

JOIDES OFFICE

ROSENSTIEL SCHOOL OF MARINE AND ATMOSPHERIC SCIENCE

305/350-7575

M I N U T E S

JOIDES Planning Committee Meeting
7-9 July 1982
Institute for International Mineral Resources Development
Fujinomiya, Japan

PCOM Members Present

- J. Honnorez (Chairman, Rosenstiel School of Marine and Atmospheric Science)
- J. Aubouin (France)
- H. Beiersdorf (Federal Republic of Germany)
- W. Bryant (Texas A&M University)
- R. Buffler (University of Texas)
- J. Cann (United Kingdom)
- J. Creager (University of Washington)
- D. Hayes (Lamont-Doherty Geological Observatory)
- J. Heirtzler (Woods Hole Oceanographic Institution)
- J. Kennett (University of Rhode Island)
- K. Kobayashi (Japan)
- R. Moberly (Hawaii Institute of Geophysics)
- E. Winterer (Scripps Institution of Oceanography)

NSF Liaison

- I. MacGregor

DSDP Liaison

- Y. Lancelot

JOIDES Office Liaison

- D. Marszalek

Members Not Present

- L. Nikitin (USSR)
- H. Schrader (Oregon State University)

Guests and Observers

- S. Murauchi (Chiba University, Japan)
- J. P. Cadet (Universite Orleans, France)

ACTION AND NOTA BENE ITEMS
 JOIDES PLANNING COMMITTEE MEETING
 7-9 July 1982

<u>Page</u>	<u>Responsibility</u>	<u>Subject</u>
6	PCOM (ACTION)	Send comments regarding <u>Explorer</u> conversion (space, lab design, etc.) to R. Dinsmore, WHOI.
7	Honnoez (ACTION)	Take steps to obtain more realistic support for scientific aspect of future drilling program.
8	DMP (ACTION)	Define future needs on logging and downhole measurements.
11	PCOM (ACTION)	Clarify who is responsible for logging decisions.
11	PCOM/EXCOM (ACTION)	Decide the role of co-chief scientists in logging decisions.
11	Honnoez(ACTION)	Ask H. Schrader to act as OGP liaison for PCOM.
11	Honnoez(ACTION)	Discuss with co-chief scientists on Leg 85 and with DSDP the problem of obtaining accurate core orientation data and interpretations thereof.
19	Lancelot(ACTION)	Negotiate contact for logging services with Schlumberger.
21	PCOM (N.B.)	Vote results on Leg 92 options B and C-2.
24	Honnoez(ACTION)	Invite W. Riedel (DSDP) Core Curator) to Oct. 82 PCOM meeting to clarify archive material distribution.
27	PCOM (N.B.)	Establish a working group to advise PCOM on membership and guidelines for an Engineering and Technological Developments Panel.
27	PCOM (N.B.)	Explore holding COSOD type meeting at 3-year intervals to incorporate scientific community views in AODP structure.

PCOM MEETING, 7-9 JULY 1982
M I N U T E S

JOIDES OFFICE
Rosenstiel School of Marine and Atmospheric Science
Miami, Florida 33149

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367 Opening Remarks and BusinessI. Opening Remarks

J. Honnorez opened the meeting, introduced guests and welcomed R. Buffler representing the University of Texas, a new JOIDES member. K. Kobayashi (Japan) welcomed panel members and guests.

II. Agenda and Minutes

E. Winterer and J. Honnorez informed PCOM members of the addition of items to the agenda. J. Honnorez expressed his concern to cover the "routine" items on the agenda in an efficient manner, so that ample time be available to discuss long range planning, such as the transition from Challenger to Explorer.

The Planning Committee accepted the agenda and the minutes of the 23-26 February 1982 PCOM meeting, with minor typographical corrections.

368 National Science Foundation Report

I. MacGregor reported for the National Science Foundation.

I. National Science Board Endorsement of AODP

The Foundation made a formal presentation to the National Science Board on 18 March 1982 which resulted in a resolution in support of the Advanced Ocean Drilling Program. The resolution indicated support by:

- 1) acknowledging that a long-term program of ocean drilling is an essential component of basic research in the earth and ocean sciences;
- 2) approved the establishment of an office of Scientific Ocean Drilling in the Foundation; and
- 3) authorized the Director to seek resources leading to conversion of the Explorer. (The NSB resolution is Appendix 1 of the May 1982 EXCOM meeting minutes.)

