

Deep Submergence Science Committee

May 17-18, 2004

Patricia Fryer, Chair

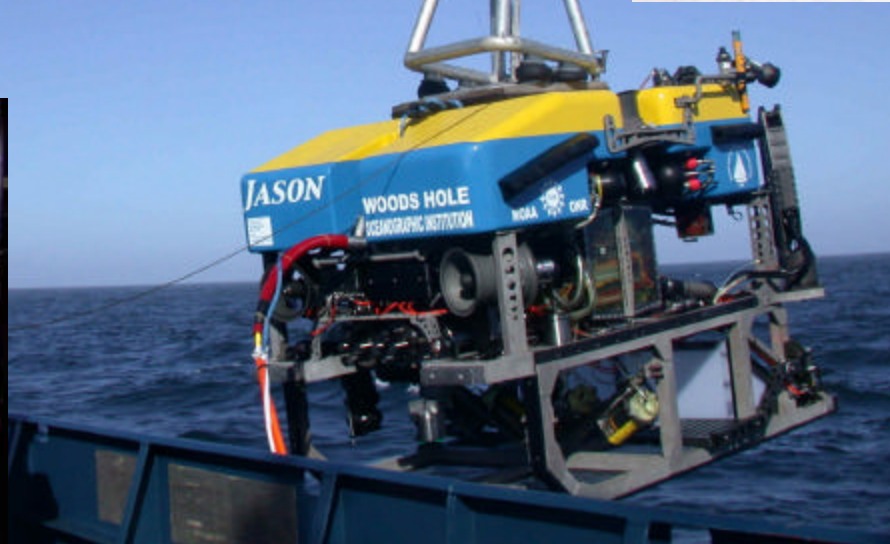
On the retirement of Admiral Richard Pittenger:

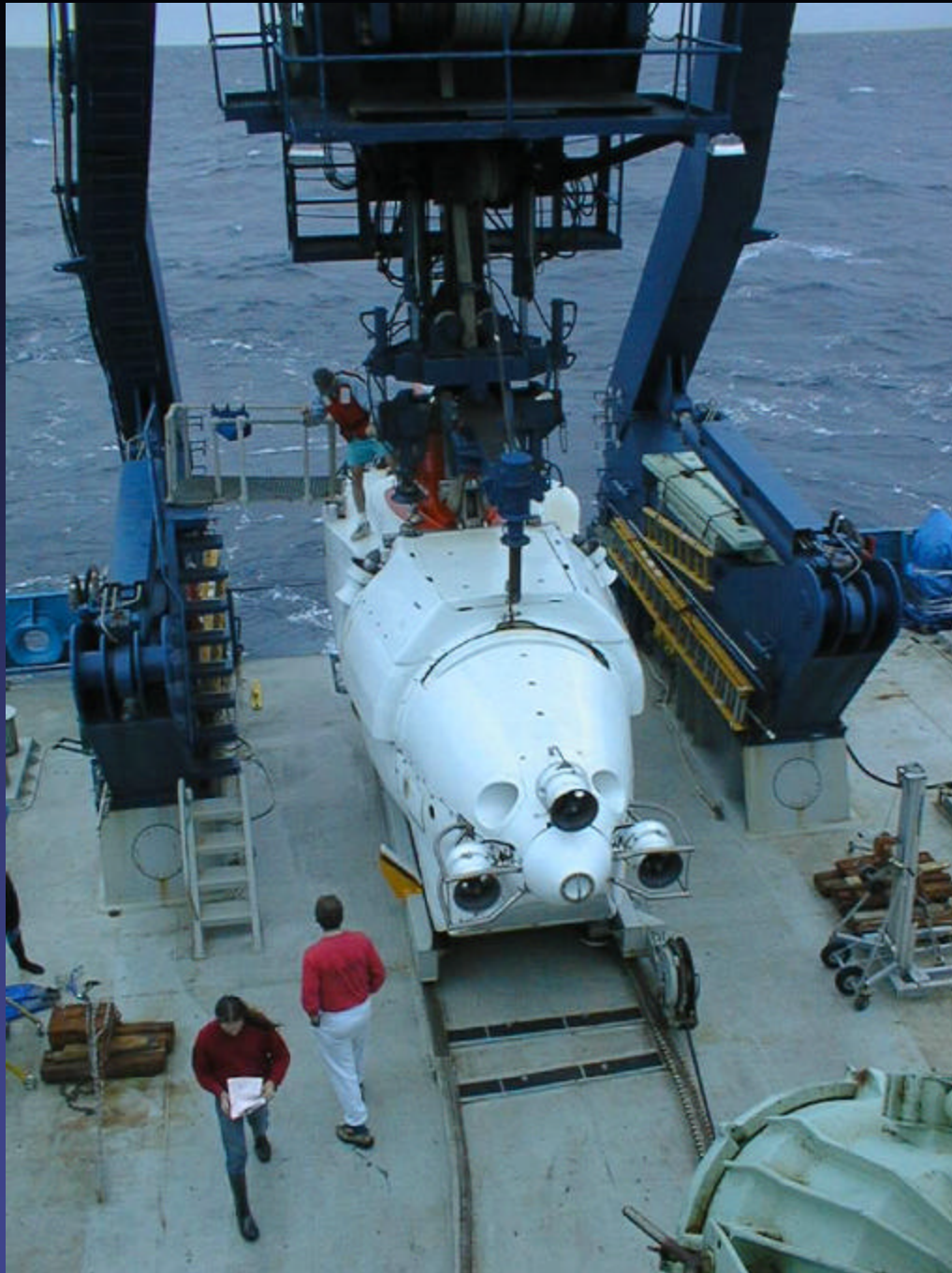
On behalf of all the members of DESSC, present and past, who have had the privilege of working with and getting to know him, I would like to thank Dick for his unswerving devotion to the facility and to the community of students, researchers, and engineers who have benefited from his dedication to our needs. We wish him well in his future endeavors and although we know he plans to remain an active advocate for deep submergence science, we hope that he permits himself the occasional day off from time to time. We are indeed fortunate to have the scientific expertise and administrative talents of Dr. Robert Dietrick to continue the high quality of interaction with the user community and operational excellence that the NDSF has provided through WHOI over the years.

