

JOIDES Office
Department of Oceanography WB-10
University of Washington
Seattle, Washington 98195 USA

DRAFT MINUTES

JOIDES EXECUTIVE COMMITTEE MEETING

25-26 January, 1978, La Jolla, California

Present: M. Talwani (Chairman)
J. Creager
J. Debyser
H. Durbaum
W. Hay
C. Helsley
G. Keller
J. Knauss
A. Maxwell
W. Merrill
W. Nierenberg
P. Twinn (Chairman 25 January)

M. Peterson (ex-officio)
P. Wilkness (NSF)
R. Stewart (NSF)

Guests: J. Clotworthy (JOI, Inc.)
S. Franco (NSF)
M. Lloyd (NSF)
A. McLerran (NSF)
F. MacTernan (DSDP)
C. Merdinger (SIO)
J. Steele (WHOI)
R. White (JOI, Inc.)

90 ACTION ITEMS FROM
PREVIOUS MEETINGS

Item 81, I: A letter from W. Roberts has been received suggesting further technical review of the capabilities of the GLOMAR CHALLENGER was unnecessary. It appears that future utilization of the CHALLENGER will be directed by monetary qualifications rather than technical capability.

Item 83, V(4): Peterson noted that an RFP for logging had been sent out, and that DSDP is now negotiating with Gerhardt-Owen. Logging will be done on Legs 60, 61, and 63 in FY 1978.

Item 81, II(3): Creager reported that approximately 1000 copies of the FUSOD report will be distributed by the JOIDES Office, and approximately 1000 copies will be available to other interested scientists. Copies of the document may be obtained by writing the JOIDES Office.

Item 85, I: Creager reported that the Planning Committee is in the process of preparing recommendations for the Executive Committee for the 1979-81 drilling program, and hopes to have detailed plans by the end of the summer.

Item 85, II: Creager noted that the Planning Committee is in the process of getting reviews of the SEAPROBE from the Panels.

Item 85, IV(3): Creager noted that formulation of recommendations on the Initial Reports is in progress, and the SCP and SPPP have been asked for specific suggestions. There will continue to be a single IR per leg, but with occasionally two overlapping legs coordinated into two volumes.

Item 85, VI(4): J. Handin has been appointed to the SPPP.

Item 85, VI(6): The recommendations of the Executive Committee on site surveying have been forwarded by Rattray to NSF.

Item 85, VI(7): G. Pommier has been appointed to the PPSP.

Item 85, VI(8): The JOIDES policy on symposia remains an action item.

Item 85, VI(9): Volume 48 will be complete but delayed.

Item 86, I, II: Riedel has been informed of the Executive Committee actions.

Item 86, III: Franco noted that SIO is the prime contractor and thus the responsibility for providing curatorial services was SIO's. Nierenberg suggested that the repository should be handled either as a direct separate contract to L-DGO or to SIO. Talwani suggested under the proposed plan the repository would be run as directed by DSDP through subcontract to L-DGO with a curator acceptable to the DSDP curator. Peterson noted DSDP is working for a purchase order relation with L-DGO, and Benson noted NSF is reluctant to accept a second repository contract. Wilkness noted NSF's position is that if DSDP and the Ocean Sediment Coring Program should disappear there has to be a central point which is in control of all core collections.

Item 86, IV: Peterson noted that the requirement for curatorial capability of DSDP staff geologists has not been specifically written into the job description. Rather, DSDP attempts to maintain a spectrum of capability in the project to be able to handle curatorial problems as they arise.

91 REPORT FROM DSDP

I. CHALLENGER drilling. Drilling by the CHALLENGER is progressing well and the Japan Trench legs were very successful. GMI has maintained its established maintenance program, and since the drydock at San Pedro the breakdown rate has only been 0.7 percent. GMI has a maintenance and reliability plan, and is reorganizing its entire fleet.

