

MINUTES

24-27 February 1981 JOIDES Planning Committee

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ACTION ITEMS  
JOIDES PLANNING COMMITTEE  
24-27 February 1981

<u>Page</u>	<u>Responsibility</u>	<u>Subject</u>
5	Y. Lancelot	Obtain a short written report from the Leg 77 co-chief scientists and geochemists
9	Y. Lancelot	Submit a plan including deadlines for receipt of Sedimentary Petrology Techniques Manual
15	P. Fox	Recommend replacements for two OCP positions
17	R. von Huene	Recommend replacement for vacant AMP position
22	R. Hyndman	Recommend new chairman for DMP
24	E. Winterer	Explore history of and way to strengthen data interpretation at IPOD Data Bank
28	A. Richards	Review panel rotation
29	Y. Lancelot	Submit three phase-down plans at July PCOM meeting
33	Y. Lancelot	Ask SIO Safety Panel to reconsider MAZ-9, MAZ-3 restriction
48	E. Winterer	Notify NSF, COSOD Steering Committee and OMD of PCOM's intent on post-1983 drilling proposal
50	E. Winterer	Relay guidelines for the preparation of white papers and 5-year drilling proposal

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M I N U T E S

JOIDES Planning Committee Meeting  
24-27 February 1981  
Scripps Institution of Oceanography  
La Jolla, California.

PCOM Members Present

Winterer, E. (Chairman, SIO)  
Aubouin, J. (France)  
Beiersdorf, H. (FRG)  
Bryant, W., (Texas A&M)  
Cann, J. (U.K.)  
Corliss, J. (Oregon State)  
Creager, J. (U. of Wash.)  
Ewing, J. (WHOI)  
Hayes, D. (L-DGO)  
Kobayashi, K. (Japan)  
Moberly, R. (HIG)  
Moore, T. (URI)  
Nikitin, L. (USSR)  
Lancelot, Y. (DSDP, non-voting member)  
Worstell, P. (JOIDES Office)

Panel Chairmen

D. Appleman (IHP)  
L. Dorman (for J. Jones, SSP)  
R. Douglas (OPP)  
P. Fox (OCP)  
L. Garrison (PPSP)  
J. Gieskes (IGP)  
R. Hyndman (DMP)  
R. Poore (SCP)  
A. Richards (SP<sup>4</sup>)  
R. Sheridan (PMP)  
B. Simoneit (OGP)  
R. von Huene (AMP)

Not Present

Schlager, W. (U. of Miami)

Guests

T. Davies (JOI)  
B. Haq (NSF)  
A. Inderbitzen (NSF)  
R. Larson (URI)  
A. McLerran (NSF)  
F. MacTernan (DSDP)  
L. Montadert (IFP)  
M. Peterson (DSDP)  
M. Salisbury (DSDP)  
S. Schlanger (HIG)  
P. Wilkmiss (NSF)

## 323 INTRODUCTORY REMARKS

William Nierenberg, Director of Scripps Institution of Oceanography, welcomed the Planning Committee, commenting on the key role it has played in advancing marine geological sciences.

E. Winterer also welcomed the Planning Committee and introduced PCOM, Panel chairmen, and guests.

The PCOM approved the agenda and, following a brief discussion, accepted the minutes of the October 1981 PCOM meeting with corrections as noted.

## 324 NATIONAL SCIENCE FOUNDATION REPORT

B. Haq reported for the National Science Foundation on items I, II, and III. A. Inderbitzen reported on the Ocean Margin Drilling program (Item IV).

## I. NSF REORGANIZATION

NSF will dissolve the Division of Applied Engineering and will move administration of applied research programs to other divisions. The reorganization takes effect 8 March 1981 and although it does not directly affect the DSDP program. The change is relayed as an information item.

NSF has received nine applications for the position of Director of the Division of Ocean Drilling Program (see also Item 312-III in October 1980 minutes) and seven applications for Chief Scientist within the division. Because of the current hiring freeze on federal jobs, the positions cannot be filled immediately.

## II. NATIONAL SCIENCE BOARD REVIEW

The NSB very favorably reviewed the 1981-83 drilling proposal (UCSD-1734) and recommended approval in principle of the two-year program and funding for the first year (FY 1982). Budgeting for FY 1982 assumes:

\$14 million	-	from NSF
\$10 million	-	from Non-U.S. IPOD countries (\$2 million/country)
\$2 million	-	from DARPA and USGS <sup>1</sup> (combined)
Total		<u>\$26 million</u>

<sup>1</sup>USGS is under "embargo on budgeting discussions" until first week of March 1981.

The Board did not formally discuss FY 1983 funding.

### III. IPOD-COUNTRY POSITIONS

To date, West Germany has committed \$2 million to the IPOD program. France and Japan are expected to announce their decisions at a 23-24 March IPOD meeting in Washington. The U.K. is still undecided, but NSF hopes for its decision also at the March Meeting; the U.S.S.R. has not commented.

NSF is beginning discussions with the Netherlands about its joining IPOD. A meeting between NSF/JOIDES and the Netherlands representatives will take place in April 1981.

Although the Australians have not approached NSF directly, they are convening a conference 10-11 March 1981 to discuss joining IPOD; P. Wilkniss, R. Brett (both NSF) and M. Peterson (DSDP) will attend.

### IV. OCEAN MARGIN DRILLING

OMD Scientific Advisory Committee (SAC) has established 5 regional Planning Advisory Committees (East Coast, West coast, Gulf of Mexico, mid-Atlantic Rise/East Pacific Rise, Antarctic) and are developing 7 Technical Advisory Panels to advise the SAC.

Ten oil companies have jointly contributed \$5 million matched by \$5 million from NSF for the first year of the program which began in October 1980.

NSF hopes to select a systems integration contractor (SIC) by late 1981. The SIC is responsible for design, conversion and operation of the vessel and drilling system.

The OMD contract was originally scheduled for review 31 October 1980. At that time oil company participants would agree either to make a long-term commitment to the program or to withdraw. The "decision day," however, has been postponed for an unspecified period -- perhaps for 1 year beyond the original date.

(The Ocean Margin Drilling Program is discussed further under Item 326.)

## 325 DEEP SEA DRILLING PROJECT REPORT

### I. FISCAL 1981 PROGRAM PLAN

Y. Lancelot reported for the Deep Sea Drilling Project.

NSF has approved funding of \$19.6 million out of the \$22 million DSDP requested for FY 1981 operations. Although the amount is 6% greater than the budgeted for FY 1980, the effect of a 12% increase in the consumer price index is that DSDP will actually suffer a 6% reduction in buying power.



Fuel prices have soared; in addition, Global Marine has increased salaries by 20% in order to retain their people during the current great demand for qualified seagoing drill-ship personnel. DSDP requested \$1 million from NSF in November 1980 to cover the anticipated shortfall and expects a written response from NSF shortly.<sup>1</sup> DSDP is prepared to continue standard operations for 6 months, but if supplemental funds are not awarded it will be faced with drastic cuts -- eliminating the logging program for remaining legs (79, 80, 81) may be one of them. DSDP has already delayed buying a shipboard mini-computer. Moreover, owing to uncertainties the project is forced to hire people on a temporary basis, creating a difficult staffing situation.

## II. GLOMAR CHALLENGER OPERATIONS

### A. Leg 76

Leg 76 was highly successful. The pressure core barrel worked in four out of five runs; the one failure was human error and not that of the instrument. The shipboard party recovered clathrates (recognized on the basis of their degassing curve and visually in one core).

Operations at the nearby deep site (ENA-1, Site 534) were also extremely successful. Drilling penetrated to basement in the Blake-Bahama Basin sampling the oldest Atlantic Basin sediments yet drilled (Calloviaian) at about 1570 meters sub-bottom.

Drilling, at Site 534, however, proceeded somewhat slowly. Moreover Challenger had to spend additional time in port for engine repairs between the end of Leg 76 and the Leg 76 extension. The cruise was ultimately extended 12 days to ensure reaching the deep objectives. The time lost was not taken from Leg 77, but distributed throughout the remainder of the Atlantic program.

### B. Leg 77 - (Florida Straits)

Drilling in the Florida Straits (Leg 77) produced good scientific results. The shipboard party, however, was unable to conduct logging on the cruise owing to failure of the bit-release mechanism.

Failure of the main crane in port delayed beginning the cruise for 5 days and resulted in damage to a logging cable. (The crane also failed during the cruise.)

Communication with the ship was a problem during Leg 77. An early report of tar-filled fractures in Hauterivian rock at Site 535 was not cause for alarm; the shipboard scientists believed the hydrocarbon to be immature and the drill to be progressing in a safe interval. But a later, more detailed report indicated that tar was extensive in the cores and that the hydrocarbons had migrated.

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<sup>1</sup>M. Peterson reported later in the meeting that NSF denied the request for supplemental funds.

Members of the Safety Panel became concerned upon learning that the Challenger had moved to a site not previously approved, and that coring there had not been continuous.

Discussion. The Planning Committee expressed concern about an apparent breach of shipboard safety regulations.

L. Garrison noted that although the tars could very well be immature, the possibility that they were mature could not be eliminated on board ship. Three things happened that are contrary to the existing shipboard safety procedures.

1. Drilling continued after hydrocarbons were encountered.
2. The co-chief scientists moved the ship from an approved site to another location without notifying DSDP.
3. The sequence at the second site was spot cored rather than continuously cored.

ACTION/  
Lancelot

Consensus: The Planning Committee asked Lancelot to obtain a short written report from the Leg 77 co-chief scientists and geochemists explaining the drilling at Sites 535 and 536, and to report on the matter at the next (July 1981) PCOM meeting.

C. Leg 78A, 78B

1. 78A Operations

Drilling at CAR-1 (Site 541) penetrated about 460 meters of Quaternary and lower Miocene sediment. A stratigraphic inversion (upper Miocene over lower upper Pliocene) associated with scaly foliated claystone cored at 276 meters indicates reverse faulting. The shipboard party noted progressive development of fracturing and foliation in the lower 200 meters and suggests the zone may overlie the decollement separating the subducted and scraped-off sediments of the Atlantic and Caribbean plates. The site was abandoned when fractured and sheared rock collapsed into the hole, binding the pipe.

A second hole (CAR-1A, Site 542) was drilled about a kilometer down slope toward the deformation front of the Barbados Ridge complex. Drilling here also encountered fractures and scaly foliation. An attempt to emplace drill-in casing to prevent hole collapse failed when the shifting device failed to release the bit from the casing. At the time of the report, the drillers were attempting to blast off the bottom-hole assembly.

2. Leg 78B Time Constraints

The 5 days lost in port owing to ship repairs prior to Leg 78 have imposed time restraints on the Leg 78B program. Clearly not all the planned work could be accomplished. DSDP asked DARPA to postpone its program for 15 days or to do it at a later site in the Bay of Biscay. DARPA, however, was unwilling to postpone its work and so DSDP

worked out a compromise whereby the DARPA program was maintained but held to 4-1/2 days (actual experiment time); other science was given 5 days (actual experiment time). This would probably preclude conducting the Langseth packer experiment during Leg 79.

### 3. 78A Update and PCOM Recommendation

DSDP learned, toward the end of the PCOM meeting, that the original attempt to blast off the bottom-hole-assembly, which could not be disengaged from the drill-in casing, had failed. Time lost owing to the operation has imposed further time constraints on Legs 78A and 78B drilling.

Y. Lancelot asked the PCOM's opinion on how best to use the remaining time during 78A. The options were (a) to drill, and to conduct the Duennebier down-hole seismic experiment at the reference site or (b) to drill another site upslope. Option (a) would take less time. The ship could return to port two days earlier, thereby increasing the chance that the Langseth experiment could be conducted during Leg 78B.

Following discussion, the PCOM agreed that Challenger should (a) go to the oceanic reference site and drill at a place with a thin cover, (b) conduct the Duennebier experiment and (c) return to port two days earlier than originally scheduled. The recommendation was made with the proviso that if another innovative experiment were conceived, the shipboard party be allowed to devote the extra time to it.

#### D. Discussion Re DARPA

During discussion of the DSDP report, the PCOM inquired whether questions concerning the NSF agreement for use of Glomar Challenger (number of ship days, amounts of money, financial responsibility for drill string, etc. (see PCOM Items 305, 318; EXCOM Item 175) had been resolved. Although the PCOM did not receive specific answers to the questions, NSF assured the Committee that DARPA intends to act as a normal member of the JOIDES community -- that is, in a cooperative and responsible way.

The question of whether DSDP will be contractually obliged to give the DARPA program a priority higher than any other DSDP/JOIDES program remained unresolved. (NSF may be able to report more completely on the negotiations at the next EXCOM meeting.)

### III. ENGINEERING DEVELOPMENTS

#### A. Seismic Experiments

DSDP will experiment with a near-bottom high-resolution seismic system. The Project will first purchase a suitable recording system.

#### B. Heat Flow Package

DSDP continues to work on developing a heat-flow package for use

with the hydraulic piston corer.

C. Extended Core Barrel

Development of the extended core barrel is now going well. Development had been somewhat behind schedule owing to changes within the developmental engineering staff.

D. Logging

Gerhardt-Owen will end its logging contract with DSDP in May 1981 (during Leg 79) and does not intend to renew it. DSDP is investigating other logging contractors, but anticipates a huge increase in cost. Schlumberger, for example, could cost about \$140,000 per leg -- nearly twice as much as the current contract.

The results of the logging continue to be disappointing. Lancelot noted that the problem is, in part, because DSDP has bought a routine logging package, whereas a package tailor-made to DSDP programs and the Challenger drill string is what is required. DSDP might consider developing an in-house logging capability with the help of a service company, as has been recommended by the Downhole Measurements Panel.

