APPENDIX XI

REVISED DESSC 3rd PARTY TOOL POLICY



Dr. Daniel J. Fornari WOODS HOLE OCEANOGRAPHIC INSTITUTION Department of Geology and Geophysics, MS #22 Woods Hole, MA 02543 USA TEL: (508) 289-2857 FAX: (508) 289-2857 FAX: (508) 457-2187 Telex: 951679 Internet address; dformat@whoi.edu

TELEFAX

TO: A. SHOR, E. DEITER, D. EPP - NSF S. MILLICK - ONR G. SMITH - NOAA

CC. M. PERFIT - DESSC CHAIR J. BASH AND A. DE SILVA - UNOLS OFFICE

FROM: DAN FORNARI - WHOI

DATE: SEPT. 17, 1996

SUBJECT: REVISED DESSC 3RD PARTY TOOL POLICY

Attached please find the revised 3rd Party Tool Policy that has incorporated the various comments from agency reps. We would like to briefly discuss the changes and hopefully come to closure on this matter at the DESSC meeting tomorrow.

Please take a few minutes to review it and come to the meeting with any further changes/comments that you feel should be made. I will bring overheads of the following pages to the meeting.

Thanks for your assistance in working on this issue.

Best Regards,

Third Party Tools on National Deep Submergence Facility Vehicles **SUGGESTED REVISIONS IN BOLD** **Issues to Discuss in Bold Italics**

9/17 /96

Over the past few years DEM has made progress on formulating policy and guidelines for third party tool development and use on Alvin and the ROV/towed system operated by the UNOLS National Deep Submergence Facility Operator, Woods Hole Oceanographic Institution's Deep Submergence Operations Group (WHOI-DSOG). In order for scientists to be able to effectively plan and conduct their research,

and. especially when it involves specialized tools that will be operated from the vehicles that have either a specific technical/scientific purpose, or could have applications to a broader group of users, it was considered important for DESSC to formulate and distribute a set of Third Party Tool guidelines. These guidelines have been reviewed by the Federal Funding Agencies (NSF, ONR and NOAA), and will be considered when proposals are received for equipment/tool development, and used to evaluate the benefits and projected costs of Third Party Tools beyond the project-specific work that provides the original Impetus for the development of the tool.

Third party tools are defined for this memo as devices **funded and developed** outside of the **National Deep Submergence Facility**, with the :emphasis on those tools that may be useful for the broader, multidisciplinary deep submergence research community. New tools are required for the increasingly complex and multidisciplinary nature of deep submergence-based research in mid-water, hard-rock and soft-sediment benthic environments. In the coming years, the advent of deep ocean sea floor observatories and time-series studies will undoubtedly lead to new requirements for sampling, monitoring , and communications devices that will be operated from the National Facility vehicles. Advances in sensor technology, materials, and engineering must be incorporated in a manner to effectively support the research programs and enhance the US deep submergence capability. In order to proceed with Third Party Tool development programs in a coordinated, safe, and cost-effective manner, the Federal Funding agencies are encouraging proponents of new deep submergence related tools to communicate their ideas with the DESSC and WHOI-DSOG in order to be sure that issues relating to future operating, maintenance, and mobilization costs are addressed in the original proposal where applicable.

Based on discussions with the community at various DESSC meetings, and in consultation with the Federal funding agencies, DESSC envisions a procedure that **allows technical review** by the DESSC, and operational assessment and recommendations by the WHOI-DSOG with respect to proposed Third Party Tool development for the deep submergence vehicles. DESSC realizes that this must be done without unnecessarily burdening the investigator, but in a way that will enhance the peer 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 are all important topics that should be addressed by the proposer. In order to assist the federal agencies with the process of Third Party Tool assessment, DESSC has established a Technology Subcommittee, that comprises several members with appropriate technical and scientific background to address Third Party. Tool issues, and w provide advice to the Federal funding agencies and WHOI-DSOG on technology Issues related to science equipment.**

Outlined below is the accepted Third Party Tool Policy that has been formulated **jointly** by DESSC, the Federal Funding Agencies and WHOI-DSOG, and which should be referred to by scientists planning to propose the development of a scientific "tool" that is to be operated from one of the National Deep Submergence Facility vehicles. Any questions concerning this policy should be directed to either the UNOLS office or the DESSC Chair.

Third Party Tools on National Deep Submergence Facility Vehicles REVISED DRAFT 9/17/96*

1. Investigators considering submitting a proposal for developing a Third Party Tool are encouraged to submit a "letter of intent to propose" to the DESSC - Technology Subcommittee for initial comment and review. The Subcommittee and the vehicle Operator will evaluate the information provided, and respond with a letter to the investigator with comments and suggestions in a timely fashion. Feedback from DESSC can be used by the proposer when submitting 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, and interfacing for various types of vehicles should be encouraged.

2. Proposals submitted to the funding agencies for development of scientific instruments or tool.- will be

reviewed under the applicable agency peer review system.

3. If the proposal is for a Third Party Tool with possible extended use beyond the proposed science work, the subsequent operation and maintenance costs associated with using the tool should be estimated and shown. *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 includes providing funding for the vehicle Operator to carry out those tasks.* It is conceivable that this process may Involve sequential proposals.

4. If a Third Party Tool becomes widely used by the scientific community, and its routine availability and support on **National Deep Submergence Facility Vehicles are considered important** to the conduct of science, then, based on: 1) community demand, 2) **advice to the Funding Agencies by** the DESSC Technology Subcommittee, and 3) a technical and operational review by the vehicle Operator, equipment developed by a third party could become a permanent addition to a vehicle system, with the assets transferred to the vehicle Operator for operation and maintenance. **If Third Party Tools are transferred to the vehicle Operator, the appropriate support costs should be made part of the annual operating budget of the vehicle Operator. in most cases it is not reasonable to assume that the costs for maintaining and operating a new tool for science use can be absorbed by the existing operations budget.**

5. Unless long-term funding for the support of a Third Party Tool is provided for, 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.

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 be made available with on-line information provided by the vehicle Operator.