1999 and Beyond:

Mike Perfit began this discussion with viewgraphs showing the geographic demand for deep submergence facilities and the areas which already have funded work for 1999 and beyond, see ***Appendix XII***. Areas of high interest continue to be in the traditional ALVIN areas, but there is also interest globally. There already are funded programs in 1999 and beyond in the Indian Ocean, Black Sea and off Hawaii. Mike showed a time line of funded programs and their respective weather windows. A complete listing of the funded programs, vehicle needs, and PIs was also provided.

It is clear that there will be a problem accommodating both time series work in addition to expeditionary type programs. PIs need to determine if their work can be carried out using ROVs instead of ALVIN. Steve Scott suggested that perhaps a long term arrangement could be worked out between ROPOS and the National Deep Submergence Facility group for use of ROPOS to accommodate work such as time series programs. It was questioned whether it is the feasible to make ROVs usable for all time series programs.

New Deep Submergence Vehicle Construction and Facilities Upgrades:

Mike continued with a five to 20 year vision, see ***Appendix XIII***. The community needs to arrive at a consensus on what types of new vehicle(s) are needed to accomplish deep submergence science over the next 20 years. It appears that a suite of vehicles will be needed to accommodate future needs. There are a variety of issues which need to be addressed, such as, the operational limits and required support personnel. Substantial input and justification from the community is needed on whether or not a science dedicated ROV should be pursued. The community also needs to look at other types of vehicles such as AUVs as rapid response tools. Should these vehicles be included in the suite of science vehicles?

There was a discussion on how to approach long term needs and whether a workshop would be effective. It was suggested that perhaps a group of time series scientists could meet to discuss their facility needs. This group could produce a white paper with their recommendations. For the short term, an ROV needs to be found to meet time series needs. We need to look at what can be done to increase the capabilities of ROVs. Additionally, the community needs to be educated on how to effectively and efficiently utilize our deep submergence assets and needs to make decisions about upgrades to the existing facilities. It appears that construction of a science dedicated ROV could bridge the gap between short-term and long-term needs.

The community and WHOI operator need to explore funding strategies to implement required long-term new facility construction and short-term upgrade to existing vehicles. Agency, WHOI and private funding sources, or a combination, should be investigated. Mike concluded the meeting by noting that DESSC will continue to explore long-term facility needs and encouraged the community to provide their input.

The meeting was adjourned at 5:00 pm

Appendix I

Date: November 21, 1997
To: The Deep Submergence Community
From: M. Perfit, DESSC Chair

Re: DESSC Meeting I hope that you will be able to make this year's annual DESSC planning meeting before the 1997 AGU Fall Meeting. The structure of the meeting will be somewhat different this time. In the morning and early afternoon, the traditional reports will be given but most of the afternoon will be less structured and left for open community discussion on issues pertaining to the future of deep submergence science and facilities. See you at the meeting.

Enclosure: Planned Agenda Planned Agenda

UNOLS DEep Submergence Science Committee Planning Meeting

Moscone Center, Room 238
San Francisco, CA
Sunday, December 7, 1997

8:30-9:00 Welcome and DESSC Chair Report Key items that have concerned DESSC which impact the deep submergence community --Short- and long-term scheduling process --Navy vehicle decommissioning --Deep submergence science in the 21st century and vehicle needs

9:00-10:15 1997 Science Reports Brief reports from Science PIs (5-10 minutes each)

10:15-10:30 BREAK

10:30-12:00 National Deep Submergence Facility Operator's Report (R. Pittenger and WHOI Personnel)
--1997 Operational Statistics
--ALVIN Report - overhaul, upgrades, and recertification
--ROV and Tethered Vehicles Report, planned upgrades
--Post-processing of DSL-120 data - Dan Scheirer
--Science facilities on ATLANTIS and improvements planned during the PSA-shipyard period in early 1998.
--Other Key Vehicle Issues:
--Navigation - new Winfrog software and integration
--ALVIN Power
--ROV Staffing for fly-away operations
--WHOI integrated vehicle management - pilots and technicians
--ATLANTIS bow-thruster noise and multibeam system
--Science Liaison - between WHOI operator and users.
-- Facilities Upgrades
--1998 Tentative Schedules

12:30-1:30 LUNCH (Lunches will be available at the meeting ($7.00)

1:30-2:00 Other Facility Operations. --MPL --MBARI --ROPOS

2:00-2:45 Agency and UNOLS Reports
--NOAA/National Undersea Research Program
-- National Science Foundation
--Office of Naval Research UNOLS Office - Report on the changes to the ship scheduling process.

2:45-3:00 Break

3:00-3:30 WHOI Archives - Mike Perfit will lead a discussion on Archive policies and guidelines.

3:30- 4:15 Long Range Planning (Operations)
--1999 and beyond - summary of Website postings
--Global deep submergence science initiatives
--Scheduling - short and long term and facilitation of time-series experiments as well as global expeditionary science

4:15-5:00 Future Deep Submergence Science Facility Needs
--RIDGE Chair Presentation
--SEA CLIFF - Survey Results and Related Activities
--5-10 year planning for new vehicle facilities
--DESSC lecture ships