Discussion

Von Huene: Even though logs are not generally satisfactory, getting even a few good points is very worthwhile. Industrial tools are not adapted to Challenger's drill string, but even ill-adapted Schlumberger tools would probably give better records than the tools now being used on Challenger.

Lancelot: If we contract with Schlumberger we will not be able to log on all legs (because of high cost); we will have to make a choice and select only certain legs to be logged.

Cann: The U.K. attaches great importance to logging deep holes drilled along the continental margins; drilling these holes without logging them would be very poor science.

Lancelot: DSDP very much wants to include a good logging program, but does not have sufficient funds in the budget for it.

E. Variable-Length Core Barrel

Development of the variable-length core barrel is progressing according to schedule. DSDP plans to test it on board ship sometime during 1981.

\* \* \*

(Possible new tools and equipment are also discussed in a report given by F. MacTernan, Item 331-II, Future Drilling with Glomar Challenger.)

#### IV. SHIPBOARD PROCEDURES/EQUIPMENT

The GRAPE equipment and procedures have now been modified on board ship to allow processing the cores in 40% less time than previously required.<sup>2</sup>

DSDP has removed the needle penetrometer from the ship as requested by the Sedimentary Petrology and Physical Properties Panel.<sup>2</sup>

Purchase of the shipboard mini-computer has been delayed owing to budgetary constraints.

#### V. PUBLICATIONS

##### A. Initial Reports

DSDP has published Initial Report Volumes 1-59. It expects to ship camera-ready-copy for Volumes 61-63 to the Government Printing Office within the next few months. Volume 60 will be produced sometime after Volume 63. The Project is contractually obligated to submit six volumes to the Government Printing Office per year, but hopes to ship seven volumes during FY 1981. The Initial Reports are now published about three years after the cruise ends. The main cause for delays in publication is the slow receipt of manuscripts, and the failure of some co-chief scientists to follow through with production of their volume. Only the organic geochemists' contributions -- those usually generated by oil company people -- are received on time. Some co-chief scientists are also committing too many samples, which in turn results in either more chapters than the volume can accommodate and/or additional problems in extracting manuscripts from the authors.

DSDP is now scheduling post-cruise meetings within less than a year after cruises to encourage the shipboard scientists to prepare their contributions within a shorter time.

##### B. Initial Core Descriptions

DSDP has printed the Initial Core Descriptions for Legs 27 to 68, and 70, 71 and 73.

##### C. Service Brochure

The Project has begun work on a brochure explaining data and services available from DSDP. Comprising about 25 pages in a pictorial format, it will include mostly graphic art work and color photographs.

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<sup>2</sup>Not reported to PCOM but relayed by Y. Lancelot to P. Worstell during the meeting.

#### D. Sedimentary Petrology Techniques Manual

##### 1. Background

The PCOM recommended (Item 307-II, July 1980 PCOM meeting) that DSDP publish a Sedimentary Petrology Techniques Manual in hard cover (similar to the Initial Reports) as soon as possible, within its time and budgetary constraints. The Information Handling Panel has urged that the PCOM and DSDP take some definitive action soon on production of the manual, i.e. decide to publish the chapters now in hand, or to await other committed reports, and in any event to publish the manual before 31 December 1981.

##### 2. DSDP Response

DSDP has received about one third of the chapters for the Techniques Manual; Lancelot believes that Ross Heath has another one-third in hand. The other third is still not written or is otherwise missing. DSDP has no funds specifically budgeted for production of the manual but can perhaps find a source. The manual's publication cannot displace an Initial Report currently scheduled, and so has to be submitted to the Government Printing Office at a convenient time.

ACTION/  
Lancelot

Lancelot will study the entire problem and agrees to submit a definitive plan including deadlines for receipt of manuscript and publication of the manual to PCOM at its next meeting.

#### E. Hole Summaries

In response to a query from DSDP to clarify distribution of the Hole Summaries (the reports generated onboard ship that contain privileged data for use by contributors to the initial reports), the PCOM affirmed that its distribution should be only to those with a "need to know." These are (a) participating shipboard scientists, (b) shorebased contributors to that particular volume, (c) DSDP personnel involved in shipboard science or volume production, and (d) One copy to each JOIDES member institution in care of its PCOM member. Should other JOIDES members need access to a Hole Summaries report, he should contact his PCOM representative.

#### VI. PERSONNEL

##### A. Changes

John Usher, formerly Associate Chief Scientist for Science Services, has retired. DSDP is currently reviewing applicants for his position.

DSDP has two positions for Staff Scientists, both of which are currently being advertised.

Swede Larson has also left DSDP for medical reasons. Stan Serocki, who was previously Chief of Engineering Development, has returned to DSDP in that capacity.

## B. Future Uncertainties

Lancelot reported that the state of uncertainty about the future of DSDP/IPOD has lowered the morale of DSDP personnel. He pointed out that DSDP is staffed by trained professionals who work hard to create good products and programs, but who are demoralized by their uncertain future. Moreover, good scientists are reluctant to join DSDP at this time.

Lancelot urged the PCOM and NSF to consider longer-term planning and commitments to ensure that a trained working team remains available to support any continued program of ocean drilling.

## 326 OCEAN MARGIN DRILLING

### A. ORGANIZATION

T. Davies reported for the Ocean Margin Drilling Program (OMDP) and presented an OMDP science programs organizational chart shown in Figure 1. All committees, offices, and agencies shown are in place except the Technical Planning Advisory Committees. Membership on committees, however, can be expected to change.

The Scientific Advisory Panel (SAC), comprising 25 people from contributing oil companies, member institutions and members-at-large, has a broad responsibility for the scientific planning. It corresponds roughly to the combined JOIDES Planning and Executive committees.

The OMDP Executive Committee, a smaller subdivision of SAC, was established as SAC's quick-action group. It comprises six members: 2 from industry, 2 from JOI, and 2 from outside institutions.

The five Regional Planning Advisory Committees (PACs) deal with major geographic areas; noted above (Item 324-IV). These are review boards that will make recommendations to SAC on the relative merits of proposals submitted by research teams. The Technical Planning Advisory Committees will advise on downhole instrumentation and logging, curation, publications, data handling, advanced technology and safety.

The Contributing Companies Oversight Committee (CCOC), comprising only industry members, advises NSF and although it can veto any action which costs money, it in fact cooperates very closely with JOI and the National Science Foundation.

T. Davies is responsible for the OMD Science Programs Office within JOI. That office receives scientific advice from SAC and effects the science projects through outside contracts. JOI does not do science itself; it writes the requests for proposals and coordinates the efforts of outside contractors.

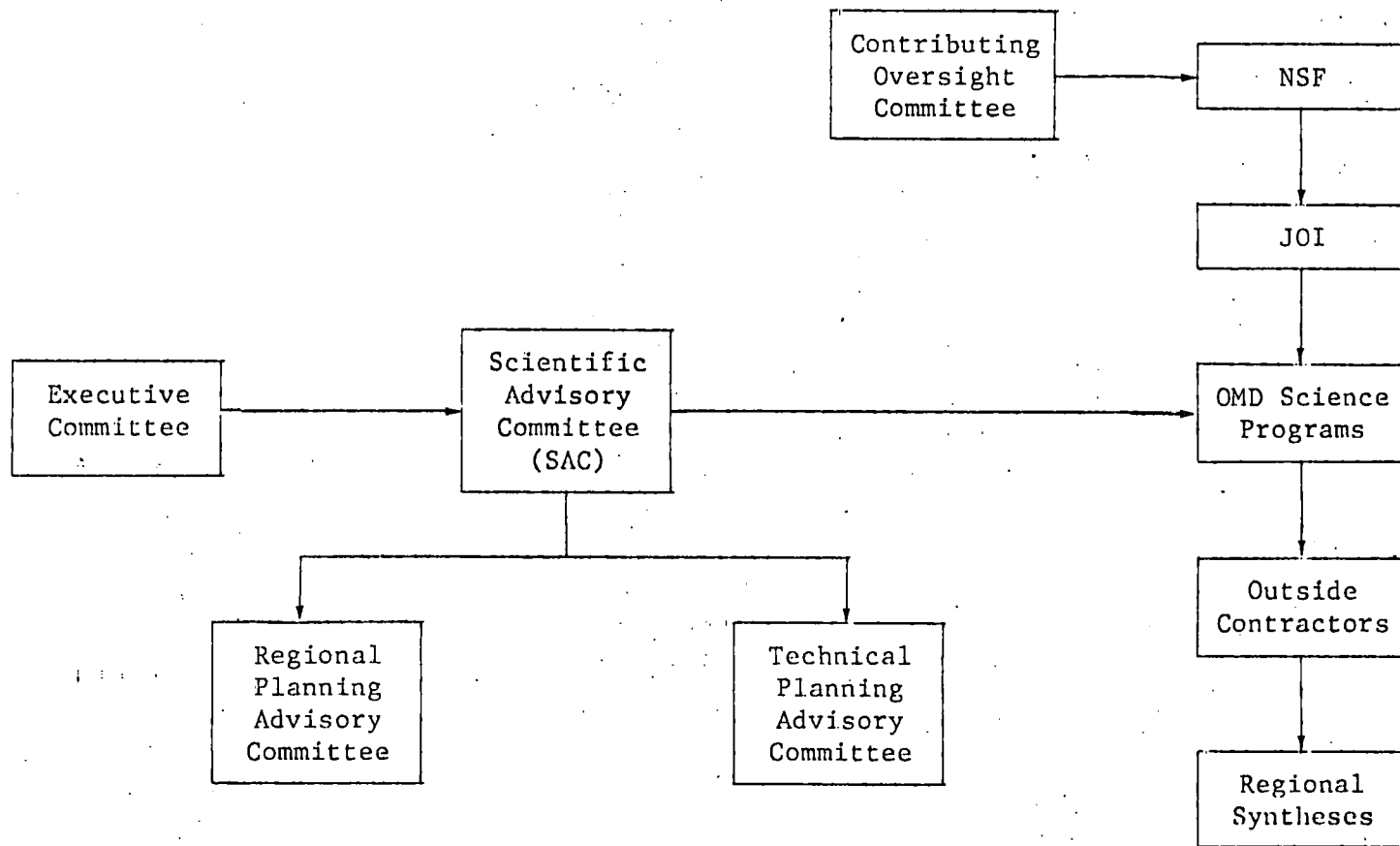


Figure 1. OMDP Science Programs Organizational Chart



N.B./  
Davies T. Davies agreed to send PCOM members copies of the recently completed JOI directory.

## II. TIME TABLE

The OMDP time table is as follows:

FY 1981 - Complete the regional syntheses, and otherwise summarize existing geological data (some of which are held by oil companies) and, construct a "road map" to plot the future course of JOI and OMDP. Davies does not expect the regional syntheses to be completed until late 1981, but working copies will be available earlier so that the Planning Advisory Committees can begin planning.

FY 1982 - Develop scientific plans, i.e. prepare a proposal similar to the JOIDES/DSDP proposal for submission to NSF. The proposal would include details of the plan originally outlined during the Houston meeting in March 1980 (sometimes called HUSOD).

(The decision to continue or scrap the OMDP program must be made at this point. The contributing oil companies will either make a long-term commitment or withdraw support.)

- begin field work, e.g., geographical site surveys

FY 1983 - Continue field work

- Select the Science Operations Contractor, establish the ship and shore facilities and initiate the information handling and publication operations.

FY 1984 - Begin drilling

## 327 JOIDES COMMITTEE AND PANEL REPORTS<sup>3</sup>

### I. EXECUTIVE COMMITTEE

E. Winterer relayed items from the 17-19 November Executive Committee meeting.

1. The EXCOM reviewed the alternative drilling programs and recommendations made by the PCOM for the proposed 1982-83 drilling. Following the review, each EXCOM member gave his institution's and/or his personal view on the 2-year vs. a shortened program. Following these discussions, the EXCOM passed a resolution that strongly supported a full 2-year Challenger program. The U.S. members of the EXCOM

<sup>3</sup>Items from panel meetings dealing with 1981 drilling, 1982-83 planning, and post-1983 planning are included in Items 329, 330 and 331 below.

also resolved that they "equally supported" ocean margin drilling with the Glomar Explorer. Winterer read the Executive Committee resolution given on Item 169 VI, EXCOM meeting, Atlanta, Georgia.

2. The EXCOM resolution cited above called for early review of scientific problems that may require use of Challenger after 1983. The EXCOM noted that plans for 1984 (and later) drilling must be started right away to ensure future funding. The committee urged early development of a long-term plan (3 to 5 years).

3. Winterer reported the PCOM's recommendation to the EXCOM concerning convening a conference on scientific ocean drilling and on his conversations with the National Academy of Sciences Geodynamics Committee in which the Committee appeared interested in the idea of Academy sponsorship of the conference.

The EXCOM approved the idea of a conference, but chose to undertake organization of the conference itself. The EXCOM established an ad hoc committee, chaired by M. Talwani to recommend the structure and procedures for such a conference. (The conference, now called COSOD -- Conference on Scientific Ocean Drilling -- is discussed in greater detail under separate item, Item 331-III, below.)

4. The EXCOM approved all PCOM nominations to JOIDES panels and for cruise chief scientists.

5. E. Winterer removed his request for a PCOM quick-action committee.

6. The EXCOM discussed potential new members to JOIDES. The Dutch (via J. van Hinte) have shown interest in joining. The Dutch and Norwegians may want to form a consortium (defined in Item 172, November 1980 EXCOM meeting).

The Germans have responded to a query from the People's Republic of China. H. Beiersdorf, however, reported during the current PCOM meeting that the Chinese have not responded further.

