Appendix X

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Appendix XI

Key Issues in WHOI Formulation of a Revised Archiving Policy

1. Must conform to academic standards for preserving scientific data acquired using public funds.
2. Must be concise and provide for clear interpretation of data to be archived, as well as able to accommodate periodic revision as required
3. Needs to be fiscally responsible and operationally practical in terms of types and quantity of data collected and delivered to the scientists and archived.
4. Should provide for preservation of scientific rights of Principal Investigators consistent with funding agency guidelines; should provide for user-friendly access and utility for other scientists after the appropriate proprietary periods, and also facilitate both non-commercial and commercial use of data for science outreach and education. WHOI should act as custodian of deep submergence data and plow back any funds derived from commercial use to support/ enhance the archives and deep submergence vehicles.

SUMMARY OF WHOI ARCHIVING DELIBERATIONS

- Internal WHOI committee (Scientific Data Advisory Committee-SDAC; Brian Tucholke of WHOI's G&G Dept. is the Chair) set up in September to review ALL WHOI scientific data archiving policies and issues, including the National Deep Submergence Facility Archives. SDAC has met five times over the past 3 months, and committee members have each met with their respective WHOI departments to discuss archiving issues.
- Extensive discussions have taken place among SDAC and all departments at WHOI, Marine Operations, WHOI Directorate, and with outside scientists.
- Recognition by SDAC and WHOI Marine Operations and Deep Submergence Facility that existing policy concerning deep submergence vehicles and data needs revision to conform with current composition of National Deep Submergence Facility vehicles and types of data collected for science.

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5. Suggested Timeline for Producing a Revised Archiving Policy

Dec. 7 197- Fall DESSC meeting - receive community perspective on archiving and specific recommendations for changes to the present draft policy.
Jan. 1 1998 - Complete drafting of WHOI suggested revisions to deep submergence archiving policy and circulate to DESSC and federal funding agencies. Post on UNOLS/WHOI deep submergence WWW site and solicit community response.

Feb. 15 1998 - Compile DESSC, federal agency, and community-wide comments/revisions to draft policy.
Mar. 1 1998 - Complete revisions and submit to DESSC and federal agencies for final review and approval.

Appendix XII

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Appendix XIII

New Deep Submergence Vehicle Construction and Facilities Upgrades
The 5 to 20 Year Vision

- Arrive at consensus on what type(s) of n e w vehicle(s) are needed to accomplish deep submergence science over the next 20 years
    - Example:
        - New construction should be 6000m science dedicated ROV versus 6000m submersible
    - Issues:
        - Operational limits and required support personnel
        - Vehicle tether management system and shipboard heave compensation
        - Manipulation and Sampling
        - Remote data communication
        - Vehicle Systems Redundancy/Spares
- Make decisions about upgrades to existing National Deep Submergence Facilities
    - Examples:
        - Use of Sea Cliff to enhance Alvin capabilities.
        - Shared vehicle telemetry and science sensors between ROV Jason and Argo 11.
        - Surface control vans and electronics
        - Existing manipulator on ROV Jason and basket space/configuration
        - DSL-120 sonar array upgrades-altimeter, subbottom profiling, vehicle towbody, depressor and cable hydrodynamics
    - Issues:
        - Identification of how to best utilize Sea Cliff to upgrade Alvin operational and science sensors, and the timetable over which this can be accomplished Expected useful service life of ROV Jason, Argo 11 and DSL-120 sonar
- Investment in upgrades to existing ROV & towed vehicle facilities to provide capabilities for next 5-7 years with ability to migrate investment to new ROV and towed vehicle facilities & Funding strategies to implement required longterm new facility construction and short-term upgrade to existing vehicles
    - Examples:
        - Tripartite federal funding plan for new construction and phased upgrade plan
        - WHOI and private foundation funding
        - Consortium of the above parties
        - Other combinations vehicle
    - Issues:
        - Writing the supporting document which makes the case for the need for new deep submergence vehicle construction and upgrades - long term and short term.
        - Acquiring community, agency and "political" support for the projects.
        - How quickly can the funding be secured
        - When can the new and upgraded facilities be placed into service.
        - Impact to ongoing and planned research objectives
