

ALVIN REVIEW COMMITTEE

Minutes of Meeting

June 21, 22, 23, 1989

Carriage House
Woods Hole Oceanographic Institution
Woods Hole, MA

The meeting was called to order at 8:20 a.m. by Feenan Jennings, Chair. Committee members, funding agency representatives, from NOAA, NSF and ONR, W.H.O.I. operator representatives, agenda participants and UNOLS staff present for all or part of the meeting:

ALVIN Review Committee

Feenan Jennings
Dave Cacchione
Jim Eckman
Jeff Fox
Casey Moore
Doug Nelson
Geof Thompson
George Grice

UNOLS Office

William Barbee

Agency Representatives

David Duane, NOAA
Larry Clark, NSF
Dolly Dieter, NSF
Bill Hag, NSF
Keith Kaulum, ONR

W.H.O.I.

Fred Grassle
Victoria Kaharl
Barbara Martineau
Don Moller
Al Vine
Barrie Walden

The ALVIN Review Committee Roster is Appendix I.

George Grice welcomed the ARC on behalf of the Woods Hole Oceanographic Institution. He noted recent events, and others occurring during the week, which were of interest to the Committee. ALVIN, the ALVIN program and individuals long associated with the program had recently received a number of honors and citations.

Woods Hole Oceanographic Institution recognized a number of individuals for their contributions to ALVIN: Bud Froelich, ALVIN designer; Charles Monson, ONR, the Navy's Program Manager; Al Vine, ALVIN concept; and Ruth Fye, widow, for the contributions of Paul Fye, then Director, W.H.O.I.

ALVIN itself received the Distinguished Public Service Award from the National Science Foundation.

Members of the ALVIN Review Committee were urged to attend (at UNOLS expense). It is anticipated that the symposium will lend insight on possible directions of near-future ALVIN investigations and on technological needs of ALVIN-supported science programs.

Keith Kaulum reported that a video on ALVIN and the ALVIN program is available through ONR. Anyone interested in seeing or using it should see Leona Cox.

Review of the funding status of requested ALVIN projects. Because many of the ALVIN requests before the Committee were to support research for which science proposals had been reviewed during NSF's April, 1989 panels, the ARC asked for reports on science funding. NSF reported that only a small number of proposals had been successful. Some proposals declined in April had been re-submitted for the June 1, 1989 NSF deadline. The Committee developed a list of ALVIN requests/proposals pending from the June 1 deadline. All ALVIN requests whose science proposals had been declined after April panels and had not been resubmitted for the June deadline were considered moot and were tabled.

Report on 1988 ALVIN/ATLANTIS II status of 1989 operations and factors influencing 1990. Barrie Walden reported that 1988 had been one of ALVIN's most successful seasons. In the 2 1/2 year period since ALVIN's last overhaul in 1986, ALVIN had made 485 scheduled dives and during that time fewer than 10 dives were lost for all reasons (e.g. weather, equipment malfunction).

Three major problems occurred during 1988: old batteries were still in use, thus constraining operations, the ALVIN group was not successful in manufacturing a sampler for one project, and ALVIN's gyro failed and no backup was available. The battery problem still remains, although its effect on operations has, in part, been reduced. One project was adversely affected by failure to provide the satisfactory sampler. One project was constrained because the ALVIN had no gyro. There had never been a backup gyro for ALVIN, because the unit is expensive and had been reliable. Efforts continue to find a new improved gyro, but so far a satisfactory unit has not been found.

During the 1989 overhaul, power systems are being modified. There will be a single 120-volt system; instruments and equipment requiring 28 volts will be supplied through convertors in the sphere.

A bottom navigation system adequate for all users has still not been devised. The ALVIN group has use of a new computer, and has developed in-house a bottom navigation system that will be easier to use and should meet many project requirements. Nevertheless, a commercial system should be procured if one can be found to meet ALVIN program needs. Keith Kaulum assured the ARC that he would convene the workshop on ALVIN bottom navigation as agreed to at the June, 1988 ALVIN Review meeting.

Research DSV ALVIN, 1989 (Appendix VI). Twenty-five requests were received for a total of 363 dives. Requests were for investigations in the north Atlantic (4 projects), EPR, north (8 projects), EPR, south (4 projects), Gorda-Juan de Fuca (10 projects) California borderlands (4 projects) and Guaymas Basin (2 projects). The ARC reviewed requests individually, in accordance with their Rules for Review (Appendix VII) except that requests whose science proposal was neither approved nor pending were tabled.

The ARC recommended thirteen projects for a total of 180 dives for scheduling in 1990. Presuming that all these dives can be accommodated in 1990, there will be no queue of already-recommended dives pending for 1991.

