

JOIDES OFFICE
Woods Hole Oceanographic Institution
Department of Geology and Geophysics
Woods Hole, Massachusetts 02543

DRAFT MINUTES

JOIDES EXECUTIVE COMMITTEE MEETING
25-26 March, 1980 - New Orleans

Present: Maxwell, A. Chairman (WHOI)
Baker, J. (U Wash)
Debyser, J. (France)
Durbaum, H. (FRG)
Gartner, S. (Texas A&M)
Hay, W. (RSMAS)
Heath, R. (OSU)
Helsley, C. (HIG)
Kent, P. (UK)
Knauss, J. (URI)
Nierenberg, W. (SIO)
Peterson, M. (DSDP)
Taiwani, M. (LDGO)

Ewing, J. (PCOM Chairman, WHOI)
O'Connell, S. (JOIDES Office)
Wilkniss, P. (NSF)

Guests Clotworthy, J. (JOI Inc.)
Eden, F. (NSF)
Moore, J. R. (UT)
Rucker, D. (JOI Inc.)

155 INTRODUCTORY REMARKS

Maxwell called the meeting to order and an agenda was adopted.
Knauss moved and Baker seconded that the corrected November
minutes be approved.

Unanimous. Motion Passed.

156 ACTION ITEMS FROM PREVIOUS MEETINGS

I. MICRO PALEO REFERENCE CENTERS

Saunders in Basel had not been contacted to see how the motion to increase the number of micropaleo reference centers from 5 to 8 would affect the work that he has done. The status of the reference centers was not clear. Talwani, with Nierenberg, agreed to prepare specific questions for Riedel to answer about the status of the micropaleoreference centers. The PCOM motion to ask JOI Inc. to submit a proposal to NSF for funds to prepare microfossil slides and establish a micropaleoreference center at the Smithsonian Institution was tabled.

II. PUNCH CORE SYSTEM

A proposal for a large diameter punch core system was endorsed by the OPP at their September meeting. The EXCOM at its last meeting requested clarification on this matter. Heath reported this was an iteration on developing a system similar to the HPC, possibly using the larger diameter SEDCO string, the availability of which was being discussed at that time. No further action was required.

III. SYNTHESIS VOLUMES

The PCOM reviewed several requests for synthesis volumes at their February meeting. They encouraged the preparation of synthesis volumes, but only consider funding them at the publication level. Research money to prepare the volumes is not available.

Peterson suggested that when the PCOM was aware that a synthesis volume was about a year away from publication, that DSDP be notified to include some money for publication fees in the budget. It was thought likely that one synthesis volume would be ready next year and possibly another one the following year. The PCOM should advise DSDP at an early date concerning scheduled synthesis volumes.

157 STATUS OF CHALLENGER OPERATIONS

I. CURRENT CHALLENGER OPERATIONS

The CHALLENGER was in the middle of Leg 72, in the Rio Grande Rise area. Leg 71, in the Falkland Plateau, in spite of bad weather conditions, drilled 3 of the 5 planned sites and was considered successful by the shipboard party.

The Port call included refurbishing the main propulsion system, drill pipe inspection and a dynamic conditioning maintenance program. Equipment is currently on board the CHALLENGER for drill string motion and strain studies. These will be conducted on an almost non-interfering basis with drilling operations.

II. FUEL

The CHALLENGER used about 1.2 m. gals. of fuel last year, a year with relatively little steaming time.

Fuel saving programs have been initiated on board the CHALLENGER. These include taking as much fresh water as possible on board the ship and reducing fuel consumption while idling by using only one forward and one aft thruster.

The ship will top off with fuel in Santos after Leg 72. The CHALLENGER should be able to drill the next 3 Legs without having to refuel and pay the high South African prices. Port calls for later Legs have been adjusted to use U. S. ports as much as possible, since fuel costs are lowest there. In addition, a \$600,000. request for supplemental fuel costs has been sent to NSF.