## II. OCEAN CRUST PANEL

J. Fox reported for the Ocean Crust Panel (OCP). The OCP last met 8-10 October 1980 at the University of Washington. Some results of that meeting are reported in the October 1980 PCOM minutes; only items not discussed there were reported at the current meeting.

### A. Summarized Results

1. Geotimes Article. The OCP is disappointed that the Geotimes article which previously was published soon after a cruise and covered its most significant aspects, is no longer published. The GSA article, while useful, is too detailed and appears after too long a time following the cruise terminated. The OCP urges that the Geotimes article somehow be reinstated or that a similar vehicle be found for rapid publication of first-order results generated by the shipboard party while at sea.

Lancelot: DSDP completely agrees and has arranged with Geotimes to publish a short article containing news or highlights of each leg. The articles will be shorter than those published earlier and will more closely conform to the news magazine format of Geotimes. The article preparation, however, is now back in the hands of the shipboard party. In addition, those legs that have not been discussed in Geotimes will be summarized in an article appearing shortly and covering the last year of drilling.

The Geotimes coverage will begin again with Leg 76.

The PCOM urges that at least the stratigraphic columns from each cruise be included in Geotimes.

2. Igneous Rock Catalogue. The OCP notes that the geochemical and petrographic analyses have not been done in an orderly fashion for Legs 2-43. Researchers cannot readily determine exactly what is available and in what condition the rocks exist.

The OCP recommends that DSDP staff and technicians (repository and information handling group) under the supervision of J. Natland (a) assist in handling and describing the igneous cores, (b) arrange for the publication of an igneous rock catalogue covering Leg 2-43, including data existing outside the Initial Reports and (c) advertise its availability in Geotimes.

J. Natland is also submitting an independent proposal to NSF, in conjunction with other investigators, to conduct more detailed and integrated analyses of the igneous rocks.

Lancelot: DSDP cannot undertake describing all igneous rocks currently in the repositories or preparation of detailed igneous rock catalog. This would represent a major effort and DSDP is neither staffed nor charged with the responsibility to prepare descriptions beyond the level of those produced on board ship. Moreover, if it were to undertake preparation of detailed igneous rock descriptions, other groups (e.g. sedimentary petrologists) would feel entitled to a similar service. He suggested that such a project should be the subject of an independent proposal.

DSDP can, however, upgrade descriptions of the exceptionally problematical cores. Lancelot suggests that the OCP identify any igneous rock cores for which the shipboard description is below standard.

The Planning Committee concurred with Lancelot's position.

3. Communications between the OCP and Site Survey Panel. Fox raised the problem of communications between the Ocean Crust and Site Survey panels. Hayes also reiterated the problem and noted it prevails throughout the panel structure. The problem is discussed under a separate item, Item 327-X, below.

4. FUTURE MEETINGS. The next Ocean Crust Panel meeting is scheduled for 30-31 March to 1 April 1981 at the Alton-Jones Center, University of Rhode Island.

J. Fox protests that the fact that JOI has budgeted the OCP for only one meeting during fiscal 1981. P. Worstell noted that the OCP was also budgeted for only one meeting during fiscal 1980, but nonetheless held two meetings. J. Creager commented that the JOIDES office should ensure that JOI budgets three meetings annually for the subject panels and reduces the number of meetings actually held as appropriate, rather than vice-versa.

## B. Membership

### 1. Changes

M. Bender declined the invitation to join the Ocean Crust Panel owing to the pressures of his other commitments. J. Fox also reported that he (Fox) had been a member of the panel for many years and was prepared to rotate off.

Following discussion, T. Moore moved (seconded by J. Cann) that (a) H. Shouten (WHOI) be selected OCP chairman designate, (b) J. Fox be asked to remain on the panel for two additional meetings, and (c) the OCP recommend replacements for two positions at the next (July 1981) Planning Committee meeting.

ACTION/  
Fox

Vote: 11 for, 1 opposed, 0 abstain. The motion passed.

During discussion PCOM members suggested several possible candidates for membership including Rodey Batiza (Wash. Univ.), J. Sinton (HIG), John Delaney (Univ. of Wash.), James Hawkins (SI) and Michael Mottl (WHOI). Fox will relay the PCOM's recommendations to the OCP and solicit its recommendations for membership.

### 2. PCOM Liaison

R. Moberly and J. Corliss will provide liaison between the Planning Committee and Ocean Crust Panel.

## III. ACTIVE MARGIN PANEL

Roland von Huene reported for the Active Margin Panel (AMP).

### A. Summarized Results

1. A counterclockwise ship's track in the Pacific would create problems in getting adequate seismic data in time for drilling the Middle America Trench. Gas hydrates pose a problem here and Safety Panel approval may be difficult without good survey data. Von Huene is trying to arrange reprocessing of the existing UTMSI multichannel data from lines off Guatemala. The reprocessing could enhance the detail in the upper part of the section, especially within the gas hydrate zones.

2. A \$3500 tool is available to measure in-situ gas pressures. Inasmuch as gas hydrates may be finely dispersed throughout an interval and may disintegrate in the core before being measured, the AMP considers acquisition of the tool very worthwhile -- especially for use while drilling in the Middle America Trench.

3. Drilling off Peru on the Andean Margin remains a very high priority with the AMP and the Panel believes that it might now be politically feasible. D. Hayes noted that the Site Survey Panel understood that drilling off Peru was prohibited and so had placed a low priority on the surveys.

4. AMP members and affiliates are preparing a "core" proposal to NSF to integrate and synthesize all data from active margin drilling transects. J. Natland and T. Shipley are coordinating the program through the University of California. Satellite proposals dealing with topics including back-arc sedimentation, fore-arc sedimentation, structural fabric and regional tectonics are being submitted to NSF by individuals also involved in the core proposal.

5. The AMP and OPP share overlapping interests in studies of facies associations. The panels plans to create an ad hoc group to coordinate the development of a plan to study the problem.

6. The Panel took no new action on the PAC-A-BERS proposal.

## B. Membership

### 1. Changes

R. von Huene retires as AMP chairman following that panel's next meeting (April 1981). A possible candidate for chairman, J. Watkins, is not available to serve and, in fact, plans to resign from the Active Margin Panel.

The PCOM noted that several current or past members of the AMP would be suitable chairmen.

Following discussion, J. Cann moved (seconded by Hayes) that D. Hussong (HIG) be asked to serve as chairman of the Active Margin Panel.

Vote: 12 for, 0 against, 0 abstain. The motion passed unanimously.

R. von Huene will provide appropriate liaison and will help prepare white papers and otherwise ensure continuity up to the time of the Conference on Scientific Ocean Drilling (planned for fall 1981).

The two other AMP members leaving the panel are J. Watkins and W. Dickinson.

D. Hayes moved (seconded by R. Moberly) that John Ladd (L-DGO) be asked to replace Joel Watkins.

Vote: 12 for, 0 against, 0 abstain. The motion passed unanimously.

ACTION/  
Vqn Huene

The PCOM suggested several other potential members to fill the second vacant position and asked the AMP to make its specific recommendations at the next PCOM meeting.

## 2. PCOM Liaison

J. Creager and D. Hayes will serve as the Planning Committee's liaison people to the Active Margin Panel.

## IV. PASSIVE MARGIN PANEL

R. Sheridan reported for the Passive Margin Panel (PMP). The Panel last met 17-19 January in Galveston.

### A. Summarized Results

1. The PMP is concerned over the possible termination of the logging program. (The contract with Gerhardt-Owens ends in May 1981). The Panel asks DSDP to do all possible to ensure downhole logging continues during Legs 79-82.

### Discussion

DSDP has requested supplemental funds from NSF to cover increased operational costs. (See Item 325-I). If NSF declines to approve the funds, DSDP may have to drop the logging program. B. Haq (NSF) noted that there was little hope that NSF would grant the supplemental funds.

2. Working Groups: The PMP proposed establishing three working groups: Deep Sea Fan, Slump, and Drift Working Groups.

The Deep Sea Fan Working Group would address drilling into the Mississippi fan during the current 1982-83 program and would also consider more open-ended programs -- drilling on end-member type fans of various kinds -- for post-1983 drilling.

The Slump Working Group would identify different end-member types of slumps and would design a drilling program comprising 5 or 6 holes on a single slump. It would also develop downhole experiments to address the problem of slump development.

The Drift Working Group would design a program comprising 5-6 holes (using both the hydraulic piston and rotary coring) to test sediment drift hypotheses.

The Planning Committee noted that it need not specifically approve creation of a working group. The guidelines to establish a

working group are (a) the group is sponsored by a panel, (b) a member from the parent panel chairs the group, and (c) its formation does not automatically commit additional funds for its operation. The Passive Margin Panel is free to create working groups as it see fit.

## B. Membership

### 1. Changes

R. Sheridan (chairman) and J. Grow will end their membership on the Passive Margin Panel 1 September 1981.

Acting on a PMP recommendation, T. Moore moved (seconded by W. Bryant) that Dave Roberts (IOS) be asked to chair the Passive Margin Panel following R. Sheridan's tenure.

Vote: 8 for, 1 against, 2 abstain. The motion passed.

The PCOM both considered recommendations put forth by the PMP and introduced other possible candidates to fill the two vacancies.

Following discussion and a straw vote taken on five possible candidates, R. Moberly moved (seconded by J. Corliss) that the PCOM recommend William Ryan (L-DGO) and Charlotte Keen (Atlantic Geoscience Center) be invited to join the Passive Margin Panel.

Vote: 7 for, 1 against, 4 abstain. The motion passed.

The PCOM was not of a single mind regarding membership of the Passive Margin Panel, but deferred further discussion until it knew whether or not the current invitations to membership would be accepted.

### 2. PCOM Liaison

W. Bryant and E. Winterer will provide liaison between the Planning Committee and the Passive Margin Panel.

## V. OCEAN PALEOENVIRONMENT PANEL

R. Douglas reported for the Ocean Paleoenvironment Panel (OPP). The Panel last met 4-5 February in Bermuda.

### A. Summarized Results

1. The OPP devoted most of its meeting to finalizing site selection for the 1982 drilling program (appearing as a separate item, Item 330:II-A, below).

2. OPP members are preparing a white paper for the post-1983 drilling.

3. The Panel plans to re-activate the Cenozoic Working Group and will ask Fritz Theyer (see Membership, below) to chair the group.

4. The Mesozoic Working Group met at SIO in January (in part) and in Bermuda in February 1981 (in part). It developed a white paper outlining the drilling program for the central "old" Pacific sites. The group expanded its outlook to consider mid-plate volcanism, especially as it relates to drilling in the central Pacific. (Discussed in greater detail below, Item 330-II-A).

## B. Membership

### 1. Changes

W. Sliter and W. Berger have resigned from the Ocean Paleoenvironment Panel. The OPP recommended that Robert Garrison (UC Santa Cruz) and Fritz Theyer (HIG) be invited to join the panel to provide expertise on Mesozoic and Cenozoic environments, respectively.

Acting on the OPP recommendation, J. Creager moved (seconded by T. Moore) that R. Garrison (UC Santa Cruz) and Fritz Theyer (HIG) be invited to join the Ocean Paleoenvironment Panel, replacing W. Sliter and W. Berger.

Vote: 12 for, 0 against, 0 abstain. The motion passed unanimously.

The OPP also suggested five alternative candidates should Garrison and/or Theyer decline the invitation. The PCOM, by straw vote, recommended that D. Johnson (WHOI) be considered the first alternative candidate.

2. The Planning Committee members providing liaison with the Ocean Paleoenvironment Panel are H. Beiersdorf and T. Moore.

## VI. ORGANIC GEOCHEMISTRY PANEL

B. Simoneit reported for the Organic Geochemistry Panel (OGP).

The OGP last met 22-24 August at Durham, N. H. Many items from that meeting have been reported in earlier minutes.

### A. Summarized Results

1. Shipboard Guide to Geochemistry. The OGP has been struggling with production of a guide to geochemistry procedures for use by shipboard scientists. Various earlier versions have posed problems and none has been completely satisfactory. B. Simoneit hopes to integrate and submit a workable guide to DSDP this week (of 23 February 1981).

2. Hydraulic Piston Cores for Organic Geochemistry Study. A hydraulic piston core collected and frozen at Site 532 during Leg 75 is available immediately to organic geochemists for study. The OGP suggests that its availability be advertised in the open literature.

Lancelot: DSDP elected not to advertise the availability of the



N.B./  
Worstell

frozen HP section on the advice of W. Riedel, DSDP curator. Because of their ephemeral properties the cores are being made available to outside scientists early — before the usual one year post-cruise delay in sample distribution. It is a "one-shot operation" and advertising their availability could create confusion and additional problems for DSDP. Advertisement in the JOIDES Journal might be appropriate.

3. Shipboard - Shore-based Organic Geochemistry Sampling. B. Simoneit noted that sampling for organic geochemistry (for contributions for the Initial Reports) has increased and is resulting in duplication of reports.

The PCOM recognized that duplicate study in itself is not bad and in fact should be encouraged to provide checks on data and interpretations and to stimulate research on opposing views. BUT, owing to page limitations, production costs, and potential delays, duplication should be avoided in the Initial Reports. The PCOM encourages the OGP to limit sampling to what can be reported in the Initial Reports and reiterated that samples cannot go into private hands for private purposes.

Lancelot also noted that the co-chief scientists must review and approve contributions more critically (i.e., sampling programs) for the Initial Reports.

#### B. Membership

##### 1. Changes

The Organic Geochemistry Panel currently has no vacancies to fill. G. Erdman and B. Tissot will leave in 1982; K. Kvenvolden will leave in 1983.