Schedule Recommendations for 1990. A provisional schedule for 1990 was outlined to include all of the recommended ALVIN requests (Appendix VIII, Tentative ATLANTIS II schedule). The provisional schedule would, after an ATLANTIS II shipyard period, undertake two projects in the Gulf of Mexico, then transit through the Panama Canal. After two projects on the EPR, ALVIN/ATLANTIS II would proceed to Gorda-Juan de Fuca, arriving in early June for seven projects. Beginning in October, four projects would be undertaken off California and on eastern Pacific seamounts with the season ending in San Diego. NSF, ONR and NOAA representatives concurred with overall schedule recommendations, and agreed that their agency program requirements were fulfilled. NSF representatives noted that program funding was still pending on most of the recommended NSF projects.

Al Vine discussed with the ARC the need in the U.S. ocean community for access to depths in excess of 6,000 meters and some efforts to marshal the desire into an effective effort. Much of the effort has been focused in Deepest Ocean Presence, chaired by Brad Mooney, managed by Lynn Hansen and with participation by many prominent undersea researchers. To date, there is no strong consensus among participants on details of a facility; no emphasis among manned, tethered or autonomous unmanned vehicles. A comprehensive facility would be required, with provision for a support ship as well as the undersea vehicle. Deepest Ocean Presence is enthusiastic, and will continue to foster the concept.

U.S.-Soviet Collaboration. NSF, ONR and NOAA representatives had earlier informed the ARC that a coordinated exercise between ALVIN and the Soviet MIRs had been proposed following the July 9-19 visit by the MIRs to Washington, D.C. It now appears that the "handshake at depth," if it occurs at all, would take place during ALVIN's inspection/certification sea trials. This does not appear too likely, and any co-ordinated dives would be rather casual.

Although some time requests were received for dives on the southern EPR in 1990, their sum did not constitute a comprehensive expedition. Indications are that the ARC might receive multi-project, multiple-P.I. requests for 1991.

It was also noted that NSF's long-range planning documents emphasize RIDGE, GOFs and WOCE, and each of these programs is developing facility support requirements, some for ALVIN. Effects of these programs on ALVIN are not anticipated for a few years, however.

The Committee agreed to hold an ALVIN Planning Meeting in San Francisco on December 3, immediately preceding the Fall AGU meeting. The ARC agreed that there would not be a planning meeting in conjunction with the Ocean Sciences meeting in New Orleans.

New ARC member. Jim Eckman's term on the ARC expires, and Jim requests that he be replaced. He suggested that it is valuable both to the ALVIN Review Committee and to individuals involved to maintain a turnover rate in Committee membership. After considering a number of individuals, the ARC recommended Gary Taghon, Oregon State University. The ARC recommendation will be made to the UNOLS Chair, who appoints ARC members.

ALVIN Archiving. At their June, 1988 meeting, the ARC had heard a report on the critical state of ALVIN archives, especially that the archives cannot be searched conveniently and rapidly and that film records approaching 25 years in age must be copied or lost. With the ARC's endorsement, W.H.O.I. submitted a proposal to improve ALVIN archives. The agencies declined the proposal and provided valuable reviewer comments. Barrie Walden suggested that a new proposal, more focused and reflecting those earlier reviews, be prepared and submitted. The ALVIN Review Committee endorsed a proposal, as described, to improve ALVIN Archives.

The meeting was adjourned at 12 noon, June 23.

UNOLS Review Committee
for DSRV ALVIN

(First Meeting 2/19/75)