Very strong support exists within the NSB and NSF to seek funds for the Advanced Ocean Drilling Program (approximately \$6 million for engineering/design and \$3 million for science related expenditures).

II. IPOD Membership

Increased membership in IPOD is an NSF goal. NSF hopes that non-U.S. participation in AODP will generate about \$17 million; six participants at \$3 million each are required to achieve the target goal.

Level of interest and organization varies among potential member countries. Canada, Australia and Australia/New Zealand consortium have a high level of interest and are well mobilized at the scientific and political levels. NSF is currently negotiating with Canada to participate in the planning phase of AODP for \$200 K/yr.

Countries which are interested but not well organized in their efforts to participate are: Finland, Sweden, Norway, Denmark, Netherlands, Switzerland and Italy.

Countries showing some interest but not likely to participate in the near future are: Brazil, Mexico, Spain, India, China and Saudi Arabia representing several Arab states.

MacGregor noted that an important decision regarding IPOD membership was made by EXCOM--that only one class of membership (i.e., full membership) will exist. Another form of membership may exist during the planning phase only (e.g., membership for \$200 K to participate in JOIDES panels with full voting privilege). After the planning phase, all members will contribute at the full rate.

E. Winterer requested informal support from NSF and from PCOM to promote IPOD/AODP participation while attending scientific meetings abroad. I. MacGregor indicated that NSF would welcome the help of PCOM in promoting IPOD membership and in explaining the science, cost and openness of the program.

III. Explorer Conversion

A. Background

The Explorer conversion is now in the planning stage. The Interface Working Group has defined the laboratory space. E. Winterer displayed working drawings from Lockheed of planned space utilization on Explorer. Using visual graphics, Winterer presented PCOM a general overview of Explorer space arrangements and traced the pathway of cores from work deck to storage.

Various Planning Committee members expressed concern that more input from the scientific (user) community is needed to ensure that Explorer space is efficiently utilized, living quarters are comfortable, and laboratory design is the best possible. PCOM noted that now (while in the planning phase) is the time to influence the conversion plan. MacGregor advised PCOM that NSF has contracted a team headed by R. Dinsmore (advisor to Woods Hole Oceanographic Institution on marine operations) to provide Lockheed with input from the scientific community. Dinsmore and J. Schiff, an architect experienced in laboratory design, will contact the PCOM chairman and various panel members for advice. PCOM members and others are urged to send comments regarding Explorer conversion to Dinsmore. Dinsmore and Schiff will report to J. Honnorez, chairman of the Steering Committee to oversee Explorer conversion.

ACTION
PCOM

B. Conversion and Operating Costs

Conversion of Explorer to the AODP platform is estimated to cost \$69.6 million ± 12%. Already, there has been a 3% increase.

NSF hopes to secure the funds during the first two years of AODP; an alternate plan is to amortize \$20 million of the total cost over twenty years.

MacGregor presented a detailed budget illustrating the cost breakdown for Explorer conversion and a comparison of operating costs for Explorer and Challenger.

R. Moberly, J. Aubouin and others were skeptical about the figures given for the relative operating costs of Challenger and Explorer, \$74 K/day and \$103 K/day respectively. MacGregor indicated that the amounts were based on hard data and not susceptible to much error.

Discussion following the NSF presentation of the budget breakdown centered on the lack of funds for science during the Explorer conversion. The following motion was introduced by R. Moberly (seconded by D. Hayes):

After reviewing the proposed NSF budget for the AODP the JOIDES Planning Committee expresses its concern at the level of scientific funding during the initial two year start-up period. The Committee believes that the budget is grossly inadequate and does not support site surveys, regional studies and engineering developments in the spirit of COSOD and the views of the scientific community in general. This committee recommends that steps be taken to resolve this problem by obtaining realistic support for the scientific aspect of the future drilling program.

Vote: 12 for; 0 against; 0 abstain.