##### 2. PCOM Liaison

J. Corliss will serve as liaison between the Organic Geochemistry Panel and the Planning Committee.

### VII. INORGANIC GEOCHEMISTRY PANEL

J. Gieskes reported for the Inorganic Geochemistry Panel (IGP). The panel last met 4-5 August at SIO.

#### A. Summarized Results

1. The IGP strongly supports creation of a Submarine Hydrogeology Working Group and has made recommendations concerning its membership. (Addressed at the October 1981 PCOM meeting, Item 316-XIII).

2. The Panel strongly supports and encourages drilling at 150s (Pacific) to study a region of hydrothermal productivity. The panel wrote a proposal to that effect and submitted it together with the Ocean Crust Panel to the Planning Committee. (See also Item 319-IV-A,

October 1981 PCOM minutes, and Item 330-II-A, below.)

3. The IGP very strongly supports the Middle America Trench drilling proposed by the Active Margin Panel.

4. The panel continues to be interested in clathrate studies. Although the in-situ water sampler did not work on Leg 76 and the IGP reaffirms its position that in-situ sampling is extremely important.

#### B. Membership

##### 1. Changes

Following the report and recommendations by J. Gieskes, R. Moberly moved (seconded by J. Creager) that M. Kastner (SIO) and F. Sayles (WHOI) be asked to join the Inorganic Geochemistry Panel, filling positions to be vacated by J. Gieskes and F. Manheim, respectively.

Vote: 10 for, 0 against, 1 abstain. The motion passed.

The PCOM will consider the question of IGP chairmanship at a later meeting. The IGP also proposed that rather than fill the remaining vacant position on the panel with a regular member, the panel fill it on an ad hoc basis. This would allow the Panel to get expert advice on specific programs as planning evolved. The Planning Committee concurred.

J. Cann will serve as liaison between the Inorganic Geochemistry Panel and the Planning Committee.

#### VIII. DOWNHOLE MEASUREMENTS PANEL

Roy Hyndman relayed results of the last Downhole Measurements Panel (DMP) held 20-21 May 1980 in Palisades, New York.

##### A. Summarized Results

1. The DMP has reviewed the results of downhole measurements. Legs 69-70 have produced a very productive series of downhole measurements. Objectives on Legs 71-75, however, required shallow holes and logging was not emphasized. When attempted, the results were disappointing owing to both poor hole conditions and tool failures.

2. Gerhardt-Owens has declined to renew its logging contract with DSDP. Logging contract bids will be very high because of strong demand within the industry for logging services. The DMP recommends that DSDP consider establishing an in-office logging facility. Several logging companies have indicated an interest in working with the Project to develop tools specifically designed for Glomar Challenger.

(DSDP is currently studying the possibility of establishing an in-office logging program. See Item 325-III, above.)

3. The DMP commends DSDP on its successful tool and instrument development, (e.g. the hydraulic piston corer). The panel hopes DSDP will develop logging tools in the future -- particularly design and develop mechanical adaptations for drilling with the Challenger's system.

4. The DMP strongly supports scheduling mini-legs to return to previously drilled holes to conduct downhole experiments.

5. The Panel next plans to meet 30 April - 1 May at the Hawaii Institute of Geophysics.

#### B. Membership

##### 1. Changes

Roy Hyndman would like to step down from the chairmanship of the Downhole Measurements Panel following its next meeting. The PCOM asked Hyndman to solicit recommendations for chairman from the DMP and will plan to select a chairman at the next Planning Committee Meeting.

ACTION/  
Hyndman

##### 2. PCOM Liaison

W. Bryant and L. Nikitin (alternate) will provide liaison between the Planning Committee and the Downhole Measurements Panel.

#### IX. SITE SURVEY PANEL

##### A. Summarized Results

LeRoy Dorman reported for John Jones (JOIDES SSP chairman) who was at sea. L. Dorman is chairman of the JOI Site Survey Planning Committee and a member of the JOIDES Site Survey Panel (SSP). The full JOIDES Site Survey Panel last met 14-15 May 1980 at the University of Hamburg; the JOI Planning Committee last met 18 December 1980.

The delay in reviewing the 1981-83 drilling program has caused problems in planning site surveys and issuing requests for proposals (RFPs) from JOI. NSF has now approved, in principle, a 24-month program, but the drilling schedule is still not firm.

JOI Inc. issued RFPs for surveys for three programs:

1. 15°S Pacific -- Hydrogeology
2. Western Pacific -- Old Pacific
3. Equatorial Pacific

The deadline for receipt of the proposals at the JOI office in Washington is 11 March 1981. The JOI Site Survey Planning committee will meet in early April to consider the proposals.

L. Dorman noted that the Site Survey Panel must create programs

that result in both a good survey of the drilling area and be rewarding scientifically to the people conducting the survey.

### Discussion

Q: How should panel chairmen relay information regarding changes in scientific program, reprocessing of data, and other site survey matters?

PCOM: The Planning Committee must render scientific advice. But time is short; to short-cut the system, direct information to JOI (J. Clotworthy) and send copies of correspondence (telecommunication summaries) to the PCOM chairman (E. Winterer) and other appropriate JOIDES members.

Ewing: We need to conduct a high-resolution geophysical survey with the Glomar Challenger while on site with the best tool available.

The PCOM noted that in approving the JOI site-survey proposal, the NSF also approved the purchase of a high-resolution profiling system for the Glomar Challenger (Item 306-XII), but for the sake of clarity it chose to make a more specific recommendation at the current meeting.

J. Ewing moved (seconded by R. Moberly) that the DSDP chief scientist acquire a state-of-the-art, high-resolution seismic system for use aboard Glomar Challenger, and that Challenger be equipped with a hydrophone which can be lowered from the drill string and held near the seafloor while the ship maneuvers in a pattern near the drill hole, thereby upgrading the Challenger systems as proposed in the JOI budget request.

N.B./  
Lancelot

Vote: 12 for, 0 against, 0 abstained. The motion passed unanimously.

### B. Unresolved Problems

D. Hayes reiterated his concern for unresolved problems regarding site survey matters. (Discussions occurred at various times during the meeting, but are noted under the SSP report for convenience of organization.)

Communications between subject panels and the Site Survey Panel continues to be the major problem. The SSP needs a broader perspective on what is required in a site survey, and a longer lead time. The panel must meet more than once a year and encourage participation of site proponents.

Today the IPOD data bank at L-DGO performs primarily a repository function. Previously, before JOI assumed its contractual responsibility, the data bank provided more data interpretation. Now the limited interpretation is "bootlegged" from other sources. The IPOD data bank does not provide survey management, and many, many tasks are "falling in the crack."

ACTION/  
Winterer

The PCOM directed E. Winterer to explore the history of the IPOD data bank and make specific recommendations to improve the system, either through the IPOD data bank or by strengthening the JOIDES Site Survey Panel.

Following discussion and in response to a draft position paper prepared by D. Hayes, the PCOM informally agreed to the following statement.

Recognizing a continuing inadequacy in the communications and the definition of responsibilities regarding evaluation of existing and required site surveys, the PCOM offers the following clarification:

The primary responsibility for identifying, collecting and evaluating existing data rests with the site proponent(s) designated by the "parent" subject panel. The proponent should seek advice from the Chairman of the JOIDES Site Survey Panel (or his appointed deputy) and obtain reasonable assistance from the JOIDES Data Bank.

Prior to a SSP meeting, the proponent should submit to the SSP for review a concise summary of the existing data and a commentary on additional surveying needs. This action should precede the date of anticipated drilling by a minimum of 18-24 months.

The JOIDES Site Survey Panel will identify any additional or modified surveying requirements. The Site Survey Panel will assign responsibilities (among the JOIDES member countries) and identify the opportunities for implementing the needed surveys.

Results of the surveys should be reviewed by representatives of the Site Survey Panel, the surveying Principal Investigator and the site proponent(s) to evaluate the adequacy of the total survey data.

Results of these deliberations should then be reported by the proponent back to his parent subject panel for re-evaluation of site priorities.

Figure 2 shows an ideal scenario.

#### C. Membership

The Site Survey Panel has no new vacancies or requested changes in membership.

D. Hayes, W. Schlager, and H. Beiersdorf will continue to serve as liaison between the Planning Committee and Site Survey Panel.

#### X. POLLUTION PREVENTION AND SAFETY PANEL

L. Garrison reported for the Pollution Prevention and Safety Panel (PPSP). The panel last met 13 November 1980 at SIO, and has met

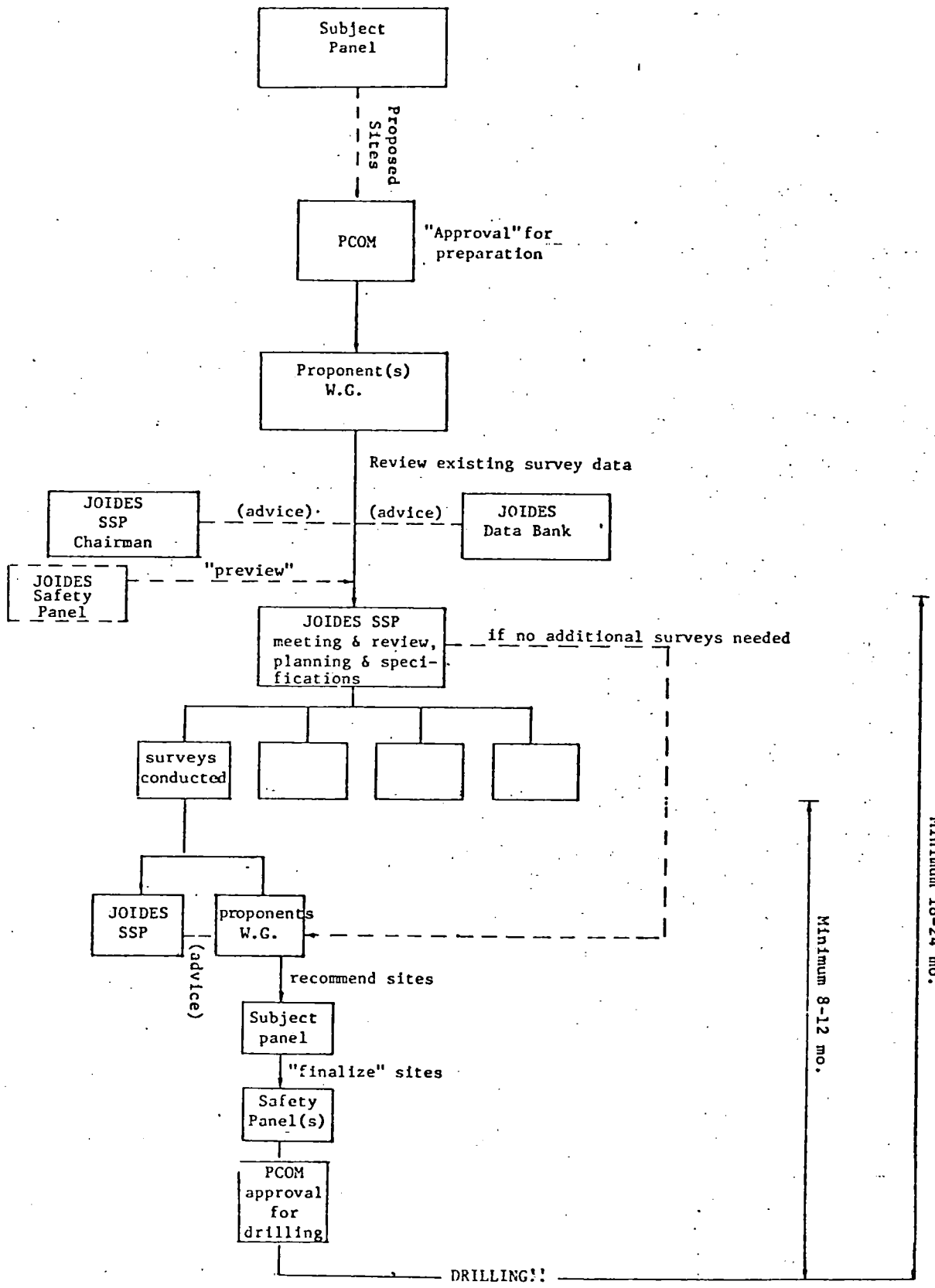


Figure 2. "Ideal Scenario"

three times since its last report to the Planning Committee.

#### A. Summarized Results

1. During the last year the Safety Panel has reviewed a total of 59 sites: it approved 38 sites as proposed, 14 sites with some restrictions or modifications, and disapproved 4 sites. The panel reviewed proposed sites for the following Legs.

Leg 76 and a preview of Leg 77 - 26 June 1980  
 Legs 77 and 78 - 3 September 1980  
 Leg 79 (Mazagan and Galicia Bank) - 13 November 1980

2. Check Sheets for Proposed Sites. The Safety Panel urges site proponents to improve the quality of material presented for site review. The panel has devised a new check-sheet to key background information for completion by co-chief scientists in preparation for the safety review. The panel hopes completion of the sheets will improve the safety review process.

3. Drillsite Data Sheet. The panel also developed a post-cruise data report sheet for completion by cruise co-chief scientist after the cruise. Its use will allow comparison between proponents' predictions and actual drilling results.

4. Site Preview. The Safety Panel initiated a pre-review of sites this year. Site proponents have found that knowing which sites present potential safety problems is a great help in preparing their final presentation. The Safety Panel plans to continue the site pre-review but asks proponents to notify the panel of their candidate sites.

5. The Safety Panel will next meet 10 March 1981 at SIO to review Legs 80-81 sites; that leaves only Leg 82 to be reviewed in the current Challenger program.

(Questions arising about safety problems occurring during the Leg 77 drilling are discussed above, ITEM 325-II-B.)

#### B. Membership

Grant Goodell has resigned from the Safety Panel, but the panel recommends that he not be replaced. J. Harms is now alternate for D. MacKenzie (both of Marathon Oil Co.)