1975		1980	
	Term Expires		Term
A.R. Richards, Ch., Lehigh	7/78	R.W. Corell, Ch., UNH	7/76-6/82
C.L. Drake, Dartmouth	7/76	R.N. Anderson, L-DGO	7/79-6/82
G. Grice, WHOI	7/78	J.M. Edmond, MIT	7/78-6/81
R.R. Hessler, SIO	7/77	D.E. Karig, Cornell	7/80-6/83
G. Keller, NOAA/AOHL	7/77	K.C. Macdonald, UCSE	7/78-6/81
S. Murphy, U/Wash	7/76	D.C. Rhoads, Yale	7/78-6/81
C. Rooth, RSMAS	7/76	G.T. Rowe, Brookhaven	7/80-6/83
K.K. Turekian, Yale	7/78	M. Wimbush, URI	7/79-6/82
T.J. van Andel, Stanford	7/77	A.E. Maxwell, WHOI, <i>ex-officio</i>	
A.E. Maxwell, WHOI, <i>ex-officio</i>			
1976		1981	
	Term Expires		Term
A.R. Richards, Ch., Lehigh	7/78	R.W. Corell, Ch., UNH	7/76-6/82
R.W. Corell, UNH	7/79	R.C. Aller, U.Chicago	7/81-6/84
M. Gregg, U/Wash	7/79	R.N. Anderson, L-DGO	7/79-6/82
G. Grice, WHOI	7/78	D.E. Karig, Cornell	7/80-6/83
D. Hayes, L-DGO	7/79	G.T. Rowe, Brookhaven	7/80-6/83
R.R. Hessler, SIO	7/77	F.L. Sayles, WHOI	7/81-6/84
G. Keller, OSU	7/77	M. Wimbush, URI	7/79-6/82
K.K. Turekian, Yale	7/78	A.A. Yayanos, Scripps	7/81-6/84
T.J. van Andel, Stanford (resigned 9/76)		G.D. Grice, WHOI, <i>ex-officio</i>	
A.E. Maxwell, WHOI, <i>ex-officio</i>			
1977		1982	
	Term		Term
R.W. Corell, Ch., UNH	7/76-6/79	R.W. Corell, Ch., UNH	7/82-6/85
J.B. Corliss, OSU	7/77-6/80	R.C. Aller, U.Chicago	7/81-6/84
M.C. Gregg, U/Wash	7/76-6/79	J.K. Weissel, L-DGO	7/82-6/85
G.D. Grice, WHOI	2/75-6/78	D.E. Karig, Cornell	7/80-6/83
D.E. Hayes, L-DGO	7/76-6/79	G.T. Rowe, Brookhaven	7/80-6/83
A.F. Richards, Lehigh	2/75-6/78	F.L. Sayles, WHOI	7/81-6/84
K.K. Turekian, Yale	2/75-6/78	M. Wimbush, URI	7/82-6/85
R.D. Turner, Harvard	7/77-6/80	A.A. Yayanos, Scripps	7/81-6/84
A.E. Maxwell, WHOI, <i>ex-officio</i>		G.D. Grice, WHOI, <i>ex-officio</i>	
1978		1983	
	Term		Term
R.W. Corell, Ch., UNH	7/76-6/79	R.W. Corell, Ch., UNH	7/76-6/85
J.B. Corliss, OSU	7/77-6/80	R.C. Aller, U. Chicago	7/81-6/84
J.M. Edmond, MIT	7/78-6/81	P.A. Jumars, U/Wash	7/83-6/86
M.C. Gregg, U/Wash	7/76-6/79	D.E. Karig, Cornell	7/80-6/86
D.E. Hayes, L-DGO	7/76-6/79	F.L. Sayles, WHOI	7/81-6/84
K.C. Macdonald, Scripps	7/78-6/81	J. Weissel, L-DGO	7/82-6/85
D.C. Rhoads, Yale	7/78-6/81	M. Wimbush, URI	7/79-6/85
R.C. Turner, Harvard	7/77-6/80	A.A. Yayanos, Scripps	7/81-6/84
A.E. Maxwell, WHOI, <i>ex-officio</i>		G.D. Grice, WHOI, <i>ex-officio</i>	
1979		1984	
	Term		Term
R.W. Corell, Ch., UNH	7/76-6/82	R.W. Corell, Ch., UNH	7/76-6/85
R.N. Anderson, L-DGO	7/79-6/82	J.K. Cochran, SUNY	7/84-6/87
J.B. Corliss, OSU	7/77-6/80	J.W. Deming, Johns Hopkins	7/84-6/87
J.M. Edmond, MIT	7/78-6/81	P.A. Jumars, U/Wash	7/83-6/86
K.C. Macdonald, SIO	7/78-6/81	D.E. Karig, Cornell	7/80-6/86
D.C. Rhoads, Yale	7/78-6/81	G. Thompson, WHOI	7/84-6/87
R.D. Turner, Harvard	7/77-6/80	J. Weissel, L-DGO	7/82-6/85
M. Wimbush, URI	7/79-6/82	M. Wimbush, URI	7/79-6/85
A.E. Maxwell, WHOI, <i>ex-officio</i>		G.D. Grice, WHOI, <i>ex-officio</i>	



UNIVERSITY - NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

ALVIN Review Committee
AGENDA
0800 June 21,22,23 1988
Carriage House
Woods Hole, MA

Open the Meeting. Welcome and introduction by ARC Chairman, Feenan Jennings.

Report on 1988 ALVIN/ATLANTIS II season, status of 1989 operations and preview of operational factors for 1990. Barrie Walden and Woods Hole operators will summarize operations since the last meeting, preview remaining season and forecast for 1990.

Review of Requests for Dives in 1990. Committee discussion and review of new dive requests for 1990. ARC rules and procedures are attached. approximately 20 Dive Requests have been submitted.

Schedule Recommendations for 1990. 1. Based on their reviews of dive requests together with operational/logistical information from WHOI, ARC will develop recommendations for 1990 schedules. 2. WHOI develop a candidate schedule for ARC review. 3. ARC review and final schedule recommendation will explicitly register with NSF, NOAA and ONR representatives to assure that the recommended schedule accommodates each agency's critical program/budget requirements.

