pole, the Galapagos Islands, Beijing during the SARS epidemic, the center of Greenland, the Amazon rain forest and the foot of Mt. Kilimanjaro (for a story about tuberculosis).

In 2010, Harris' reporting uncovered that the blown-out BP oil well in the Gulf of Mexico was spewing out far more oil than asserted in the official estimates. He covered the United Nations climate negotiations, starting with the Earth Summit in Rio de Janeiro in 1992, followed by Kyoto in 1997 and Copenhagen in 2009. Harris was a major contributor to NPR's award-winning 2007-2008 "Climate Connections" series.




## On the Wave - HIFI Productions News

Well here's our blog so please enjoy and feel free to comment on our Post!

ALVIN makes its LAST DIVE tomorrow before retiring

Well seems like the good old satellite internet has just been to slow up until now for me to post from the Gulf. Glad to be back! We've seen 12-20ft swells over the last 2 days as the wind kicked up to over 40 knots! It's posting that footage as soon as we get back to port in Outfoot MG. That should be on Wednesday now as we extended the trip one more day to get ALVIN one last dive. That dive will be with Chuck Fischer and Mike deGruy. This will be ALVIN'S LAST DIVE after over 50 years.



SENTRY is an amazing ALVIN because it literally acts as a scout before each ALVIN dive. The data from SENTRY provides an accurate underwater road map for ALVIN to follow and is an essential element to the success of each dive made.

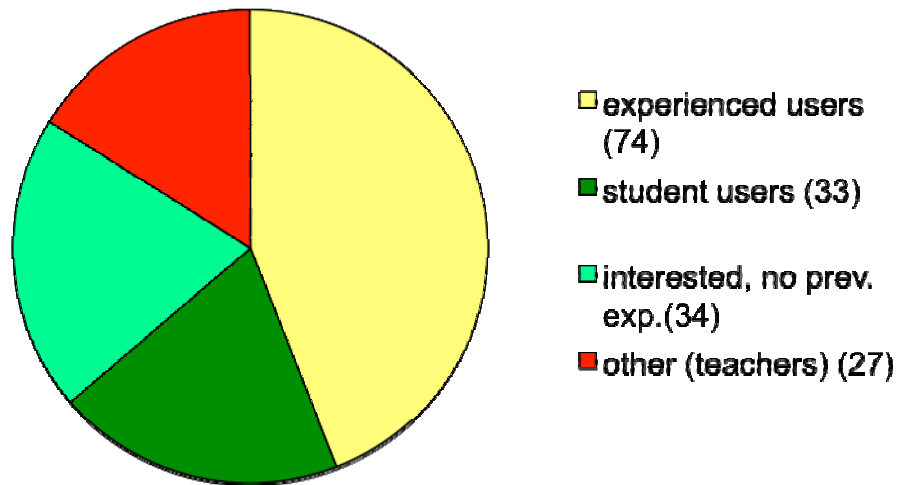
**On the Wave Productions SPONSORS**  
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# Summary of our experiences at AGU

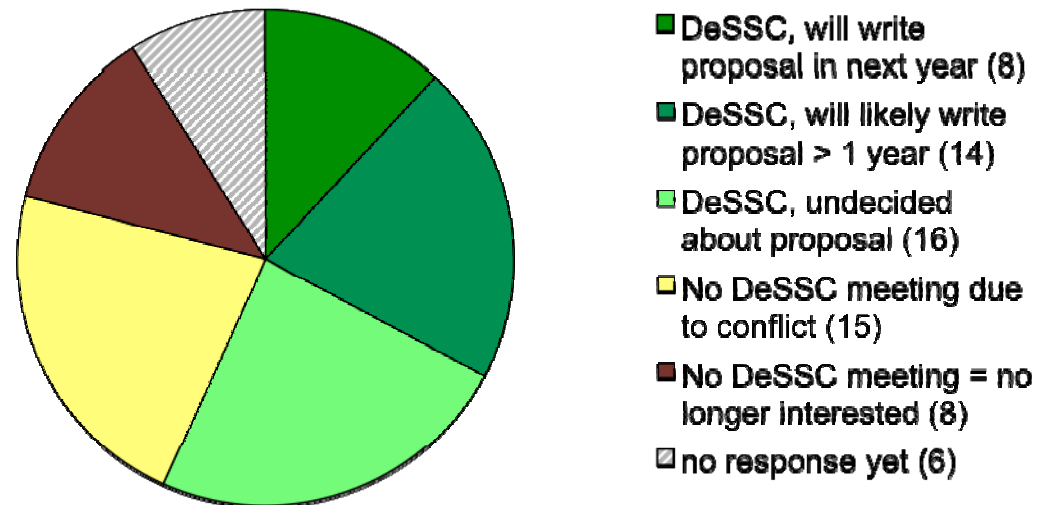
- What worked?
  - Everyone who participated was amazing.
  - Appropriate level of complexity
  - Hands on exhibits !!!
  - Twitter; Facebook ads worked
  - Raffle of a *DSV Alvin* viewport
- What to do in the future?
  - Reduce cost
  - Mini-lecture series (5 mins) during the exhibit?
  - Concrete, easy info on how to apply for ship/facility time
- Special thanks to NDSF staff and Brian Midson

# Data from AGU NDSF booth

**Data from raffle entries;  
AGU NDSF Booth 2010**



**Data from phone calls;  
self-identified "future" users**





# Upcoming student/early career scientist program @ the DeSSC Fall Meeting (AGU 2011)

## Purpose

- To engage students/early career scientists in DeSSC*
- To provide mentoring and guidance on applying for/use of NDSF*
- To partner students with seasoned mentors*

## Plan

- Financial support from NSF to offset costs of DeSSC participation
- Broadcasted program; students applied for support
  - 34 successful applicants; at least 8 intend to submit proposals next year
- Participants will contribute to DeSSC, and will participate in three short courses post-DeSSC meeting
- Currently developing program to partner participants with more seasoned mentors