As chairman of the Planning Committee, E. Winterer normally sits with the Safety Panel; and will provide liaison between the PPSP and the PCOM.

### XI. SEDIMENTARY PETROLOGY AND PHYSICAL PROPERTIES PANEL

A. Richards reported for the Sedimentary Petrology and Physical Properties Panel (SP<sup>4</sup>). The SP<sup>4</sup> last met 3-4 October 1980 at Denver, Colorado.

## A. Summarized Results

1. The SP<sup>4</sup> sampling of a special hydraulic piston core from Site 532 was very successful. Fifteen investigators attended the "sampling party" at L-DGO. The SP<sup>4</sup> commends the East Coast Repository Staff for its excellent work in conjunction with the sampling.

2. The SP<sup>4</sup> would like to obtain another core for special sedimentary petrology studies from the New Jersey transect leg. (The PCOM took no action on this request during the current meeting.)

3. The panel noted it needs more feedback from DSDP. The SP<sup>4</sup> asked DSDP more than a year ago to examine the resolution of the new "fast" GRAPE relative to the slower GRAPE and has not yet received a response. Moreover, although SP<sup>4</sup> has JOIDES overview responsibility for DSDP-developed tools relevant to SP<sup>4</sup> activities, it has received no communications from the DSDP Engineering group regarding new developments. The panel suggests that R. Bennett initiate liaison with DSDP to ensure better communications.

4. The SP<sup>4</sup> had suggested that it also have a liaison person on several other panels. Chairmen of the other JOIDES panels agreed to establish an informal (primarily telephone and letter) liaison, but owing to present size of panels, and additional travel costs, could not promote a full-time SP<sup>4</sup> attendee. G. Klein will provide informal liaison to the PMP; M. Arthur will provide liaison to the OPP.

5. The SP<sup>4</sup> will form an ad hoc committee to learn if state-of-the-art tools are available for in situ measurements and will report their findings to the Downhole Measurements Panel.

6. The SP<sup>4</sup> urges the expeditious publication of the Sedimentary Petrology Technical Manual. (See discussion Item 325-IV-D, above.)

7. The SP<sup>4</sup> recommended that a mechanism be established to describe cores unopened on board Challenger.

E. Winterer noted that such a mechanism already exists. The repository staff describes some cores; for others, a shipboard scientist or DSDP staff representative will complete the "shipboard" descriptions.

## B. Membership

### 1. Changes

Acting upon the recommendation by the SP<sup>4</sup>, R. Moberly moved (seconded by W. Bryant) that J. Conolly be replaced by Leland Kraft (McClelland Engineering).

Vote: 11 for, 0 against, 0 abstain. The motion passed unanimously.

The PCOM chairman also suggested that the SP<sup>4</sup> chairman, Adrian



ACTION/  
Richards

Richards, consider rotating off the panel and that the SP<sup>4</sup> make recommendations for chairman during their next meeting (probably December 1981).

## 2. PCOM Liaison

R. Moberly provides liaison between the Planning Committee and the Sedimentary Petrology and Physical Properties Panel.

## XII. STRATIGRAPHIC CORRELATIONS PANEL

Richard Poore reported for the Stratigraphic Correlations Panel (SCP). The SCP last met 7-9 May 1980 at SIO.

### A. Summarized Results

1. Following a report on the status of Paleontologic Reference Centers W. Riedel, the SCP recommended that New Zealand Geological Survey in Lower Hutt, N.Z. become the reference center for the Australian-Asia region. (Addressed by PCOM at Paris 1980 meeting, Item 303-V.)

2. The SCP prepared and submitted a report on the uncored stratigraphic boundaries to the Passive Margin Panel to consider in planning Legs 76-82.

3. The SCP forwarded suggestions regarding alternative sites in the North Atlantic to monitor Cenozoic history of the Gulf Stream via W. Ruddiman and J. Hays to the Ocean Paleoenvironment Panel.

### B. Membership

#### 1. Proposed Changes

Richard Poore replaced R. Benson as chairman of the SCP at the end of the last meeting; and Lloyd Burkle (L-DGO) has joined the panel.

At its last meeting the Stratigraphic Correlation Panel recommended that a stable-isotope stratigrapher and a magnetostratigrapher be added to its membership. R. Poore noted that the two disciplines could possibly be combined in one person.

Following discussion, the PCOM suggested that the SCP ask a U.S. participant to step down to allow inclusion of a magnetostratigrapher on the panel. (The PCOM has no direct authority over non-U.S. membership.)

#### 2. PCOM Liaison

J. Creager is the PCOM liaison to the Stratigraphic Correlation Panel.

N.B./  
Poore

## XIII. INFORMATION HANDLING PANEL

D. Appleman reported for the Information Handling Panel (IHP).

The IHP last met 15-16 January 1981 at Scripps Institution of Oceanography.

A. Summarized Results

1. Data Base/Phase Down. The Information Handling Panel urges (1) that DSDP submit a multistage phase-down plan rather than a single-year phase down plan to ensure proper handling of data and (2) that more funds and especially more space be allocated to the Information Handling Group early on so that DSDP can accelerate completion of the data bases. Further, the panel recommends that before the program terminates (a) all current data bases be completed, and (b) a record of procedures, programs and computer files be completed so that the data operation can be picked up at a later time or at a different place.

Lancelot reported that DSDP is currently preparing three phase-out plans. DSDP recognizes the need for a long-term phase out both in regard to proper data curation and volume production. (The Initial Reports are now published about 3-years post cruise.) Lancelot will submit the phase-out plans to E. Winterer and to the Planning Committee at its July 1981 meeting.

2. Sedimentary Petrology Techniques Manual. The IHP urges the Planning Committee and DSDP to take definitive action with regard to production of the Sedimentary Petrology Techniques Manual. (See Item 325-V-D, above.)

3. Micropaleontology Reference Center. The non-U.S. IPOD members feel micropaleontology reference centers are very important to their communities. Yet only two centers are in place and activity to establish new centers is minimal. The IHP asked the Planning Committee to appoint a small working group of curators to expedite establishment of the centers.

The PCOM made no specific recommendation at this time other than suggesting that persons in member institutions should relay their comments to their EXCOM representative. The EXCOM has a continuing interest in the Reference Centers and most action regarding them is initiated by the Executive Committee.

4. Non-U.S. Data Center. The French have recently established a Center for DSDP Data at the Bureau Nationale des Données Océaniques (BNDO); the Russians have established two data centers, one at the Academy of Sciences in Moscow to serve the academic community and one in Gelendzhik to serve the Ministry of Geology.

The IHP supports the establishment of these data centers and recommends that the Planning Committee urge the appropriate French and Soviet administrators to provide adequate support for the facilities, i.e., funds for computer time, support personnel, travel, and advertising.

ACTION/  
Lancelot

Following discussion J. Creager moved (seconded by H. Beiersdorf) that the Planning Committee recognizes the efforts of Soviet and French scientists to establish working DSDP data bases. Already beneficial results have been seen and further dissemination of information should be encouraged. Significant additional benefits will accrue from cooperative consideration of problems within the data base by personnel of the three active groups.

Vote: 12 for, 0 against, 0 abstain. The motion passed unanimously.

5. Encoding Data Bases. The IHP is very pleased with the progress DSDP has made with encoding data. Details of the status of the data bases are included on handouts distributed at the PCOM meeting.

#### B. Membership

The German representative to the Information Handling Panel, H. Glashoff, has been replaced by Judit Nowak of the Bundesanstalt für Geowissenschaften und Rohstoffe.

T. Moore is the PCOM liaison to the Information Handling Panel.

#### XV. HYDRAULIC PISTON CORE WORKING GROUP

T. Moore reported for the Hydraulic Piston Corer Working Group.

The HPC Working Group met in Atlanta 18 November 1980 during the Geological Society of America meeting. D. Johnson chaired the well-attended session in which HPC results were discussed.

1. Moore described a newly developed sampler (LaBreque sampler, Fig. 3a) and core divider (Fig. 3b) designed for hydraulic piston cores. The U-shaped channel sampler allows a person to remove an undisturbed column of sediment for magnetic determinations. An ice-cube-tray-like plastic divider is inserted into the core to prevent "sloshing" of core materials.

#### XV. SUBMARINE HYDROGEOLOGY WORKING GROUP

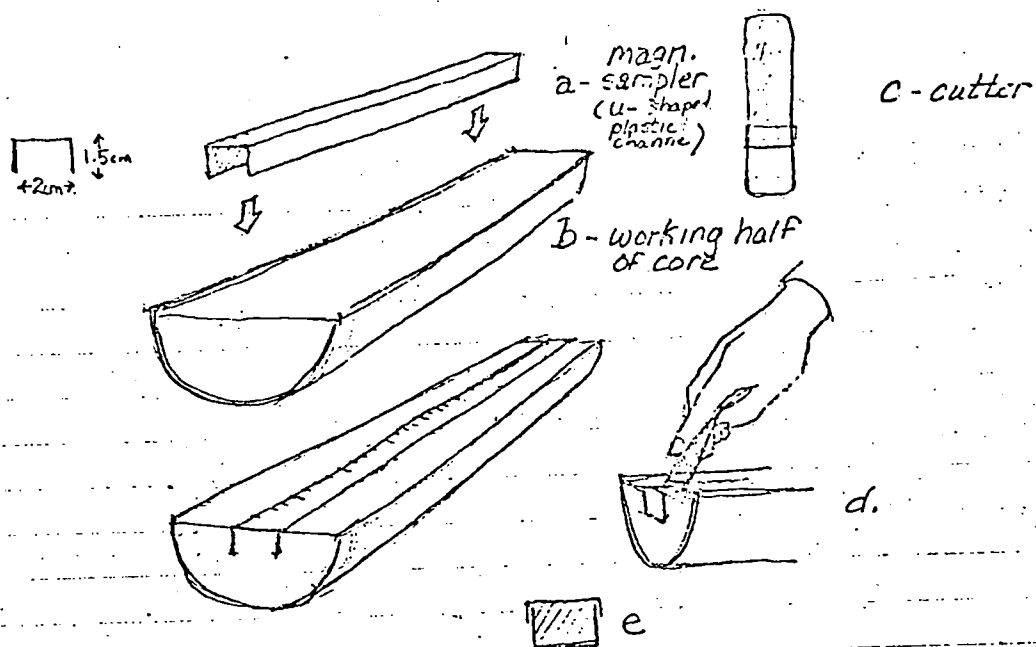
The newly formed Submarine Hydrogeology Working Group met recently in San Francisco. The meeting addressed development of a submarine hydrogeology program in concert with the Inorganic Geochemistry Panel. It resulted in a proposal submitted to the National Science Foundation to fund hydrogeology experiments on D/V Glomar Challenger during 1981-83.

### 328 OTHER PCOM-PANEL-RELATED BUSINESS

#### I. PROCEDURE TO REQUEST A PANEL MEETING

E. Winterer reiterated the procedures to request a JOIDES Panel meeting. A request to hold a meeting must be received by the JOIDES

Figure 3a



Procedure: press sampler (a) into working half of core (b); cut around magn. sampler by drawing wire loop cutter (c) down length of magnetic sampling device (d) from label and remove column of sediment from core; place plastic cover over sediment and tape ends (e)

Figure 3b

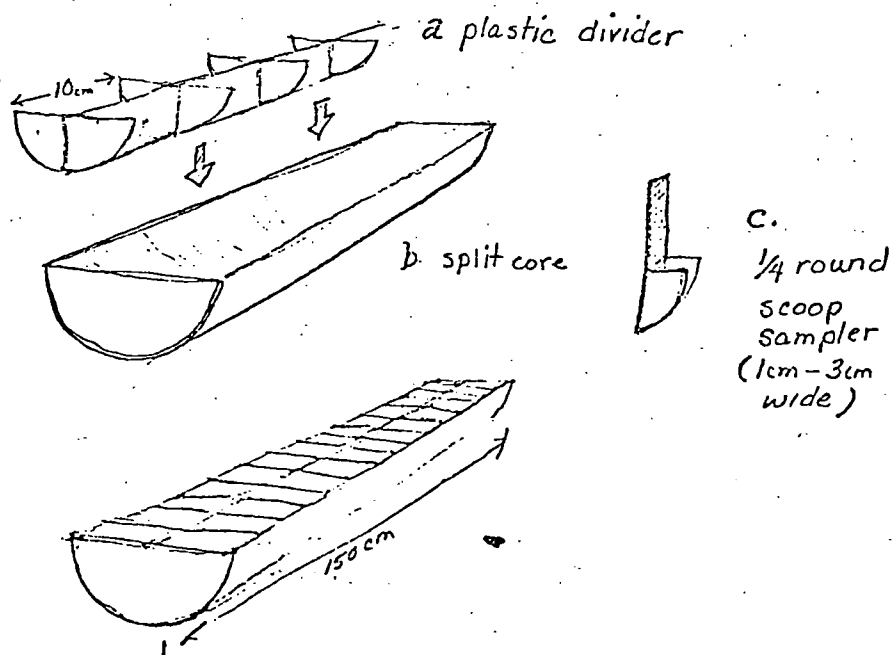


Figure 3. Newly developed sampler (3a) and core divider (3b) for hydraulic piston cores.

office at least 3.5 months before the proposed meeting. The written request should include suggested date, place, names of the proposed guests, and a generalized agenda. Chairmen should include justification for participation of the proposed guests. Because of additional costs and of additional NSF reviews for meetings held outside the U.S., Panel Chairmen (and the PCOM chairman) must be prepared to justify such meetings in detail. Panel Chairmen are charged with the responsibility to seek the most scientifically effective and economical meeting times and sites.