Comments on ALVIN program funding by agency representatives. Keith Kaulum, ONR, David Duane, NOAA and Larry Clark, NSF.

ALVIN Twenty-Fifth Anniversary Symposium. J. Fred Grassle, WHOI, Symposium Convenor, will brief the ARC on plans for the symposium.

Proposed changes in process for ALVIN certification. The Navy has notified ONR and the WHOI Deep Submergence Group of changes that intend to make in the process for engineering changes and certification of ALVIN. Keith Kaulum, ONR and Barrie Walden, WHOI will brief ARC and other-agency reps on these changes and their potential impact on ALVIN program, ops and budget.

U.S.-Soviet Collaboration. A collaboration has been proposed between ALVIN/ATLANTIS II and Soviet deep submersibles (MIR I? MIR II ?), either within or immediately following ALVIN certification in 1989. Briefing to the ARC.



UNIVERSITY-NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

An association of Institutions
for the coordination and support
of university oceanographic facilities.

23 June 1989

Barrie Walden, Manager
Submersible Engineering and Operations
Woods Hole Oceanographic Institution
Woods Hole, MA 02543

Dear Barrie:

The Alvin Review Committee (ARC) has had the benefit: of reading the June 1, 1989 "Operations Group Concerns" which you provided in your letter of June 9; of hearing the oral summary of the June 20th Meeting given by you and George Grice to the ARC on June 21st; of discussions with members of the Operations Group during the evening reception on June 21st; and reading additional written material provided by Tom Tengdin on June 21st.

We support your effort to address the concerns of the Operations group seriously because of the importance to the scientific programs utilizing ALVIN,

We commend the Woods Hole Administration for organizing the meeting with the group and responding to its concerns item by item. We understand that the issues about berthing and availability of AII to the Group as living quarters when the ship is in port, have been discussed and resolved to the maximum extent possible; and that the topics of expedition leader, chief pilot and senior pilots and drug testing and alcohol policy were aired and explanations of the constraints, both Federal and Administrative provided and discussed.

We understand that vacation and comp time, and salaries were thoroughly discussed although many of the group's concerns could not be resolved. We encourage you and the administration to continue to examine alternative ways of dealing with these particularly difficult and stressful concerns. We realize that some solutions to these problems might require additional support from funding agencies. If you should decide to pursue one of these options, ARC would be open to assisting you in communicating the case for financial argumentation to NSF, NOAA, and ONR.

Finally, we sense that the kind of open communication exemplified by the June 20th meeting are crucial to the welfare of the

List of Dive Requests, 1990

North Atlantic

6	Kastens	G&G	18
15	Lutz	Bio	3
15	Lutz	Bio	3
18	Brooks	Bio/Chem	<u>10</u>
			34

California Borderlands

4	Berelson	Chem	8
7	Suchanek	Bio	12
16	Lutz	Bio	3
20	Eittriem	G&G/Bio	<u>10</u>
			33

EPR (North), Volcanoes,
Galapagos

2	Lonsdale	G&G	12
3	Childress	Bio	35
5	Levin	Phys/Bio	38
9	Edmond	Chem	5
14	Sinton	G&G	22
15	Lutz	Bio	2
16	Lutz	Bio	9
17	Lupton	Chem	<u>Withdraw</u>
			123

Guaymas

15	Lutz	Bio	2
16	Lutz	Bio	<u>3</u>
			5

EPR (South)

8	MacDonald	G&G	Withdraw
10	Edmond	Chem	10
16	Lutz	Bio	3
23	Macdougall	G&G	15
24	Craig	Chem/Bio/G&G	<u>20</u>
			48

Gorda-Juan de Fuca

1	Kulm	G&G	18
11	Edmond	Chem	15
12	Moore	G&G	12
13	Johnson	G&G	21
16	Lutz	Bio	3
17	Lupton	Chem	Withdraw
19	Stakes	G&G	6
21	Delaney	G&G	20
22	Embley	G&G/Chem/Phys	20
25	Franklin	G&G	<u>5</u>
			120

Biology	156*
Chemistry	88
Geology & Geophysics	199
Physical	58

TOTAL DIVES: 363

*Multi-disciplinary programs counted in each discipline.