NDSF Chief Scientist Replacement

Announcement of interim
replacement for Dan Fornari

The need for ROVs will continue to grow, more large ROVs like Jason 2 will be needed for extended geographic range (and for observatory work).





NADAC report from Bob Brown

Progress toward design of the
sphere and other work

Partial Inventory of HOVs

HOV	Facility/Operator (country)	Depth Capability (m)
Shinkai 6500	Japan Marine Science and Technology Center (JAMSTEC) (JP)	6500
Mir I & II	P.P. Shirshov Institute of Oceanology, Russian Academy of Sciences (Rus)	6000
Nautile	French Research Institute for Exploration Of the Sea (IFREMER) (FR)	6000
Alvin	National Deep Submergence Facility (NDSF) Woods Hole Oceanographic Institution (WHOI) (USA)	4500
Cyana*	IFREMER (FR)	3000
Shinkai 2000*	JAMSTEC (JP)	2000
Pisces IV & V	Hawaii Undersea Research Laboratory (HURL) The two can be used simultaneously (USA)	2000
Johnson Sea-Link I & II (USA)	Harbor Branch Oceanographic Institution (HBOI)	1000
Deep Rover	Nuytco Research Ltd. (CAN)	900
DeepWorker 2k	Nuytco Research Ltd. (CAN)	900
NR1	US Navy (General Dynamics)	724
Remora 2000*	Comex, (FR)	610
JAGO	Max Plank Institute, (D)	400
Delta	Delta Oceanographics (USA)	370
Clelia	HBOI (USA)	300
Various	Commercial salvage companies (& tourist subs)	<300

(* Still exist, but are not currently in service.)

Partial Inventory of ROVs

ROV	Facility/Operator (country)	Depth Capability (m)
Kaiko*	Japan Marine Science and Technology Center (JAMSTEC) (JP)	11000
UROV 7K	Japan Marine Science and Technology Center (JAMSTEC) (JP)	7000
Jason2/Medea	National Deep Submergence Facility (NDSF) Woods Hole Oceanographic Institution (WHOI) (USA)	6500
Victor 6000	IFREMER (FR)	7000
ISIS	Southampton Oceanography Center (UK)	6000
ATV	Marine Physical Laboratory (Scripps Institution of Oceanography (USA) (USA)	6000
ROPOS	CSSF, Sidney, BC (CAN)	6000
Tiburon	Monterey Bay Research Aquarium Institute, (USA)	4000
Urashima	Japan Marine Science and Technology Center (JAMSTEC) (JP)	3500
Hyper Dolphin	(JAMSTEC) (JP)	3000
HYSUB 75-3000		
http://www.oilpubs.com/oso/rov/h_left.htm for oil industry vehicles, mostly 3000 m)		
Ventana	Monterey Bay Research Aquarium Institute, (USA)	1850

(* Lost at sea, but plans exist to replace it.)

Partial Inventory of AUVs

AUV	Facility/Operator (country)	Depth Capability (m)
ABE	Woods Hole Oceanographic Institution (WHOI) (USA)	5000
SeaBED	Woods Hole Oceanographic Institution (WHOI) (USA)	2000
Odessey IIb (5)	AUV Laboratory at MIT Sea Grant (MIT) (USA)	6000
Sauvim	Autonomous System Laboratory, Univ Hawaii (USA)	6000
Caribou	AUV Laboratory at MIT Sea Grant (MIT) (USA)	4500(max) 3000(op)
CETUS™	AUV Laboratory at MIT Sea Grant (MIT) (USA)	4000(Ti) 200(AI)
Xanthos	AUV Laboratory at MIT Sea Grant (MIT) (USA)	3000
PTEROA150	Underwater Technology Research Center, Institute of Industrial Science, U. Tokyo (JP)	2000
AutoSub	Southampton Oceanographic Centre (UK)	1600
Maridan AUV	Maridan ApS (DK)	1500
Slocum Gliders	Webb Research Park, Falmouth, MA (USA)	1200
Theseus	ISE Research Ltd. (CAN)	1000

Numerous others mainly commercial for shallower work...

Inventory of Tools and Sensors

THE NDSF provides a list of tools and sensors used on Alvin and Jason2/Medea

For others there are listings at various facilities.

These need to be compiled. We hope to create a site on the UNOLS DESSC web pages where users can go to find this compilation. For this effort

we'll be calling on you...

Marine Archeology Programs



An Unsinkable Ship?



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+ Hot Science

Resources

Teacher's Guide



<http://ina.tamu.edu/>
<http://www.serve.com/archaeology/>
http://www.gso.uri.edu/index_net_big.html

Education and Outreach Efforts

- Dive and Discover: <<http://science.who.edu/DiveDiscover/>>
- REVEL: <http://www.ocean.washington.edu/outreach/revel/>
- Mud Volcanoes from the Mantle:
<<http://www.soest.hawaii.edu/expeditions/mariana>>
- Extreme <<http://www.extremescience.com/>>
- NOAA Explorations <<http://oceanexplorer.noaa.gov/>>
- IMAX movie on Alvin explorations of Ridges released 2003
- NeMO
- MATE: ROV competition –<<http://www.marinetech.org/>>
- RIDGE2000 Lecture Series