## II. JOIDES OFFICE

### A. Summary of Panel Minutes for the JOIDES Journal

N.B./  
Panel  
Chairmen

E. Winterer asked the Panel chairmen to provide (if appropriate) a summary of their panel meetings in a timely fashion for inclusion in the JOIDES Journal.

### B. Distribution of PCOM/EXCOM Minutes

The JOIDES Office at SIO has been distributing Planning and Executive committee minutes, calls to meetings, and various correspondence to both the committee member and his alternate, in addition to panel chairmen and appropriate people at DSDP. (The distribution list for the Atlanta EXCOM draft minutes alone included about 80 people.)

N.B./  
JOIDES  
office

In response to a question from the Planning Committee Chairman, the PCOM agreed that distribution of appropriate materials to attending members only (i.e. one set per institution plus panel chairmen and DSDP representative) is adequate. The attending member is responsible for ensuring that pertinent information is relayed to his alternate or others within his institution.

## 329 FY-1981 DRILLING (NORTH ATLANTIC)

### I. LEG 79 (MAZAGAN)

#### A. Drilling Priorities

R. Sheridan reported on the Passive Margin Panel recommendations for drilling Leg 79.

MAZ-3 (upper Jurassic sediment) should be cored to refusal depth by the hydraulic piston corer and rotary drilled until the lowest outcropping horizon is reached.)

Although the JOIDES Safety Panel approved drilling at MAZ-3 (salt and/or Paleozoic granite) provided the location be moved northwesterly to a position as near the scarp as possible, the SIO Safety Committee approved drilling the site only if MAZ-9 (down-dip) were drilled first. The SIO Safety Committee fears the structure could be a salt dome with trapped hydrocarbon, and asks that MAZ-9, at which drilling would penetrate exposed beds, be drilled first.

ACTION/  
Lancelot

The Passive Margin Panel believes the beds are also exposed at MAZ-3 and asks DSDP to ask the SIO Panel to reconsider the restriction.

Lancelot: On the basis of new data, Hinz would like to drill MAZ-9 first in any event. The "blue reflector" is at only 700 meters sub-bottom.

Sheridan: We would like the restriction removed, nonetheless, in case we do not penetrate to the "blue reflector."

Lancelot: Yes, but let's drill MAZ-9 first for scientific reasons. We don't know the nature of basement in the structure and it could be a salt dome. This creates concern.

The PCOM made no specific comments regarding the restriction on drilling MAZ-3. Presumably the question will be resolved between DSDP and the SIO Safety Committee which will next meet 11 March 1981.

GAL-2B and GAL-1A (Galicia Bank) are contingency sites for drilling during Leg 79 — should drilling at MAZ-9 encounter evidence of hydrocarbons.

#### B. Co-chief Scientist, Leg 79

In October, 1980, E. Winterer had withdrawn as a candidate for co-chief scientist of Leg 79 (Mazagan) in response to the Planning Committee's concern about its chairman being unavailable during crucial planning periods. (Karl Hinz is the other co-chief scientist.) Since that time circumstances have changed -- the postponement of the COSOD meeting until October -- making April and May 1981 a slower time for the Planning Committee. Other nominations for Leg 79 co-chief scientists could not participate on the cruise and the possibility of promoting a shipboard sedimentologist to the co-chief slot at the last moment was not satisfactory to the shipboard sedimentologist. Winterer, polled many PCOM members by phone and received a generally favorable response to his participation. Accordingly, DSDP invited Winterer to be co-chief scientist of Leg 79. Winterer would like to participate on the cruise and has accepted the invitation.

The PCOM did not, as a body, object to Winterer's participation. Some members, however, did note certain areas that might require specific attention.

- a. COSOD - clearly the Conference on Scientific Ocean Drilling must be properly organized and driven to a successful conclusion. (Action regarding COSOD is discussed below, Item 331-III.)
- b. NSF funding of the 1981-83 drilling program. Problems could arise which would require strong scientific guidance and quick action.
- c. A mechanism should be established by which there is neither

the fact nor the appearance of conflict of interest when a PCOM chairman sails as a co-chief scientist.

The PCOM made no specific recommendations, but noted that as in the past, the immediate-past Planning Committee Chairman, might be called upon to assist as necessary.

### III. LEG 80 (BAY OF BISCAY)

#### A. Passive Margin Panel Review

The PMP would like to drill ARM-1 (old Hole 400A) on the Biscay margin to sample a sequence into pre-rift Mesozoic deposits.

ARM-1, however, located in a half graben behind a tilted block, could be a structural trap, and might present a safety problem. Drilling a transect on the Goban Spur is an alternative, but because the spur was a topographic high during the Mesozoic, pre-rift sediments do not exist here. The choice is between drilling the simpler Goban Spur transect, but missing pre-rift sediments, or attempting the more difficult deep re-entry site (25 days drilling time) -- with possible safety hazards.

The PMP recommended drilling ARM-1 (re-entry), GOS-1, GOS-2, GOS-3, and GOS-4 (but perhaps not in that order).

The Planning Committee will comment on Leg 80 drilling priorities following the Safety Panel review.

#### B. Co-chief Scientists

The Co-chief scientists for Leg 80 are P. DeGraciansky and P. Wylie Poag (Item 304-VI-B, July 1980 PCOM meeting).

### IV. LEG 81 (ROCKALL PLATEAU)

#### A. Passive Margin Panel Review

The Passive Margin Panel recommended drilling the following sites during Leg 81:

ROCK-3B (pre-rift and syn-rift sediments with both hydraulic piston and rotary coring).

ROCK-1 (continent/ocean boundary with hydraulic piston and rotary coring, and possibly with re-entry capability).

ROCK-3A (pre-rift and syn-rift sediments).

ROCK-4 (to test subsidence history of rifted continental crust).

A problem is that poor weather may interfere with drilling the re-entry site (ROCK-1).

The PMP considers ENA-8 (Newfoundland Ridge) a contingency site for Leg 81 drilling. Surveys for the site, however, will not be completed until later in the year. The Safety Panel will be asked to review the site at its March meeting with only the limited data available.

#### B. Co-chief Scientist

William Berggren (WHOI) has declined the invitation to serve as a co-chief scientist on Leg 81. (Dave Roberts, IOS, is the other co-chief scientist for that leg.)

Following discussion and selecting from candidates suggested by the Passive Margin Panel, R. Moberly moved (seconded by J. Corliss), that Thor Nielsen (USGS,) -- first choice -- or Ditmar Schnitker (NSF) -- second choice -- be asked to be a co-chief scientist on Leg 81.

Vote: 12 for, 0 against, 0 abstain. The motion passed unanimously.

#### V. LEG 82

The PMP proposed drilling ENA-3 (to sample reflector J on the continental rise off Delaware) during Leg 82. They proposed drilling a deep (re-entry) hole, requiring 45 days at the site to penetrate a thick section to 1800 meters sub-bottom.

(Following discussion of the complete 1982-83 drilling program (Item 330, below) the PCOM designated Leg 82 to drill the New Jersey margin transect, postponing drilling the ENA-3 site until April of 1983.)

330 FY 1982-83 DRILLING

#### I. INTRODUCTION

Following upon the National Science Board's approval, in principle, of a 2-year Glomar Challenger drilling program, E. Winterer prepared a revised 2-year trial schedule (distributed as a handout during the PCOM meeting). The schedule differs from that proposed at the October PCOM meeting in that the ship progresses in a counter-clockwise direction around the Pacific. This places the hydrogeology leg later in the program, thereby allowing sufficient time to survey the 150S (Pacific) region adequately. In preparing the trial schedule Winterer assigned no value judgment to the drilling objectives; he subtracted the total number of steaming days required to reach the sites from the 2 years and divided the remainder by the number of legs, giving a result of 35 on site days for each leg. The schedule submitted another schedule to serve as a basis for discussion. The Planning Committee was charged with developing a 2-year schedule before the end of the meeting so that planning could proceed.



## II. REVIEW OF PROPOSED DRILLING PROGRAMS

Each of the chairmen of the JOIDES subject panels reviewed his panel's proposed drilling programs for consideration in the final 1982-83 drilling plan.

### A. Ocean Paleoenvironment Panel

R. Douglas reported on discussions at the recent OPP meeting during which the OPP objectives were refined. The OPP program comprises four legs in the Pacific: Equatorial, Southwest, Central ("old"), and Northwest Pacific.

1. Equatorial Pacific -- coring with the HPC would sample Neogene sediments deposited at high rates in low latitudes to study ocean climate oscillations and patterns of carbonate dissolution. Data would complement those of the North Atlantic transect.

Nine sites were defined between the equator and 15°N and 155°-110°W (Figure 4). The sites were originally selected on the premise that the hydraulic piston core could penetrate only to 100 meters. They were thus located on erosional surfaces of the Equatorial bulge. Because the HPC later tested to 200 meters, the Panel moved the transect slightly eastward to penetrate a thicker, more complete sedimentary section, and cut the list of sites to eight.

The N-S transect would sample the record of changes in the equatorial upwelling and current systems by recovery of sediment deposited during different ages as the plate passed beneath the zone of highest productivity.

The OPP defines 6 primary sites and 2 alternate sites. All sites would be drilled to basement, if time permits.

<u>Site</u>	<u>Approx. Location</u>	<u>Approx. Water Depth (m)</u>
EQ-1	4.5°N, 115°W	3800
EQ-2	2.5°S, 136°W	4400
EQ-3	0.5°N, 133°W	4400
EQ-4	4°N, 133.5°W	4400
EQ-5	6°N, 133.5°W	4400
EQ-6	7.5°N, 138°W	4400
EQ-7	2°N, 125°W	4700
EQ-8	10°N, 136.5°W	4400

Site Survey - All equatorial Pacific sites are located on existing seismic lines, but more detailed bathymetric and seismic control is needed. The Panel hopes that additional surveys will be conducted.

### 2. Southwest Pacific

Of the seven sites selected, shown on Figure 5, all but SW-3 are high priority sites. The transect is planned to study oceanographic conditions during the Cenozoic, and will also establish

3)

66, 69, 70, 71, 77, 78

SEE (4) → 70-71

Eq. PAC.

SITE 161

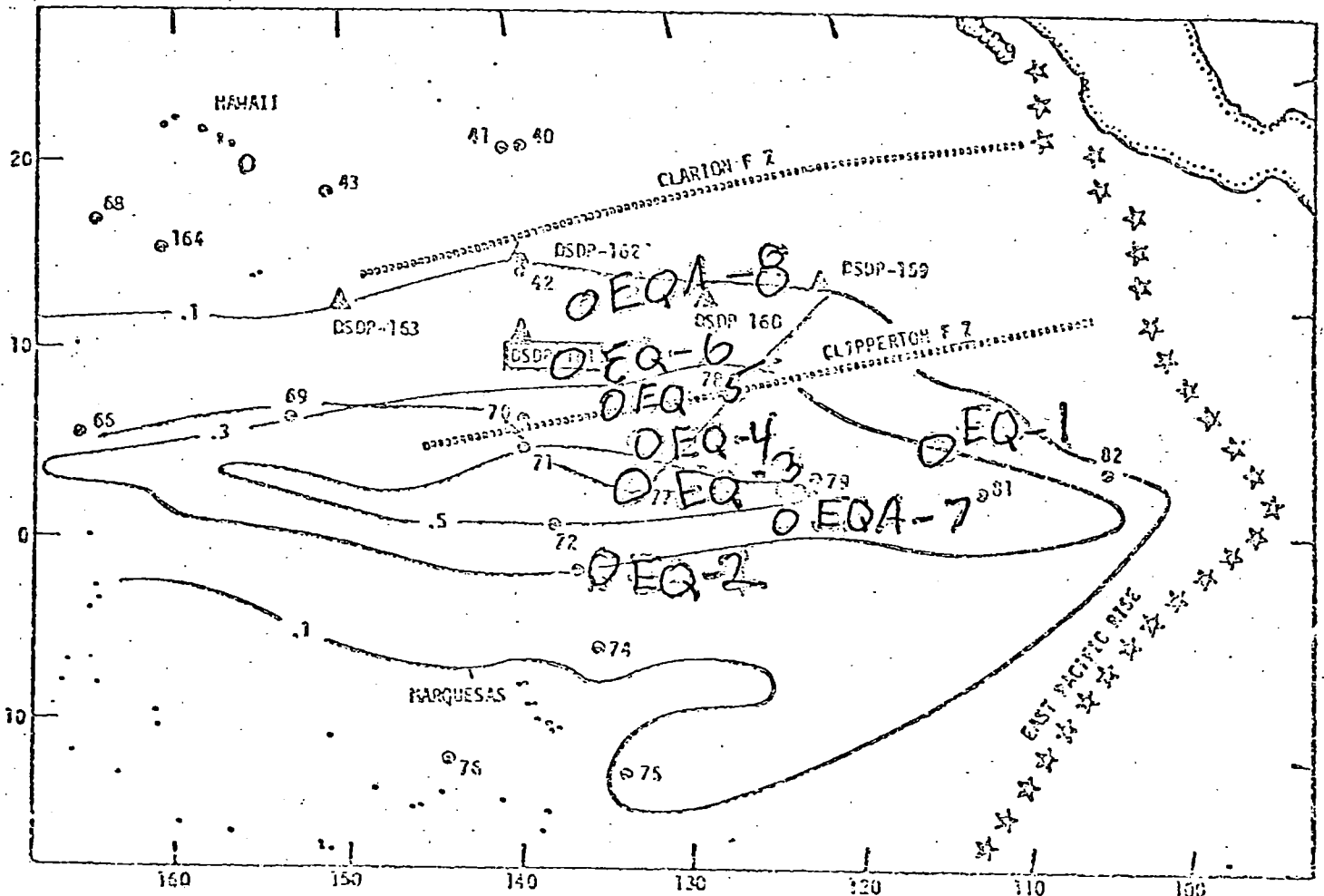


Figure 1. Location of Leg 16 sites (large triangles) in the eastern equatorial Pacific on the west flank of the East Pacific Rise. Small dots are sites from Legs 5, 8, 9 and 17. Contours indicate sediment thickness above acoustic basement in seconds (approximately equivalent to 800 meters).

biostratigraphic correlation of well preserved Cenozoic microfossil assemblages from the subantarctic to equatorial water masses.