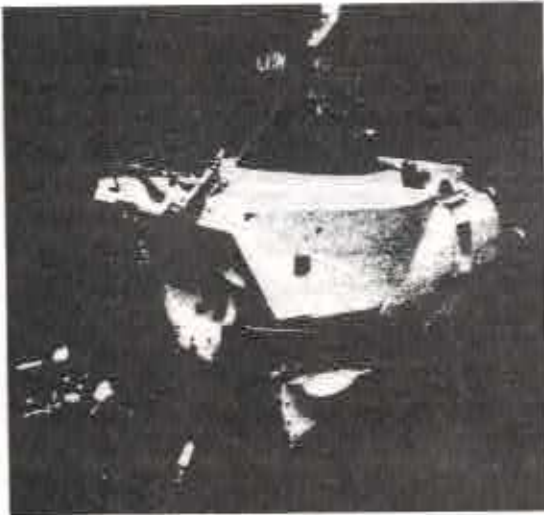
SUMMARY
ALVIN SHIPTIME REQUESTJune 1989
Woods Hole, MA

Investigator	Associates	Area	Purpose	Sponsor	Date	Altern	No. Dives	Remarks
1. Kuhl, LaVerne	Carson, B. Suess, E.	44-60N 125-25W Oregon Continental Margin	Sources, Composition and Rates of Fluid Discharge at Vent Sites on the Oregon Margin.	NSF	June Sept 1990		18	
2. Lonsdale, P.	Karson, J. Natland, J.	2-20N 101-10W Hess Rift	Geologic Sampling and Measurements of Structure in the Hess Deep Rift Valley.	NSF	Any 1990		12	Recommended
3. Childress, J.	Fisher, C. Felbeck, H. Nelson, D. Vetter, R. Johnson, K. Desbruyeres, D. Laubier, L. Alayse, A. Fiala, A. Lutz, R.	12-50N 103-58W Manzanillo	A joint US/French program to contin- ously monitor (with annual submersible visits) vent sites at 13N on the East Pacific Rise. The emphasis will be on biology with monitoring of chemical and physical parameters which interact with the biology.	NSF	April May 1990		35	
4. Herelson, W.		33N 119W Border- land Basins Calif	Studies of Irrigation and its importance in solute exchange across sediment-water interface; experiments ALVIN deployed benthic flux chambers. Deploy benthic chambers over irrigation structures on floor of two southern California Borderland basins.	NSF	May 20- 29 1990	June 1990	8	Recommended
5. Levin, I.	Mullineaux, L. Greene, C. Leithold, E. Luettich, R. Thistle, D.	32-25N 127-47W Fiehl, Guyot	Physical and Biological Effects of Flow over Abrupt Topography: Benthic Boundary Layer Investigations.	ONR	Sept, Dec. 1990	Oct. 1990 Jan 1991	20, 18	38 Dives on 2 separate cruises. Recommended
6. Kastens, K. Bonatti, E.		10-11N 41-45W Vema Fracture Zone	Temporal Variation in Processes of Crustal Accretion: Constraints from an <u>in situ</u> Sheeted Dike Complex exposed by Vertical Tectonics at the Vema Fracture Zone.	NSF	Early 1990		18	
7. Suchanek, T.		37-35N 123W Farallon Islands	Macrofaunal Bioturbation and Potential Bioaccumulation at the Farallon Islands Nuclear Waste Dump Site. Radioactive tracers will be used to assess rates and depths of macrofaunal bioturbation and resus- pension of POM above the sediment/ water interface.	NSF	Feb. July 1990	July Nov 1990	12	

Investigator	Associates	Area	Purpose	Sponsor	Date	Altern	No. Dives	Remarks
15. Lutz, Richard		Galapagos Rift 48N 86W	Studies of Molluscan Shells From Hydrothermal Vents and Cold-Water Seeps. To determine rates of biological processes through measurements of shell growth and dissolution.	NSF	1990		2	Recommended
		Guaymas Basin 27N 111W					2	
		West Florida Escarpment 26N 84W					3	
16. Lutz, Richard Vrijenhoek, Robert		Galapagos Rift 0-48N 86W	Gene Flow and Dispersal of Molluscs at Deep-Sea Hydrothermal Vents and Cold-Water Seeps. Analyses of genetic variation on a wide variety of molluscs.	NSF	1990 or 1991		3	Recommended
		EPR 17-22S					3	
		EPR 13N 103W					3	
		EPR 21N 109W					3	
		Guaymas Basin 27N 111W					3	
		Monterey Canyon					3	
		Juan de Fuca 46N 130W					3	
		West Florida Escarpment					3	

Investigator	Associates	Area	Purpose	Sponsor	Date	Altern	No. Dives	Remarks
22. Embley, R.W. Massoth, G. Feely, R.	Lupton, J. McDuff, R. Holcomb, R. et al	Juan de Fuca Ridge 45N 130W	Chemical, Dynamical and Geological Studies of Hydrothermal and Volcanic Systems at the Cleft Segment, Southern Juan de Fuca Ridge.	NOAA	1990		20	Recommended
23. Macdougall, J.	Craig, H. Vergara, H. Natland, J.	Sala y Gomez Ridge 25S, 83W to 27S, 107W	Surveying and sampling along Easter Fracture Zone	NSF	Early 1990	Early 1991	15	
24. Craig, H.	Hey, R. Edmond, J. Welhand, J. Macdougall, J. Schilling, J-G	Pascua Hot Spot, Southern EPR 26-27S, 112-30W and 23-24S, 115-34W	Sample hydrothermal vents and survey geological, geographical and biological features on Easter Microplate	NSF	Early 1990		20	
25. Franklin, J.	Johnson, P. Edmond, J. Massoth, G. et al.	Middle Valley 48-25N, 128-53W	Vent sampling, biological sampling and geological mapping of high temperature area	Canada GS	1990		5	Recommended