II. FY '79 budget (see Appendix 1). The FY '79 budget is for \$16.65 million, which is virtually the same as FY '78. The budget is a phase-down budget written in terms of the present contract. The philosophy of the budget is to eliminate the storage of shipboard expendibles. As far as possible DSDP is trying to maintain a nucleus of people together through FY '79, but with equipment handled as if planning to close down. Included in the budget is \$800,000 for site surveying.

To bring the program into an operating, rather than phase-down mode will require an additional \$2.2 million. A decision on the budget is expected from NSF by the end of June.

Twinn inquired as to what areas DSDP has to make choices in developing the budget. Peterson replied that the project has responsibility for:

1. Pay rate.
2. Repository operations.
3. The production of the Initial Reports.
4. Equipment procurement (which has been reduced virtually to nothing).
5. Reduction in drilling consumables.
6. Fuel.
7. Site surveys.

III. Future planning. Peterson presented a list of basic matters requiring policy decisions (Appendix 2) and the Ocean Margin Program (Appendix 3). Hay noted that sand accumulations in the lower slope are probably going to accumulate in depressions, the relationship being the reverse of that normally expected, and IPOD must be able to demonstrate a proven system of blowout prevention. Debyser noted that although the project may want to drill in areas of hydrocarbon accumulation, the project will most likely not want to drill through the accumulations. Nierenberg suggested the Executive Committee appoint a special committee to aggressively meet the problem of drilling in hydrocarbon areas. Debyser noted that a statement saying that if identifiable oil is present that an area will not be drilled would be beneficial for non-U.S. participants.

Peterson noted the comments in the Environmental Impact Statement concerning blowout prevention, instrumentation of holes, and plugging of holes (Appendix 4).

Talwani noted that the reason for having blowout prevention on the drillship is to be able to handle any overpressured zones whenever they may be encountered. The Executive Committee expressed concurrence in this statement.

Twinn noted the consensus of the Executive Committee was to have Peterson proceed with engineering studies to get estimated costs for water depths, sediment thicknesses, and hard rock thicknesses that are expected in the future.

92 REPORT FROM NSF

I. The annual meeting of NSF with the non-U.S. IPOD members will be in Washington, D. C., 6-7 April.

II. NSF is now in the process of establishing a contract with JOI, Inc.

III. IPOD extension through FY '79. The UK has sent a strong letter of intent to participate in the extension, and NSF has replied. Japan and Germany have informally indicated an intent to continue. France is in the process of formalizing a statement of intent to participate. There has been a request from the Swiss for participation in IPOD.

IV. FUSOD review (see p. 6, PCOM minutes, 16-18 January, 1978, Mexico City). Of the \$21 million requested in the FY '79 budget, \$17 million goes to IPOD, and \$4.2 million is budgeted for planning and evaluation of FUSOD.

Wilkness noted the timing of the review process could possibly cause a problem in that it may be very difficult to have a program ready to submit for the FY '80 budget.

Twinn suggested separating the two-year proposal from FUSOD. Wilkness and Lloyd noted that there would be great difficulty in getting an independent review because so many scientists have been involved in DSDP and IPOD. Helsley suggested the foundation should tolerate a certain amount of involvement with the project in the makeup of the review teams.

Twinn and Durbaum inquired if non-U.S. views were being sought on the review. Durbaum inquired as to how long the non-U.S. participants have to declare their intentions to participate in the new program. Wilkness suggested that the non-U.S. views do have an impact on NSF, and that if there is a major program in the 1980's that international cooperation will be required. By the April meeting it should be possible to assess what the new international cooperative program will be. Twinn noted that because of differences in fiscal planning schedules he would have to know the budgets by November 1978.

Debyser stressed that under the present conditions it would be very difficult for the non-U.S. participants to have a definite response at the April meeting. He suggested it would be much easier if the two-year proposal was separated from the FUSOD document. Creager noted the Planning Committee stresses that the 1971-80 proposal was written so it could stand on its own, and is not simply an extension of the present program. It is a significant new package, but some people are confused because it uses the same drilling vessel as the old program. He stressed that the two-year proposal should be viewed as the beginning of FUSOD, not the end of IPOD.