SW-1 - West of New Zealand, south of the Chatham Rise: to study the fluctuations of the subantarctic currents during the Miocene.

SW-2 - Near DSDP 284 } to study relationships between  
SW-3 - Near DSDP 207 } cool temperate fluctuations.

SW-4, -5, -6 - near DSDP 206 to form a transect down the Lord Howe Rise.

SW-7 - Near DSDP 208 } to study the record of  
SW-8 - Dampier Ridge } subtropical and tropical  
SW-9 - Near DSDP 289 } water masses.

More sites are planned than can be drilled in one leg. The OPP would prefer not to drill sites to basement, but retain some drilling at all sites if time constraints dictated such a choice be made.

### 3. Northwest Pacific

a. Three sites were proposed on the Japanese margin to examine major fluctuations in currents and climates.

NW-2 - lower priority

NW-3 - off Japan (Japanese proposed site D).

NW-4 - off Japan (Japanese proposed site F).

Drilling these sites (in shallow water) would help establish the history of movements of the front between the Oyashio and Kuroshio currents and history of volcanic events on the Japanese arc.

b. N-S transect comprising four sites:

NW-5 - Near DSDP 303, DARPA area 1.

NW-6

NW-7 - Near DSDP 304

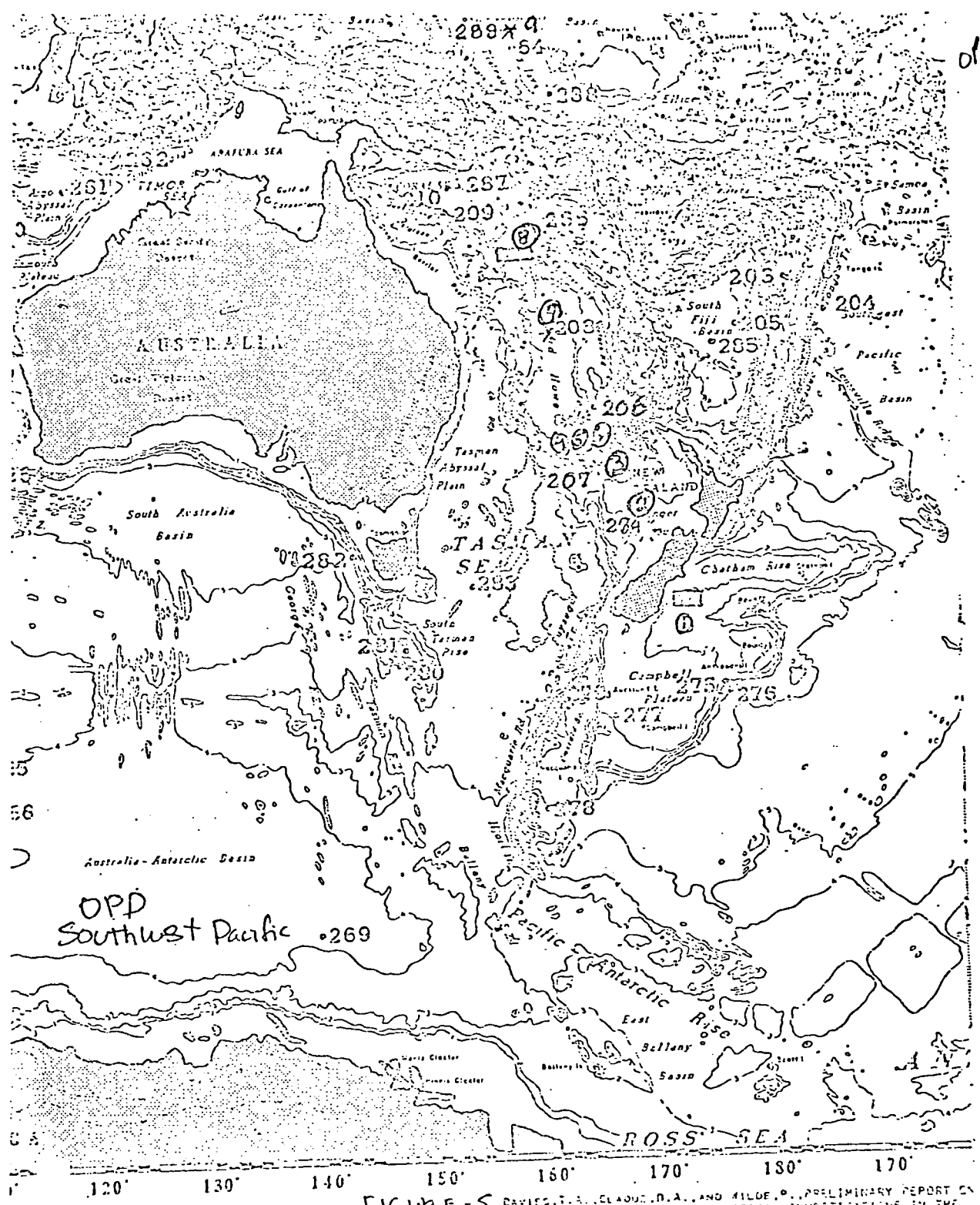
NW-8 - "Southern Site" to monitor history of jet stream contribution to the ocean basin.

All sites would be cored with the hydraulic piston corer.

c. The OPP gave two other sites a lower priority:

NW-9A - Hess Rise (Cretaceous/Tertiary boundary)

NW 10 - Bering Sea, Mesozoic section.



REFERENCES

FIGURE 5

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 Océanographique des Océans  
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DAVIS, T. A., ELAOUF, D. A., AND KILDE, P. PRELIMINARY REPORT ON  
 THE SPIES EXPEDITION. GEOLOGICAL INVESTIGATIONS IN THE  
 WESTERN NORTH PACIFIC, DIO REFERENCE NO. 1-27, 1960.  
 FISHER, R. L., ENGEL, C. S., AND HILDE, T. M. C. 1968. BASALTS DREDGED  
 FROM THE AMBRANTE RIDGE, WESTERN INDIAN OCEAN. DEEP-SEA  
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 FISHER, R. L., JOHNSON, G. L., AND HEDEN, B. C. 1967. MASCAFENE  
 PLATEAU, WESTERN INDIAN OCEAN. J. MAR. RES. VOL. 25.  
 FISHER, R. L., JOHNSON, G. L., AND HEDEN, B. C. 1971. BATHYMETRY IN THE SOUTHERN

The N.W. Pacific sites, although posing interesting science in their own right, are not part of the integrated 3-area program in the equatorial, southwest and western (old) Pacific.

#### 4. Central (Old) Pacific

S. Schlanger and R. Larson presented the scientific program for drilling Jurassic sediments in the Central Pacific.

Earlier drilling in the Pacific failed to reach the Jurassic sediments thought to record environments of the Mesozoic superocean. Drilling at Site 462 could not penetrate sills there but focused attention on another major problem -- the nature, extent, and chronology of Cretaceous mid-plate volcanism.

The proposed drilling would address problems of reconstructing oceanographic and environmental changes as a single supercontinent (and superocean) which has been fragmented into several continents and several oceans. It would also study the mechanisms, and influences of mid-plate volcanism, and the influence of vertical tectonics on Mesozoic environments -- i changes.e., sea level and bathymetry. The interpretation of calcium carbonate compensation depths depends on reliable reconstructions of vertical tectonics.

The proposed sites are:

MZP-1<sup>4</sup> (west of Majuro Atoll) to drill the Majuro fan which contains debris from several atolls. Better control on the age of volcanic edifices in the Marshall-Gilbert-Ellice chain would help resolve whether or not the chain was formed over a hot spot.

MZP-2 (DSDP 462, Nauru Basin) -- Re-enter the hole (cone is in place) and penetrate the sill/flow complex to study the vertical motion in the Nauru Basin and sample Jurassic "superocean" sediments below.

MZP-3 ("Belly Button" Site, N.E. part of Mariana Basin) -- Continuously core through Jurassic sediment to the ocean crust in the oldest part of the Pacific Ocean.

Additional site surveys are required to find a "window" through the mid-plate volcanic rocks.

MZP-4 (DSDP 199, Mariana Basin) -- Set re-entry cone and continuously core through mid-plate sills and flows and oldest sediments, to oceanic basement. Hole 199 penetrated to 450 meters sub-bottom ending in Campanian sediments, but profiler records show that several hundred meters of older sediment lie below the total depth penetrated at site 199 and acoustic basement.

MZP-5 (western part of Mariana Basin) -- Continuously core

---

<sup>4</sup>MZP = Mesozoic Pacific

through pelagic ooze and chalk to Cretaceous(?) reef and into "edifice" basalt to reconstruct Cenozoic oceanographic and subsidence history, volcanic chronology of edifice building, and Cretaceous(?) reef development.

\* \* \*

MZP-2, -3, -4 are first priority sites: MZP-1, -5 are second priority sites.

During discussion, D. Hayes noted that many as yet unproven assumptions are built into the vertical tectonics model. If the model were incorrect, chances of successful drilling would be considerably lessened.

#### B. Ocean Crust Panel

J. Fox presented the Ocean Crust Panel's program.

1. Hydrogeology. A white paper containing a proposal to drill a transect across the East Pacific Rise at 15° south<sup>5</sup>, and a proposal to NSF for hydrogeology experiments contain details<sup>6</sup> of the proposed hydrogeology experiment, strongly supported by the Inorganic Geochemistry and Ocean Crust Panel.

The program would require at least one re-entry plus three other holes drilled at varying distances from the ridge crest.

The transect would lead to a better understanding of the interaction between ocean water and ocean crust. At 15°S, spreading rates are near maximum levels -- allowing for study at a fast-accreting plate edge. The hydrothermal contribution to sediments at 15°S may be as high as 80%; the panels are interested not only in extracting data on chemical compositions of pore fluids, but also in establishing how the hydrothermal contributions vary away from the ridge crest.

2. Costa Rica Rift (old Site 504) -- Return to Site 504 to drill deep into the oceanic crust. Hole 504 was abandoned because of lack of time. Hole conditions were excellent and returning to the site would offer an excellent opportunity to penetrate a major velocity discontinuity (5 km/sec to 6 km/sec) and to conduct good downhole logging experiments. (See also Item 319-IV-A, October 1980 PCOM minutes).

3. Mantle Heterogeneity -- Fox presented the arguments for drilling in the N.W. Atlantic at the October 1981 PCOM meeting (Item 319-IV-A).

<sup>5</sup>Hydrothermal sedimentation in the South Pacific -- a proposed transect across the East Pacific Rise at 15°S by Joris Gieskes, Chairman, Inorganic Geochemistry Panel.

<sup>6</sup>Hydrogeology experiments on D/V Glomar Challenger in 1981-83, Principal Investigator, Roger N. Anderson.

### C. Active Margin Panel

R. von Huene reviewed the Active Margin Panel priorities.

1. Middle America - (a) Return to near Hole 494 on the toe of the slope off Guatemala and (b) drill a hole in the Oaxacan Margin to learn about the dynamics of accretion along this convergent margin. Earlier drilling during Legs 66 and 67 encountered gassy sand beds and the deeper objectives were not reached; thus the complex accretionary history could not be unravelled. The AMP recommends drilling a hole offset from original sites in an area with fewer, thinner sand beds. Evidence suggests that the sand source is local. Drilling the site requires better survey data. Von Huene is attempting to acquire funds (from JOI) to have existing UTMSI lines reprocessed to enhance the upper part of the section which contain gas hydrates.

2. Japan Trench -- The AMP unanimously favors drilling in the Japan Trench to study the structure and evolution of a fore-arc region. Three mechanisms could have caused the uplift and subsidence discovered on Legs 56 and 57:

- a. A spreading-ocean ridge collided with the margin,
- b. Subduction slowed or halted.
- c. Tectonic erosion of the toe of the margin, which may have been much farther seaward.

Drilling would provide information from along the seaward edge of the margin to place constraints on the models.

Drilling would require (a) one hole to maximum depth at Site 440 in 4000 meters of water; 12 days on site, (b) a second hole near Site 435 in 3500 meters water depth, to 1200-1400 meters sub-bottom; 12 days on site. Neither hole would be a re-entry site.

d. Nankai Trough -- The AMP proposes 3 sites in the Nankai Trough to study the subduction zone there: a single oceanward reference site and two sites at the foot of the margin. Drilling would require 19 days on site.

Drilling the Japan Trench/Nankai Trough would require a leg of about a 51-day leg, including steaming time.

3. DARPA sites - Of the sites proposed by DARPA, the AMP prefers site 3 off Kamchatka (first choice) and Site 1A, near Site 303 (second choice). The Panel, however, is not far enough along in their planning to be too specific.

Winterer relayed that he had urged DARPA to consider sites farther south and closer to Hakodate to tie into the Japanese ocean-bottom seismic systems, and to minimize steaming time on any mini-leg.

#### D. Passive Margin Panel

R. Sheridan reported the Passive Margin Panel priorities. (The following is extracted from several discussions during the PCOM meeting.)