The University — National Oceanographic Laboratory System



Opportunities for Oceanographic Research DSV ALVIN at the Woods Hole Oceanographic Institution 1990

The Deep Submergence Vehicle ALVIN

The Deep Submergence Vehicle ALVIN, based at Woods Hole Oceanographic Institution, is designated a UNOLS National Oceanographic Facility. Diving time is available for qualified research projects selected on the basis of scientific merit and compatibility of the proposed research.

ALVIN is owned by the U.S. Navy under the purview of the Office of Naval Research and is operated by the Woods Hole Oceanographic Institution. Operations are supported under a Memorandum of Understanding among the National Science Foundation, the National Oceanic and Atmospheric Administration and the Office of Naval Research.

Planning and Scheduling for ALVIN

The UNOLS ALVIN Review Committee (ARC) makes recommendations for ALVIN-ATLANTIS II areas of operation two and three years in advance and makes schedule recommendations one year in advance of the operating year. Over the last several years the task of matching dives available on ALVIN with requests from skilled individual investigators has become critical and requires careful advance planning.

The ARC conducts annual workshops to solicit interest in using ALVIN two, three and more years into the future. The workshop held in December 1988 and Notices of Intent submitted there are the ALVIN Review Committee's principal source of planning information for the period 1990-1991 (until the next ALVIN overhaul).

Through this Opportunities for Oceanographic Research, DSV ALVIN, the ARC solicits requests for ALVIN dives, to be reviewed by the Committee in June 1989. On the basis of that review, the ARC will make 1990 schedule recommendations to the three funding agencies and to the W.H.O.I. operators.

Recent and Scheduled Operations

Since the last overhaul in 1986, ALVIN-diving operations from ATLANTIS II have been more consistently successful than ever: 495 dives have been scheduled and made with only 10 lost for all reasons. The 485 dives completed is about three times the number that could be scheduled and completed between major overhauls in earlier years.

After ALVIN's major overhaul, work began in the north Atlantic. Upon completing several projects, ALVIN/ATLANTIS II moved into the Pacific where they remained until late 1988. Work there included a major deployment to the western Pacific (Mariana Back-arc, Bonins), Gorda-Juan de Fuca-Escanaba and Oregon subduction zone, Guaymas Basin, East Pacific Rise and California canyons and basins.

In 1989 ALVIN will undergo a six-month overhaul at the Woods Hole Oceanographic Institution. At their June 1988 meeting, the ALVIN Review Committee reviewed and made recommendations on ALVIN Time Requests for operations in late 1989. Because of the ALVIN overhaul, a dearth of requests for ALVIN time in the Atlantic, the generally low level of funded science projects and strong requirements for a suitable ship, the Committee also considered non-ALVIN requests for ATLANTIS II time. A schedule was reached for a mixture of ALVIN and other projects on ATLANTIS II, all in the north Atlantic, during March-November. ATLANTIS II will end 1989 in shipyard somewhere on the east coast.

Requests for 1990

ALVIN and ATLANTIS II should, at the beginning of 1990, be just out of shipyard and ready for operational deployment. There should be no backlog of already recommended Time Requests (for either ALVIN or non-ALVIN use). At the December 1988 ALVIN Planning Meeting, the ARC noted strong interest in using ALVIN in the Pacific, with potential for extended deployments to the southern East Pacific Rise as far south as the Chile triple junction, northern East Pacific Rise-Galapagos and nearby seamounts, Guaymas Basin, California coastal area, Gorda-Juan de Fuca-Oregon subduction, and western Pacific. A more modest interest was expressed in the Atlantic.

In response to the interest expressed, the Committee expects that ALVIN/ATLANTIS II will enter the Pacific early in 1990 and will likely remain there until late 1991, returning in time for possible deployment in the Atlantic and for ALVIN overhaul at Woods Hole. The ALVIN Review Committee solicits and will consider ALVIN Time Requests for work in 1990 in any area in the Pacific or along transects. A schedule for 1990 could accommodate two extended deployments (e.g. southern EPR and western Pacific or Gorda-Juan de Fuca and northern EPR/Guaymas) together with some other convenient work. The Committee will review Time Requests at their June 1989 meeting and will recommend a number that can be accommodated during 1990. Requests that cannot be accommodated during 1990 will be tabled. The Committee will suggest that investigators who so desire re-submit tabled requests for later annual review.