III. OTHER ACTIVITIES

Developmental engineering is continuing for the HPC.

Legs 73-75 have undergone safety review.

The lease for the east coast core lab at LDGO has been renewed.

158 PCOM REPORT

I. SOUTH ATLANTIC PROGRAM

A. Leg 73 Logging Motion

Prior to the meeting, by a telex and telephone count, the EXCOM had agreed to the PCOM motion to cancel logging on Leg 73, because of the shallowness of the holes and the shortness of time. Helsely suggested that if such a situation were to arise again it would be helpful for the EXCOM representative to have information about the

projected depths of the holes.

B. Leg 74 Science Operations Plans

The EXCOM did not feel that it was appropriate for it to second guess PCOM CHALLENGER scheduling changes and therefore had no comment on the PCOM motion to move 5 days from Leg 75 to Leg 74. Ewing moved and Maxwell seconded that the EXCOM accept the PCOM motion to log only the rotary drilled holes on Leg 74.

Unanimous. Motion passed.

C. Leg 75. HPC Geotechnical Studies

The SP4 requested that a complete HPC section from one hole be made available, without being opened on the ship, for geotechnical studies. The PCOM was prepared to agree to this request provided that it was done in close consultation with the curator and co-chiefs, and that funding and sampling procedures could be worked out. This would be tried in the Angola Basin on Leg 75.

The EXCOM was made aware that approving such special sampling requests might bring about others. Knauss asked if it would be possible to put a complete geotechnical lab on board. The SP4 panel had considered this and didn't seem to think so. Ewing moved and Maxwell seconded that the EXCOM approve the PCOM motion for special handling of the Leg 75, Angola Basin Site, hydraulically piston cored material.

Unanimous. Motion passed.

II. NORTH ATLANTIC PROGRAM

The EXCOM questioned the ambitiousness of the North Atlantic program, and the similarities of some of its objectives to EXPLORER objectives. CHALLENGER type drilling and the sites to be drilled during this program are different from those of the EXPLORER. The Passive Margin Panel has had a long standing objective to penetrate the deeper sediments on rifted margins. If these objectives are met in the current phase of drilling they will be enhanced by EXPLORER recovery.

ENA-1 is near site 391 with slightly shallower depth to basement. Because the sites are so close, Peterson asked if a drilling bit, rather than a coring bit could be used for the upper section of this site. This might increase the possibility of reaching the lower section where the primary objectives are. The current PMP plan is to HPC the upper section. The reports of site 391 could be examined to determine which regions of the deeper section were not recovered and need to be covered in ENA-1.

III. PANEL REPORTS/MEMBERSHIP CHANGES

A. DOWNHOLE MEASUREMENTS PANEL

Japan has not had a representative on the DMP. They have nominated Hajimu Kinoshita. Ewing moved and Maxwell seconded that H. Kinoshita be approved as a member of the DMP.

Unanimous. Motion passed.

B. SEDIMENTARY PETROLOGY AND PHYSICAL PROPERTIES PANEL

The EXCOM withheld action on the SP4 recommendations in the report "Undisturbed Sampling and on Physical Properties Testing", until more specific recommendations were forthcoming.

C. Clausen has resigned from the SP4. Michael Arthur has been nominated to replace him. Ewing moved and Maxwell seconded that M. Arthur be approved as a member of the SP4.

Unanimous. Motion passed.

C. INFORMATION HANDLING PANEL

The information handling panel felt that adequate preparations should be made for a phase down of drilling operations, particularly insuring the preparation and transmittal of the data base. The one year phase down plan, currently on the budget is clearly not adequate. Peterson explained that this was residual from the early days of the project and that the NSF had been apprised of the need to address the long term curatorial and phase down needs at last year's Spring meeting. Talwani suggested that these discussions should be held jointly with LDGO, SIO, and NSF.

D. POLLUTION PREVENTION AND SAFETY PANEL

Alfred Mayer-Gurr the FRG representative to the Safety Panel has resigned. Ernst Hotz has been nominated to replace him. Ewing moved and Maxwell seconded that this nomination be accepted.