1. New Jersey Margin -- A 5-hole transect in relatively shallow water to penetrate Tertiary and upper Cretaceous unconformities. A major objective would be to test the Vail sea-level curve and reconcile the presence of deep-water strata (recognized on the basis of planktonic foraminifers) during a supposed low-stand of sea level. (Details of the proposed drilling are contained in "Transect Across the New Jersey Slope and Rise," a drilling proposal prepared by C. W. Poag, P. C. Valentine, and J. A. Grow, and distributed during the PCOM meeting.)

Heat flow measurements and gas hydrate studies would be conducted during the transect, if possible.

2. Gulf of Mexico -- to core the Mississippi fan with the HPC to provide a 3-dimensional picture of fan structure and development.

3. ENA-3 (continental rise off Delaware) -- to core continuously to the J<sup>1</sup> horizon and relate the stratigraphy to the deep Blake-Bahama Basin site (534). The proposed site, in 4700 meters of water, may require drilling to 1500-1600 meters sub-bottom. Consequently, the PMP proposed devoting an entire leg to drilling this site, rather than combining it with drilling ENA-8. ENA-3 is a high-priority PMP site.

4. N. African Margin -- to study the climatic evolution of the North Atlantic.

The Passive Margin Panel also defined topical priorities as follows:

1. Fans - 1 leg
2. New Jersey transect - 1 leg
3. Slides - 1/2 leg
4. Sediment drift - 1/2 leg
5. Clathrates - 1/2 leg

The Passive Margin Panel noted many passive margin targets had not been scheduled during the current or 1981-83 drilling and recommended that an additional leg be assigned to realize these objectives.

#### III. PROPOSED 1982-83 DRILLING SCHEDULE

The PCOM views scientific planning for the future as its most important function. Members discussed the many aspects and ramifications of arriving at the optimum program. Because the many excellent



programs proposed have been somewhat expanded as the panels went about their detailed planning, they cannot all be accommodated now even within a full two-year program.

The proposed model schedule for 1981-83 drilling shown as Table 1 was developed on the basis of the following rationale.

- Key programs in high latitudes, i.e. the S.W. Pacific paleoenvironment, N.W. Atlantic paleoenvironment, DARPA must be maintained and result in fixed points around which the remainder of the scheduling must work.
- The schedule must preserve a balance between the Atlantic and Pacific oceans.
- Programs were assigned relative weights on the basis of broad scientific interest.
- Weather was considered; the panel did not want to compromise the New Jersey transect because of bad weather and so moved it up to the first leg of the program (September-October). Drilling ENA-3 was then moved to spring of 1983.
- Because survey data for the Mississippi Fans (Gulf of Mexico leg) is not yet ready, the PCOM placed the mantle heterogeneity leg second (November of 1981). The PCOM recognizes that the crustal drilling will take place in a time of potentially bad weather, but drilling can proceed at that time of the year, and this seemed the best solution in forming the overall plan.
- The proposed drilling is somewhat compressed in the area of Japan, but ample time is allowed for the Japanese Trench drilling.
- The N.W. Pacific leg was dropped, because the OPP objectives here were not of quite so high a priority as their objectives in other areas. Some OPP data will be retrieved during coring at the DARPA site.
- The PCOM grouped legs addressing similar objectives (and proposed by the same panel) so that in case of slippage in scheduled drilling, priorities could be traded off among proponents of 2 or 3 adjacent legs and not passed on to legs dedicated to other major objectives.
- The schedule allows for some extra days but does not allow specifically for extra days in port for repairs.

Most members of the PCOM view the proposed schedule as a very good balanced program, but recognized that it would require certain adjustments.

D. Hayes noted that although it was a balanced schedule, he felt it to be unrealistic. Too much was being attempted in too short a

TABLE 1

## PROPOSED MODEL SCHEDULE, 1981-83 DRILLING

Leg	Objective	Beginning Date	Beginning Port	Steaming Days	Port Days	Drilling Days	Total Days <sup>1</sup>
82	New Jersey margin	18 Sep 81	St. Johns	8	5	43	56
83	Geochem. transect	13 Nov 81	Norfolk	14	5	33	52
84	Costa Rica Rift	4 Jan 82	Panama	3	4	35	42
85	Middle America Trench	15 Feb 82	Panama	7	5	33	45
86	Equatorial Pacific	1 Apr 82	Acapulco	24	5	35	64
87	Transit + DARPA	4 Jun 82	Honolulu	24	4	12	39
88	Japan Trench	13 Jul 82	Hakodate	6	5	52	63
89	Old Pacific	14 Sep 82	Tokyo	10	5	71	105
90	SW Pacific		Rabaul	14	5		
90T	Transit	28 Dec 82	Wellington	10	1	0	11
91	Hydrogeology	8 Jan 83	Papeete	22	5	35	62
92	Gulf of Mexico	11 Mar 83	Panama	10	5	35	50
93	ENA-3	30 Apr 83	Norfolk	5	4	47	56
94	N. Atlantic Paleoenv.	25 Jun 83	Azores	22	5	81	120
95	N. W. Africa	23 Oct 83	Dakar	12	-		

<sup>1</sup>Includes port time.

time. Not enough "yard" and "contingency time" had been scheduled which would result once again in compromising scientific programs to meet port schedules.

Lancelot and Peterson (DSDP) noted that the irregular cruise lengths (especially Legs 86, 87 and 88) posed problems with GMI crew staffing, but that they were surmountable.

L. Nikitin expressed disappointment that the N.W. Pacific program had been eliminated.

J. Ewing moved (seconded by J. Creager) that the Planning Committee accept the model schedule (shown as Figure 5) and charged the PCOM chairman (E. Winterer) and DSDP chief scientist (Y. Lancelot) with modifying its details as necessary and appropriate.

Vote 10 for, 2 against, 0 abstain. The motion passed.

Members of the PCOM further noted that the schedule will allow planning to continue at least through the Panama port call and that parts of the program can still be removed if this seems necessary at a later time.

### 331 POST-1983 DRILLING

#### I. INTRODUCTION

E. Winterer reported that at their last meeting (November 1980) and in conjunction with discussions concerning a proposed Conference on Scientific Ocean Drilling (COSOD), the Executive Committee directed planning groups to address long-term planning immediately. Members of the EXCOM suggested a 5-year plan to alleviate the problems and increased expense that shorter programs create.

Winterer asked the PCOM to address the question of long-term planning for ocean drilling. He suggested that the PCOM treat the discussion of post-1983 drilling as an open forum. It should consider all things possible, but should then shape its thinking to fit within the developing the COSOD (Conference on Scientific Ocean Drilling) framework. He suggested that the discussion be organized so that a concrete plan emerges. Time is short, so whatever JOIDES proposes it must propose soon. JOIDES must develop adequate communications both internally and with the appropriate agencies (JOI, NSF).

#### II. FUTURE DRILLING WITH GLOMAR CHALLENGER

In order to understand technological constraints using Glomar Challenger for post-1983 drilling, E. Winterer asked F. (Bud) MacTernan (DSDP, Deputy Program Manager) to report on the condition of Challenger, possible modifications to the vessel, improvement of existing tools, and new tools and technology which might be available using Challenger as the drilling platform.

F. MacTernan's report is summarized in his memo of 23 February 1981 to the PCOM, attached.

### III. CONFERENCE ON SCIENTIFIC OCEAN DRILLING (COSOD)

The Planning Committee continues to support a conference to re-define scientific goals and re-evaluate the direction of ocean drilling (COSOD). The committee views development of both long-term plans and COSOD as closely tied and sees a parallel development of long-range plans (developed in the form of a white paper) and contributions to the conference.

The EXCOM's ad hoc committee to recommend a structure and schedule for COSOD noted that the conference would address "how can planning for drilling and associated scientific programs be organized and coordinated to attack the most important scientific problems in the most orderly and productive way." It further recommended the conference be organized around the study of 8 to 10 major topics (e.g., subsidence, diagenesis, ocean climate, rifting, diapirism, hydrogeology, continental tectonics, physical properties of the earth, and seismic stratigraphy), but also considering present and future drilling technology, and advances in other types of sampling. The EXCOM will appoint a steering committee to oversee the conference, and which will appoint working groups to prepare papers on each topic, oriented to topics.

Members of the Planning Committee noted that perhaps the National Academy of Sciences could still be involved in COSOD through members on the steering committee. The PCOM does not want the conference perceived as self-serving.

The conference is scheduled for fall 1981; the EXCOM has not designated its location.

#### Discussion:

PCOM: Who pays for the conference?

Winterer: The EXCOM has not faced that question yet. It would probably cost between \$35 and \$40 thousand to convene the conference and publish the results.

Moberly: We are dealing with three levels: sponsorship, committees (develop white papers), meeting organization. We need guidance from the overall community (in the steering and topic committee). Our goal is to get good people, not just those in the immediate JOIDES circle.

### IV. DISCUSSION AND RESOLUTION

The Planning Committee in resolving how to organize the post-1983 planning discussed (a) how to coordinate JOIDES planning with COSOD plans and focus, (b) what constraints should be considered in developing the Panel white papers (c) how to define and the address problems,

and (d) how to effect communication among the principals.

Resolution: Following considerable discussion, R. Moberly proposed the Planning Committee accept following resolution.

The Planning Committee, in recognition of the Executive Committee's request for a review of scientific problems that may require drilling after 1983, and of our own committee's desire for a conference on drilling to resolve associated scientific problems, asks its Chairman to take the following steps that would lead to a 5-year post-1983 proposal.

ACTION/  
Winterer

1. Notify NSF, the COSOD Steering Committee, and OMD of our intent.

2. Provide guidelines (see discussion) to JOIDES panels for the preparation and transmittal of advice (before the July PCOM meeting).

The Planning Committee adopted the resolution by a vote of 11 for, 0 against, 1 abstain.

The guidelines to the panels are:

1. Tasks:

- a. To rewrite the White Papers. These should be open-ended and embody broad concepts. They should be related to associated science and stress ways in which such science can be addressed with ocean drilling.
- b. To translate White Paper goals into a concrete and specific 5-year proposal for drilling.

2. Timetable:

- a. Draft papers and proposals from panels due in JOIDES office on June 1, 1981, so that a draft combined proposal can be studied by the PCOM at its July 8-10 meeting in Hannover. There will be time for revisions and refinements later, but we need enough by June to put together the major elements into an outline.
- b. By late summer the PCOM will need more advanced versions of the white papers for inclusion in the set of documents that COSOD will examine at its fall meeting.
- c. The PCOM plans to have the drilling proposal in final form, virtually ready for submittal to NSF, by the time of the EXCOM meeting in early December, 1981.

3. Communications:

Major panels should meet well before July and establish an efficient communications system. (The OPP has recently

met; the OCP, AMP and PMP are scheduled to meet in March, April, and June, respectively.) Much of the work will probably have to be done through the mails. Panel chairman should keep in touch with one another.

Consider arranging an open (perhaps evening) session at a pre-existing conference (AGU? AAPG?) to communicate ideas with the broader scientific community.

4. General Advice:

- a. Aim for a 5-year program; consequently consider long-term experiments.
- b. Assume no political or geographic restrictions. (Although high latitudes pose certain logistical problems, drilling there is not excluded from consideration.)
- c. Assume no drilling platform restrictions or other research vessel restriction. On the other hand, Challenger is the most likely vehicle for the near-term future.
- d. Avoid projects which would create undue safety (pollution) risks.
- e. Consider regional drilling -- programs where the drilling platform would operate in a restricted area for a longer time. Also consider returning to a site with special-purpose tools (e.g. downhole instruments) for specific studies.
- f. Bear in mind possible modifications to Glomar Challenger. (F. MacTernan's memo of 23 February 1981 is attached.) Another document detailing possible new tools and systems for Challenger may be distributed with a cover letter stating that certain tools and technical procedures discussed are in the initial stages of consideration.

Update white papers prepared previously and concurrently by the subject panels. The white papers should embody broad concepts. They are open ended and subject to modification. They should be related to associated science and stress ways in which it can be addressed with ocean drilling.

Ultimately prepare concrete drilling proposals addressing specific goals: These are due at the JOIDES Office by 1 June 1981.

- g. Tie planning into technical feasibility. On the basis of what technology is available now or will be in the future consider,
  - 1) What can be accomplished now.

2) What can probably be accomplished within five years,  
and

3) What possibly can be accomplished after the next  
5-years.

5. Relation to COSOD: Focus white papers and drilling proposals toward our JOIDES 5-year program, but be prepared to modify proposals on the basis of the COSOD recommendations.

Include discussion of general site-survey requirements in the white paper; include more specific site survey plan in the drilling proposal.

Include in the White Papers discussions (as appropriate) of the COSOD topics.

6. JOIDES planning structure:

Consider the need to alter the structure of the planning groups to parallel changes in focus, as the body of scientific information increases.

ACTION/  
Winterer

The Planning Committee chairman will relay guidelines to the subject panel chairmen per resolution above.

### 332 FUTURE MEETINGS

The Plannig Committee will next meet,

8-10 July 1981

Bundesanstalt für Geowissenschaften und Rohstoffe  
Federal Republic of Germany  
Hannover, FRG  
(Helmut Beiersdorf - Coordinator)

An unofficial post-meeting field trip into the Harz Mountains is being arranged for the PCOM members. U.S. PCOM members should talk to Doris Rucker or Rebecca Siegel or their own travel agent early to take advantage of advanced booking and to obtain most economical travel arrangements.

11-13 November 1981

Salishan Meeting Center  
Near Oregon State University  
Corvallis, Oregon  
(Jack Corliss - Coordinator)

February 1982 (Exact dates to be determined)  
Fisher Island Station  
University of Miami  
(Wolfgang Schlager - Coordinator)

Kazuo Kobayashi has invited the Planning Committee to hold its summer 1982 meeting in Japan. He will investigate dates for a June meeting.

\* \* \*

E. Winterer adjourned the Planning Committee meeting at 1500, 27 February 1981.