ALVIN Time Requests through UNOLS are for the use of the facility only and no research or travel funding is implied. Associated research proposals should be submitted in a timely fashion through usual channels to funding agencies. (NSF has reiterated their policy that proposals involving the use of UNOLS-operated facilities must meet a proposal target date not later than June 1 in the year preceding operations.) ALVIN Time Requests for which the associated science proposal has not been submitted by June 1 are of such doubtful funding status that, realistically, they cannot be reviewed by the Committee.

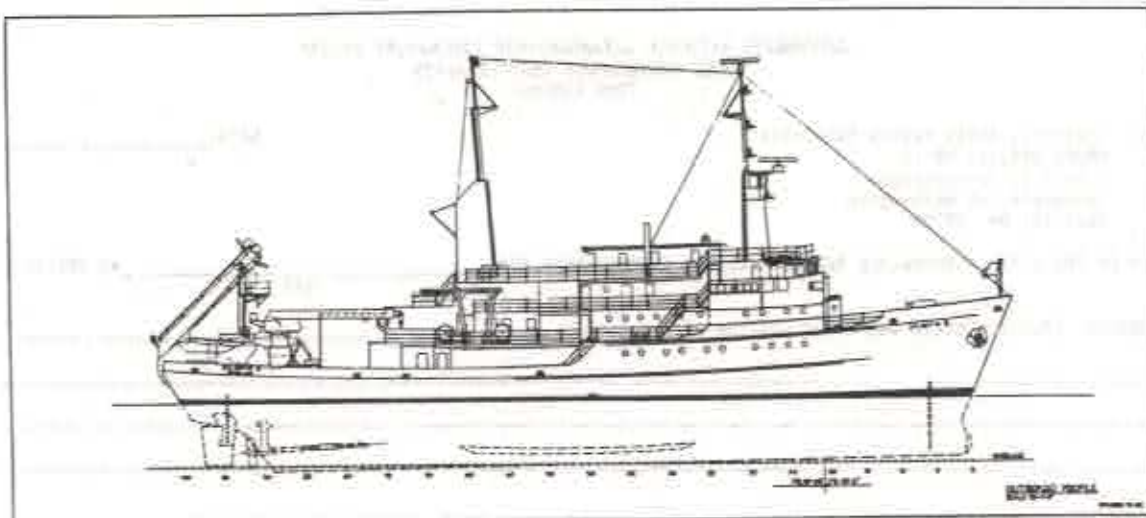
The ALVIN Review Meeting will be held in June 1989. Criteria for the review include scientific merit and suitability for ALVIN/ATLANTIS II. The Committee makes schedule recommendations based on favorably reviewed Requests.

Principal investigators are expected to meet pre- and post-cruise obligations that may exist for operations within jurisdiction of foreign states.

Requests for 1990 should be submitted so as to arrive in the UNOLS Office by May 1, 1989. Requests should include the Request form or a copy together with the additional information on the intended investigation as requested in this announcement. Failure to meet the submission deadline will jeopardize consideration of the Time Request.

Proposals should be addressed to:

Chairman, ALVIN Review Committee
UNOLS Office, WB-15
School of Oceanography
University of Washington
Seattle, Washington 98195
Telephone: (206) 543-2203



RV ATLANTIS II

Submission of ALVIN Time Requests

Requests for the use of DSV ALVIN should be initiated by sending a completed time request form (copy overleaf) to: Chairman, ALVIN Review Committee, c/o UNOLS Office, WB-15, School of Oceanography, University of Washington, Seattle, WA 98195. Requests may be made by scientists and engineers at any university or research institution in the United States, and should be supported by a research proposal (preferred length: 4-8 pages, single spaced for items 1 to 6) which specifically addresses each of the following:

1. The nature and significance of the proposed research;
2. The scientific questions being asked and the approaches that would be used toward their resolution; how ALVIN will be employed is critical to the Committee's evaluation;
3. Justifications of the need for ALVIN to do this work;
4. The research site(s) and its justification;
5. Number of dives required, justification for the number of dives and any seasonal consideration; it is especially important to include a dive plan or other description of how each dive will be used, and why each is critical.
6. Likely requirements for future ALVIN dives (not requested here) for completion of the research;
7. Proposed number of scientists and engineers in the party;
8. Curricula vitae of principal participants;
9. Potential or current support for the proposed research effort; in virtually all cases science proposals should already have been submitted by the date of the Committee's review;
10. List of publications resulting from any previous ALVIN work;
11. Any special engineering required for dive operations;

- NOTE: (1) If operations are to be carried out in foreign waters, the required clearances should be requested as early as possible. Collaboration with foreign scientists is encouraged.
- (2) If the program is not already funded, a comprehensive proposal must be submitted by the investigator to his sponsoring agency in the conventional way. The ALVIN Review Committee will submit scheduling recommendations for consideration by the research sponsor. Final scheduling depends on approval of the pertinent research proposal by the funding agency.

