

APPENDIX XIII

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Dr. Donald F. Heinrichs
Oceanographic Centers and Facilities
National Science Foundation
4201 Wilson Boulevard
Arlington, VA 22230

Ms. Lisa Rom
Oceanographic Instrumentation and Shipboard Technology
National Science Foundation
4201 Wilson Boulevard
Arlington, VA 22230

Dear Don and Lisa

We have made progress on formulating policy and guidelines for third party tool development and use on ALVIN and the ROV/towed systems operated by the WHOI-DSOG in response to your letter of February 15, 1994. By this effort we hope to encourage innovation in the use of the assets of the National Facility, resulting in improved capabilities and enhancing the science that can be addressed. Additionally, this effort will establish guidelines to aid the reviewers and the agencies in the evaluation of the benefits and projected costs beyond the proposed work.

Third party tools are defined for this memo as devices developed outside of the National Facility with agency funds, and the emphasis is on those tools that may be useful for the larger deep submergence research community. New tools are required for the increasingly complex and multi-disciplinary nature of deep submergence research in mid-water, hard-rock and soft-sediment environments, as well as the advent of deep ocean seafloor observatories and time series studies. Advances in sensor technology, materials, and engineering must be incorporated in a manner to effectively support the science and enhance the US deep submergence capability. The Stakes/Holloway rock drill development is an example of a tool that meets this criteria. It was designed for the work of the developers, it has been interfaced and tested on ALVIN, and has sparked the interest of other investigators. This type of asset should be developed with open communication with the DSF operator and the DESSC, and future operating, maintenance, and mobilization costs should be addressed in the original proposal where applicable.

We envision a procedure that involves scientific and technical review by the DESSC and operational assessment and recommendations by the WHOI-DSOG with respect to proposed 3rd party tool development. This must be done without unnecessarily burdening the investigator, but in a way that will enhance the review process and provide the agencies with information that is otherwise not available. The scientific merit of the proposed tool development, its operational viability, and its general applicability to a wide spectrum of deep submergence facility users, must be carefully reviewed to ensure that all disciplinary objectives and requirements are considered.

A straw-plan was presented to the DESSC at the December meeting and comments were gathered in the ensuing weeks to help in formulating the policy outlined in the Third Party Tool Policy draft that follows.

Additionally, we propose a Technology Subcommittee be formed from the DESSC membership as necessary to address third party tool issues and to provide input to the Operator on technology issues.

Sincerely,

(signed)

Barry Walden

(signed)

Jeff Fox

THIRD PARTY TOOL POLICY

1. Investigators considering submitting a proposal for developing a tool with intended applicability beyond the initially proposed science program are encouraged to submit a "letter of intent to propose" to the DESSC - Technology Subcommittee for initial comment and review. The letter of intent should include preliminary estimates of those items mentioned in paragraph #2. The Subcommittee and the Operator would evaluate the information provided and respond with a letter to the investigator with comments and suggestions in a timely fashion. Based on the feedback, the proposer could submit a formal proposal to the funding agency. Tools that could be utilized on a variety of deep submergence assets available to U.S. investigators would obviously have greater potential of use. In addition, the interfacing of new tools with various types of vehicles should be encouraged. Attaching the letter will show reviewers the contact with the DESSC and Operator had been made. Omission of this step, or lack of endorsement by the DESSC, could jeopardize the chances of success for the proposal.

2. Proposals for third party tools should include operation and maintenance cost estimates. Investigators should be prepared to support the continued maintenance of the tool via the funding received for the tool development and implementation, or include a long-term maintenance plan in the proposal that addresses the user costs for support services, repair and logistics.

3. Proposals submitted to the funding agencies for development of scientific instruments or tools will be reviewed under the applicable agency peer review system. The agency is encouraged to incorporate a DESSC Sub-committee member as a reviewer, who in turn will contact the Operator for dialog relevant to the review. The agency panel could be assured that there has been coordination in the proposal/review process and an assessment of the priority of a specific proposal relative to other requested instrumentation will be provided.

4. The responsibilities of the vehicle operator should not go beyond providing detailed interface specifications, installing equipment, evaluating safety and operational requirements, and cooperating on testing of new equipment. At sea repair, maintenance and spare parts for third party equipment shall be provided by the user or designated technician funded by the PI.

5. **If**, based on community demand, review by the DESSC Technology Subcommittee and with concurrence of the operator, equipment developed by a third party is to become a permanent addition to a vehicle system, the assets should be transferred to the vehicle operator for operation and maintenance. The appropriate support costs should be added to the annual operating budget of the vehicle operator.

6. The DESSC will report the status of third party tools to the community at the annual general meeting, including a review of tools under development and scheduled testing. In addition, a summary of tools available to the community, including the primary contact, will be maintained by DESSC and available with DSOG vehicle information.

We noted comments in your letter relating to the importance of the DSOG participation in the planning and implementation process for science tools that fall into the third party category. DESSC and WHOI-DSOG agree that this is a critical component of the process and it will play an important role in the eventual success of any tool development and utilization program. The 1995 DSOG Operations Proposal has included, within the scope of work for both ALVIN and the ROV/towed vehicles, the efforts that must be undertaken to provide and disseminate the vehicle systems criteria to interested parties in the deep submergence community, and the eventual work required to interface with those scientists and engineers.

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