Unanimous. Motion passed.

Maxwell had been asked by the PCOM to discuss with the AAPG and the Chairman of the Safety Panel the desirability of rotating the AAPG nominee to the Safety Panel. The Chairman of the Safety Panel preferred not to rotate this position at this time. The EXCOM expressed no objections to the Safety Panel Chairman's recommendations.

E. ACTIVE MARGIN PANEL

Dr. K. Kobayashi the current Japanese representative to the AMP will become their new PCOM representative. Japan has nominated Kazuaki Nakamura as their AMP representative. Ewing moved and Maxwell seconded that K. Nakamura be approved as a member of the AMP.

Unanimous. Motion passed.

F. OCEAN PALEOENVIRONMENT PANEL

Michael Sarnthein, the FRG nominee to the OPP has resigned. Dieter Futterer has been nominated to replace him. Ewing moved and Maxwell seconded that D. Futterer be approved as a member of the OPP.

Unanimous. Motion passed.

Jim Ingle has also resigned from the OPP. S. O. Schlanger has been nominated to replace him, with the proviso that Berger will not be replaced when he resigns. Ewing moved and Maxwell seconded that S. O. Schlanger be approved as a member of the OPP.

Unanimous. Motion passed.

G. INORGANIC GEOCHEMISTRY PANEL

E. Suess has resigned. Michael Bender has been nominated to be a member of the IGP. Ewing moved and Maxwell seconded that M. Bender be approved as a member of the IGP.

Unanimous. Motion passed.

W. Bryan Clarke has been on the IGP for two years without attending any meetings. It was recommended that he be dropped from the Panel. Ewing moved and Maxwell seconded that W. B. Clarke be dropped as a member of the IGP.

Vote 11 for, 1 abstain
Motion passed.

H. ORGANIC GEOCHEMISTRY PANEL

1. The Rock-Eval

The Rock-Eval uses a pyrolysis technique to obtain information about the nature of hydrocarbons in the sample. The instrument is always on board the CHALLENGER, but the operator needs to have some proficiency in interpretation of the results. A good organic geochemist can learn how to operate the equipment fairly quickly. However, the operation is time consuming and if the instrument is to be used, two organic geochemists or, alternatively, an organic geochemist and a trained operator should be on board.

This instrument has been available for about 5 years and is widely used in the oil companies. Peterson asked Debyser to give DSDP a list of companies that have a Rock-Eval. This might increase the chances for finding experienced people to operate the Rock-Eval on board the CHALLENGER.

2. Membership

The OGP and PCOM recommended that E. Baker and G. Erdman be retired from the OGP, to promote membership rotation. Considerable discussion developed concerning this motion. Unlike other panels, this panel is actually involved in the analysis of samples. The North Atlantic program will be of considerable interest to, and require work from, organic geochemists. The 81-83 CHALLENGER proposal is the first time an organic geochemistry section has been included in a JOIDES proposal. Organic

geochemistry is also of considerable interest to oil companies, and Erdman is the only representative from a U.S. oil company on the panel. The EXCOM felt that this was not an appropriate move for the OGP at this time, and asked the panel to prepare a rotation schedule with rotation dates for all members of the panel.

I. PASSIVE MARGIN PANEL

Detailed plans for the North Atlantic program were presented.

Two members, J. Ewing and D. Bernaulli have resigned. Ewing moved and Maxwell seconded that A. Bouma and J. Van Hinte be approved as new members of the PMP.

Unanimous. Motion passed.

IV. SHIPBOARD EQUIPMENT

A. Pressure Core Barrel

The Pressure Core Barrel failed its most recent trial (at the time of the PCOM meeting) on Leg 72. Since this instrument is essential to the success of the clathrate experiment on Leg 76 DSDP was asked by the PCOM to investigate the possibility of obtaining a commercial PCB.