ALVIN Review Committee

F. Jennings, Texas A&M University
 D. A. Cacchione, U.S. Geological Survey
 J. Eckman, Skidaway Institute of Oceanography
 P. J. Fox, University of Rhode Island
 J. C. Moore, University of California, Santa Cruz
 D. Nelson, University of California, Davis
 M. Scranton, State University of New York, Stony Brook
 G. Thompson, Woods Hole Oceanographic Institution
 G. Grice, Woods Hole Oceanographic Institution, *ex-officio*

April 15, 1987

Rules for Review of ALVIN Dive Requests
ALVIN Review Committee

1. Requests for ALVIN dives, having been solicited by the ALVIN Flyer will be reviewed annually, and principally at the ARC meeting held for that purpose in about May.
2. Extraordinary requests (e.g., those for which a later submission is warranted, or those for which ARC recommendations and funding decisions do not agree) will be reviewed at ad hoc meetings either by telephone or opportunistic assembly. The Committee discourages late submissions.
3. There is potential for conflict of interest on any dive request originating at a Committee member's institution or if any investigator listed on the request is from a member's institution.
4. The Chair will raise the questions of conflict of interest at the beginning of consideration on each request for dives. Notes for the meeting will reflect these queries and actions of the member(s) involved.
5. If a Committee member is listed on a request (or is, in fact, actively involved) that member will be excused from the room for all discussion, consideration and voting on that request.
6. For requests originating at Committee member(s)' institutions, or with investigators from their institutions, those Committee members so connected will be excused from the room for all discussion, consideration and voting on that request except that at the invitation of the balance of the Committee (and with that member's concurrence) members connected only by institutional affiliation may comment on requests. However, in no case will those members vote on the request in question.
7. If there remains a question concerning conflict of interest concerning any member(s) for an individual request for dives, it will be decided by vote of the balance of the Review Committee.
8. Voting Committee members will vote to rank individual requests for dives as:
 - 1, outstanding
 - 2, excellent
 - 3, fair
 - 4, poorest ranking
 - 5, tabled--not ranked.

R/V ATLANTIS II
 1990 SCHEDULE
 TENTATIVE (29 JUNE 1989) **

CH. SCIENTIST	DATES	AREA	END PORTS	CHARGE DAYS	AGENCY
SHIPYARD	1 JAN - 13 FEB	GULF OF MEXICO	GULF PORT		
BROOKS/ TBA	14 FEB - 28 FEB	GULF OF MEXICO	GULF PORT	7 3 6	NOAA (F) MMS (F) TBA (P)
LUTZ	4 MAR - 13 MAR	WEST FLORIDA	TAMPA	13	NSF (F)
TRANSIT	16 MAR - 23 MAR	CANAL TRANSIT	PANAMA	9	NSF (P)
LONSDALE	24 MAR - 14 APR	2N, 101W	GALAPAGOS	23	NSF (F)
LUTZ	18 APR - 11 MAY	E.P.R.	SAN LUCAS, MEX.	27	NSF (P)
EDMOND	15 MAY - 23 MAY	E.P.R.	SAN DIEGO	14	NSF (P)
TRANSIT	28 MAY - 1 JUN	WEST COAST	ASTORIA	8	NSF (P)
JOHNSON/ FRANKLIN	5 JUN - 2 JUL	JUAN DA FUCA	SEATTLE	26 5	ONR (F) CAN (F)
EMBL	7 JUL - 30 JUL	JUAN DA FUCA	ASTORIA	27	NOAA (F)
STAKES/ LUTZ	3 AUG - 14 AUG	JUAN DA FUCA	SEATTLE	13 2	NSF (P) NSF (F)
DELANEY	18 AUG - 9 SEP	JUAN DA FUCA	ASTORIA	26	NSF (P)
MOORE	13 SEP - 28 SEP	OREG. CON. MARGIN	SAN DIEGO	19	NSF (P)
LEVIN	2 OCT - 25 OCT	FIEBL. GUYOT	SAN DIEGO	27	ONR (P)
BERELSON	29 OCT - 7 NOV	CALIF. COAST	SAN DIEGO	13	NSF (P)
EITTREIM/ LUTZ	11 NOV - 27 NOV	MONTEREY CANY.	SAN DIEGO	18 3	USGS (P) NSF (P)
LEVIN	2 DEC - 23 DEC	FIEBL. GUYOT	SAN DIEGO	24	ONR (P)