93 REPORT FROM THE
PLANNING COMMITTEE

I. Creager noted the Gulf of California Working Group will meet in Mazatlan, 3 or 4 May.

II. Item 178, Report from DSDP.

1. Creager noted that at Site 441 over 6000m of drill string were used. He also noted that the Gerhardt-Owen logging tools require two people to operate the equipment, resulting in the loss of one science berth. However, the computer associated with the logging tools is useable by the scientists on the ship and can be used to manipulate data in real time.

2. Length of drill string (see Planning Committee minutes, 16-18 January, Mexico City, Item 178, III).

III. Panel reports.

1. Item 181, IV: Uyeda is constructing a heat-flow device compatible with the pore water sampler and hopes to have the package available by Leg 60.

2. Item 181, VI, VII, VIII: The DMP has recommended that the Oblique Seismic Experiment, the Large Scale Resistivity Experiment, and the Permeability and Hydrofracture Experiment all proceed.

3. Item 181, X: Downhole instrumentation. Maxwell suggested that if downhole measurements and instrumentation become a regular part of the JOIDES program that it should be handled through the DMP-PCOM-EXCOM, and not something done on the outside. Creager noted that the Executive Committee had directed that JOIDES not support specific programs, but just support the principle of downhole measurements and instrumentation. Talwani noted that even if only a few feet are open in a hole, these are still the best sites for instrumentation because the sequence of material at the site is known.

Helsley moved (Hay seconded) that the Executive Committee feels, that subject to Safety Panel review, all reentry holes should be left open, and supports the Planning Committee in its actions. (Vote: 11 for, 0 against, 0 abstain).

4. Item 183, VIII: Creager called attention to the index to Volumes 1-144 which will be on microfiche and can easily be updated and distributed.

Maxwell moved (Nierenberg seconded) that the Executive Committee accept the Planning Committee's recommendation on indexing for Volumes 1-144. Accepted by consensus.

5. Item 183, III: Creager noted that the Planning Committee had substituted the recommendations of the IHP for recommendation 16 of the ad hoc committee on repositories (Item 183, VIII, Planning Committee minutes, 6-18 January, Mexico City).

Knauss moved (Keller seconded) that the Executive Committee approve recommendation 16 of the ad hoc committee on repositories, as amended by the Planning Committee. Accepted by consensus.

6. Item 183, XI: Creager noted that one leg of data had been copied and sent to the USSR to determine compatibility with USSR computers.

7. Item 184: The in situ and pore water samplers have been donated to DSDP. The IGP has endorsed the idea of a symposium on the origin and nature of chert.

8. Item 186: The AMP has endorsed the emplacement of geophones and strain meters in the Middle America transect.

9. Item 187: Creager noted items IV and V, which list drilling programs and areas of interest to the PMP.

10. Item 188: Creager drew attention to Item VII, a discussion of sites for Leg 63.

11. Item 191, VIII: Keller inquired as to the need for the special meeting. Creager noted it was to come up with better advice on what is being done and upgrading what is being done on the ship.

12. Item 192, III: Creager called attention to the proposed plan for publication of site survey results.

13. Item 193, IX: The problem with establishing the reference center appears to center on the fact that the Smithsonian is unable to pay for the repository, NSF can't transfer funds to the Smithsonian, and DSDP is also unable to pay for it. The Planning Committee will authorize payment of the travel expenses of a Japanese representative to a repository meeting. Peterson has communicated with the Smithsonian, and the Smithsonian wants DSDP to assume responsibility for slide preparation, while the Smithsonian supplies space, lights, cabinets, etc.

14. Item 194: Taiwan noted the consensus of the Executive Committee was to support the Planning Committee in co-sponsoring the IGC Symposium.