B. Continuous Strip Color Photography

Continuous strip color photographs are being made of the HPC cores after the cruise. Considerable color deterioration can occur during the first few months. The PCOM and DSDP gave highest priority to doing this photography on board the CHALLENGER. It was estimated to cost about \$5000. in parts and labor. Some of the costs of the new camera system would be offset by a reduction in the travel and per diem money that is now being spent for Tom Chase. The EXCOM encouraged DSDP to proceed with constructing the strip camera.

V. HPC WORKING GROUP

It was noted the PCOM established a broad-based international working group to address problems related to assuring the best utilization of the HPC. The mandate is given in the February PCOM minutes.

The EXCOM suggested: (1) including a "technology" person on the committee to give engineering advice, and (2) reversing the sequence of questions in the mandate.

The EXCOM unanimously agreed that funds should be made available for the meeting.

159 OCEAN DRILLING IN THE 80's

I. 81-83 CHALLENGER PROPOSAL

A. Background

The final version of the 81-83 CHALLENGER proposal was compiled at the JOIDES PCOM meeting in late February and sent to DSDP for printing, submittal to NSF, and distribution. Copies of the proposal were distributed prior to, and during, the meeting.

The new proposal presents the program more coherently but contains basically the same science as the previous proposals. There is still a strong emphasis on the use of the hydraulic piston core and the inclusion of a wide spectrum of scientific interests.

B. Program Interest.

Each member was asked to state the general feeling of his country or institution toward the proposal. Everyone felt there was support for the program, particularly because of the strong community participation in planning the program.

C. Funding

With the uncertainties of the reviewer's response and cuts in the '81 budget, the possibility of funding for the program is not very encouraging. Nevertheless, the strong international interest in the program was thought to be of considerable help in obtaining funds particularly, if the member countries could increase their annual contribution to 2 million dollars. Within two weeks NSF will send an official letter to the IPOD countries asking for letters of intent to participate in the program. These responses will be used in internal government negotiations.

Several U. S. government agencies other than NSF have interests in the science proposed in the 81-83 CHALLENGER extension. These areas of interest include:

- 1) Paleoclimate studies, of interest to NOAA and other groups studying climatic change.
- 2) Geotechnical studies, of interest to groups studying hazardous waste disposal.
- 3) Downhole experiments, of interest to groups studying in situ and/or obtaining real time readouts of earth processes.

It was suggested that these groups be contacted for funding support.

D. Discussion

A suggestion was made that the 81-83 program might be funded for 2 or 3 months per year over a period of several years. It was thought this might be helpful for the community utilizing the HPC cores, which could then build on their broadened base of knowledge over a longer time period.

The general response to this suggestion, however, was not favorable since more than HPC'ing is planned for the 81/83 program and the mechanics of running a part-time DSDP, may be too difficult.

Action on the 81-83 proposal was deferred until additional discussion could be heard on the total 1980's drilling program (see page 11-12). After this discussion, Talwani moved, and Heath seconded, that the JOIDES EXCOM endorse the 81-83 CHALLENGER proposal to NSF.

Unanimous. Motion passed.

II. OCEAN MARGIN DRILLING

A. Background

The draft report of the Houston meeting was distributed prior to and during the EXCOM meeting. The final report should be ready in about a month and will be formally transmitted to the NSF to provide a basis for further planning.

At the IPOD-NSF meeting in Washington, several of the member countries expressed an interest in participating in the OMD program, including the planning and technical developments.

B. Discussion/Action

Many concerns for funding and planning both the 81-83 CHALLENGER and OMD programs were discussed. When the FUSOD plans were being proposed an overlapping CHALLENGER-EXPLORER program was presented, and this is still considered to be a desirable operational mode for the current plans. With a view toward possible implementation of the dual program, Kent moved and Knauss seconded that JOIDES, in conjunction with NSF, should make contact with scientists from other countries which may be interested in joining an ocean drilling program for the 1980's. JOIDES should arrange meetings of those concerned to discuss the scientific objectives and conditions of collaboration.