Helsley suggested each case of a symposia should be considered individually. Keller suggested it was inappropriate to attach JOIDES to a symposia unless

JOIDES is actually sponsoring or supporting. Helsley suggested JOIDES should sponsor symposia only when generated by the Planning Committee. Maxwell emphasized the JOIDES should not just attach its name to symposia. Talwani questioned whether JOIDES should have a small sum of money to actually support symposia. Merrill and Maxwell suggested that money should not be set aside. Creager noted that the Panels have a mandate to vigorously pursue and conduct symposia.

Helsley suggested it is not appropriate for JOIDES to sponsor symposia unless such symposia are organized and formulated by JOIDES for the purpose of promoting some aspect of the program.

Helsley moved (Nierenberg seconded) that JOIDES encourages the presentation of drilling results at symposia. JOIDES will consider the formal sponsorship of symposia on a case by case basis.

15. Item 199: Talwani noted under the JOI, Inc. proposal that JOIDES travel will be run by the JOI, Inc. office rather than by DSDP.

16. Item 200, VIII: Talwani noted the Executive Committee's concurrence in the actions of the Planning Committee concerning future leg planning.

17. Item 201: Talwani noted the Executive Committee's concurrence in the Planning Committee's recommendations for Co-chief Scientists and shipboard staffing.

18. Item 203: Talwani noted the Executive Committee's concurrence in the drilling schedule.

Peterson noted that Migldsov and Bonatti have withdrawn from Leg 59, to be replaced by R. Scott and K. Balshaw.

IV. Panel memberships - Maxwell moved (Keller seconded) that the Executive Committee accept the Planning Committee's recommendations for Panel memberships. Passed unanimously.

V. Nierenberg moved (Hay seconded) that the Chairman note and express the Executive Committee's sincere thanks and deep appreciation to H. Hedberg for his services to DSDP, IPOD, and JOIDES. Passed unanimously.

94 BUDGETS

1. Peterson presented the status of the budgets:
 1. The FY '78 Program Plan has been approved.
 2. The FY '79 first draft of the Program Plan has been prepared. The final draft is due by 1 July.
 3. The two-year proposal has been submitted.
 4. The budget for the GLOMAR EXPLORER program for 6 years, including sea trials, has been prepared (see FUSOD document, page 9).
 5. The proposal for FUSOD case 2 = #3 + #4, and has not yet been written.
 6. The budget for FUSOD case 3c has been prepared (Appendix 5).

The schedule of operations is given in the FUSOD document, page 9. The budget presented for FUSOD case 3c (Appendix 5) does not include geophysics and is additive to the two year proposal.

MacTernan noted that part of the expenses result from DSDP taking over a GFE (Government Financed Equipment) vessel, and that the budgets are escalated by

7 percent per year. Costs are estimated at approximately \$65,000/day, with a rented crew and all consumables, which is considerably less than the \$150,000/day costs for a commercial vessel of comparable capability.

II. Knauss noted that the cost estimates in the FUSOD document are in 1976/77 dollars and do not include potential inflation. The revised figures, taking into account possible inflation are:

Case	Millions of \$ Total Cost*	Millions of \$ Total Cost**
1	396.5	626
2	375.6	584
3	351.6	555
3a	280.3	443
3b	319.1	504
3c	395.7	625
4	447.9	707

*Figures from FUSOD document, Table 3, page 9.

**Figures from FUSOD document multiplied by 1.58

It was noted that geophysics, sample analysis and interpretation are not contained in the revised estimates.

III. Talwani noted that 3c is the most favored plan because there are many targets that could still be hit by the CHALLENGER. Debyser noted that the OPP has identified 50 non-riser sites, many in the Antarctic.

IV. Maxwell inquired as to the effect a 3-5 fold increase in costs would have on non-U.S. participation. Debyser noted that it is virtually impossible to be certain, but that in any case estimates are needed as soon as possible from NSF of the sharing costs of the international program. Twinn emphasized that there should be no interruptions in the continuity of drilling, and also emphasized that the two-year proposal needs to be split off from FUSOD. Durbaum noted that so far there has been no decision in Germany, but that it would be best if conversion would not be part of the program. Instead, the contributions would be made for the continuation of scientific drilling. It is best, he feels, if the science is split off from technology development.

V. Talwani and Knauss noted that a strong case should be made for the disentanglement of the two-year proposal from FUSOD. Benson noted that the program should be viewed as in a checkpoint status, and that now is the time for the thorough review dictated by the National Science Board. The scientific priorities must be determined first, then the technology necessary to carry out the science. Debyser noted that the non-U.S. members probably would not sign a letter of agreement for the 10-year program, but it may not be so difficult to obtain a memorandum of understanding for the two-year proposal. Keller drew attention to the problem that the review process as presently outlined virtually requires a break. The Executive Committee would like the review done in a timely fashion in order to avoid delay and a possible hiatus.

VI. Talwani noted the consensus of the Executive Committee appears to be favoring the need for separate review of the two-year proposal. Wilkness suggested there may be a preliminary decision by December of 1978 on the two-year proposal, and there may be some preliminary ideas by possibly as early as May. In any case, a hiatus can't be avoided even if the decision on the two-year proposal is favorable. However, the hiatus would probably be a 6-month gap in

the drilling, but not in the program. Debyser inquired if it would be possible for NSF to give a preliminary estimate of the costs of participation in the two-year proposal at the April meeting.

VII. Helsley and Hay suggested that there is sufficient material available to have an excellent program with the CHALLENGER for years into the future, and a delay in having the EXPLORER may not be inappropriate. Debyser noted the OPP has recommended enthusiastic support for EXPLORER in the FUSOD document. The EXPLORER is necessary to get to the Antarctic and the continental margins. Durbaum and Twinn agreed that the margin and paleoenvironment holes are the most important aspect of the program. Creager noted that JOIDES can justify 5 or 6 years of drilling with the CHALLENGER and still be drilling prime sites. At that time the program would be ready to use the EXPLORER. Merdinger suggested continuing with the CHALLENGER for the two-year program. Peterson also supports the two-year proposal because it is well crystalized and would allow the remaining program to be brought into focus.

VIII. Talwani noted:

1. That there is a well-justified program for using the CHALLENGER not just for 2 but for 4 or 5 years.
2. That there are important scientific objectives on the continental margins which cannot be drilled without EXPLORER, even if they are not precisely defined.
3. A possible problem may be cost effectiveness of the technology, but that there are still objectives that simply cannot be achieved with the EXPLORER.

Creager noted that if the riser permits complete core recovery that it would be very cost effective even compared to CHALLENGER.

Maxwell noted that the objectives with riser drilling are present and identifiable, even if we cannot locate the exact spot on a map.

IX. Creager moved (Knauss seconded) that the Executive Committee resolves to:

1. Reiterate its position of firmly backing the FUSOD document;
2. Recognize that continuity of the program is imperative from the non-U.S. point of view;
3. Express the need for a swift response from NSF for the backing of the two-year proposal;
4. Reiterate the urgent need for the formulation of geophysical plans for the identification of specific site objectives;
5. Support the need for technical assessment of the EXPLORER;
6. Commence formulation of scientific problem definition, especially for the deeper holes. (Vote: 11 for, 0 against, 0 abstain).

Knauss suggested the Chairman of the Executive Committee should write to NSF and express the concern over the urgency of points 2 and 3 in the motion.

95 FUTURE MEETINGS

The next meeting of the Executive Committee will be 9-11 May in London. The August meeting will be 15-17 at either WHOI or Rhode Island. The December meeting will be 11-13 in either San Francisco or Honolulu.

The meeting adjourned at 1709 hours.