Unanimous. Motion passed.

In the discussion of new members, the U.K. reasserted firmly its position that only full membership be allowed. If affiliate membership were permitted, the current IPOD members might opt for the lesser fee alternative and the available funds might actually decrease. However, small countries joining to form a unit, and entering as a single member, e.g., Scandinavia, Switzerland-Italy and Australia-New Zealand might be considered.

Two sub-committees were formed to help to implement the motion to encourage new country membership in JOIDES. One committee was charged with putting together the scientific oceanic drilling picture, past, present and future particularly for presentation at the IGC. The other committee was charged with determining who the likely new members might be and contacting key persons.

The "science" committee will consist of Talwani, Chairman, Debyser, Hay, Heath, and Peterson. Peterson volunteered to have DSDP prepare a package describing the scientific program. This could then be used by scientists in making presentations to solicit program support. A major effort will be directed toward a presentation(s) at the IGC in Paris in July stating

both the important science of the program and the need for increased membership. There will be two JOIDES sponsored symposia which could serve as focal points for this effort.

The "increased international support" committee consisting of Nierenberg, chairman, Debyser, Durbaum, Hay, Kent and Maxwell, with Wilkniss as an NSF-liaison, will begin to identify key individuals to contact in those countries.

Scientists from many non-IPOD countries have participated in the program, and global science has benefited. The program is now faced with the possibility of discontinuing because of the lack of funds and it is hoped that these countries in particular might be able to support the program. Increased international participation will also increase the areas where drilling may be conducted, because the trend of the Law of the Sea conferences has been to restrict access to territorial waters for scientific research. Increased international participation in the drilling program might help to reverse this trend.

III. SITE SURVEYS

The JOI Site Survey proposal was distributed prior to and during the meeting. The proposal included plans for site surveys to be conducted by the U.S. and other IPOD countries in preparation for the proposed 81-83 CHALLENGER extension. This proposal required additional work and concern was expressed that if it were seriously delayed, funding for the site surveys and the 81-83 CHALLENGER program might be in jeopardy.

The JOI Site Survey committee was planning a meeting later in the Spring to discuss both site survey plans and high resolution seismics. The JOIDES Site Survey Panel had requested funds to hold a meeting in (mid-late) July to discuss these same topics. It was thought that both meetings were being held too late to be useful to modify the site survey plans. The U.S. proposal to NSF was already overdue.

Debyser expressed concern that the plans for the CHARCOT survey work were not reflected correctly in the Site Survey proposal. He suggested the JOI Site Survey group should meet at an early date with the JOIDES Site Survey Panel to coordinate planning for input into a revised JOI Site Survey proposal.

Lengthy discussion developed concerning (1) site survey plans with existing equipment for the 81-83 CHALLENGER extension and (2) site survey plans with new equipment for the Ocean Margin Drilling (OMD) Program. It was decided that a joint JOI-JOIDES site survey meeting should be held as soon as possible preferably in early April to address these site survey needs. The meetings should be set up as two separate meetings, to enable some variation of participants, but be held in sequence (back-to-back) to save travel time for the participants. The participants would be charged with deciding what has been done and what needs to be done, and transmitting this information to the organizations in the IPOD countries that sponsor the site surveys. The details of the meetings should be established by the respective chairman. Lamont was suggested as the meeting location since the Data Bank is there.

160 OTHER BUSINESS

Older JOIDES files, no longer in active use, will be stored at JOI Inc.

The question was raised about the necessity of the DSDP curator serving as an ex-officio PCOM member. It was decided that he would serve at the pleasure of the PCOM, and be invited to those meetings where his expertise was needed.

161 FUTURE MEETINGS

The next meeting will be in France 18-19 July. Debyser will try to arrange the meeting in Paris, and if that isn't possible in Bordeaux. The fall meeting will be 18-19 November at U.R.I. No date or place has been set for the spring meeting. Durbaum invited the EXCOM to meet in Germany next July.