IV. Request for Information

A. Engineering

NSF needs information from PCOM regarding engineering/development problems and new equipment requirements so that NSF/DSDP discussions can proceed. (MacGregor met privately with Y. Lancelot of DSDP to discuss this matter, and engineering and new equipment topics were later prioritized by PCOM--see "Post 1983 Planning, IIB", p. 30 and 31.)

B. Logging

NSF also requires more information on logging and downhole experiments. The chapter in the 8-year scientific plan is inadequate. MacGregor suggested that JOIDES may want to set up an advisory group for downhole logging. J. Heirtzler indicated that R. von Herzen (chairman Downhole Measurements Panel) would like to participate. Discussion among PCOM members led to the following resolution directed to the Downhole Measurements Panel:

368A

ACTON
Honnorez

Charge to Downhole Measurements Panel:

The JOIDES eight year science narrative defines a significant expansion in a future drilling program for downhole logging, measurements and experiments. PCOM requests the DMP to define the future needs for these activities, particularly with respect to their management, equipment development and deployment, and funding levels.

368B

ACTION
DMP

369 JOIDES Committee, Panel and Working Group Reports

I. Executive Committee

E. Winterer reported on the last EXCOM meeting 21-22 May 1982 in Washington, D.C. Several non-U.S. participants of the IPOD meeting stayed on as observers of the EXCOM meeting. Winterer summarized the meeting as follows:

On behalf of the Executive Committee, a letter was sent by the EXCOM chairman to the Director of NSF formally endorsing the COSOD recommendation in support of the long-term scientific ocean drilling program (the letter appears as Appendix 2 of the EXCOM minutes).

Panel membership ambiguities were cleared up by an EXCOM resolution accepting all changes in JOIDES panel membership as set forth in PCOM minutes of 23-26 February 1982, item 360-XVI.

PCOM was instructed to recommend an advisory panel structure that would be appropriate to the future objectives of the scientific program. The recommended panel structure should be capable of addressing regional problems which, at present, tend to receive less attention within the subject panel structure (see Post 1983 Planning, I. Future Advisory Structure, p. 22).

The "8-year Science Narrative" was accepted as a working document to provide guidelines for planning the future scientific drilling. The document was accepted by EXCOM after discussion which resulted in the inclusion of a preface (Appendix 3 in EXCOM minutes) clearly stating that (a) the narrative is a preliminary document, (b) the ship tracks are exemplary and subject to change, and (c) the specific objectives and actual ship tracks will evolve as new ideas are brought forth.

The EXCOM expressed positive reaction to the COSOD report, presented and summarized by R. Larson (COSOD Chairman). EXCOM was concerned that the continental geology community have input during planning, so that ocean drilling results could be effectively coordinated and integrated with continental geology.

Several AODP management plans were reviewed. EXCOM favors the JOI/BOG plan in which NSF, with advice from an IPOD (oversight) council, contracts JOI to seek contractual control of the Science Operations, and through them, ship operations. The proposed management plan was generally unacceptable to the non-U.S. PCOM members and resulted in considerable discussion detailed in a later section (Future advisory structure, p. 25).

EXCOM recommended to the JOI Board of Governors that the Institute for Geophysics of the University of Texas be admitted to JOIDES.

In response to the drill hole "ownership" question, EXCOM felt that JOIDES should coordinate use of the drill holes.

II. Active Margin Panel

J. Creager reported for the AMP which met at SIO 4-5 March 1982.

No membership changes.

The Safety Committee has requested that a pilot hole free of background hydrocarbons be drilled, before site NK-2C is approved (Leg 87).

III. Safety Panel

E. Winterer reported for the Panel.

The Panel met to discuss the proposed Japanese sites for Legs 86 and 87.

Only minor changes and site rejections were recommended.

The next review will focus on the Mississippi fan.

IV. Downhole Measurements Panel

W. Bryant, PCOM liaison, reported the results of the DMP meeting, 25-26 May 1982. Copies of the minutes of that meeting, including a summary of well-log data for Legs 80-84, were made available to PCOM members.

12 of 23 holes drilled on Legs 80-84 were logged.

Of 11 holes not logged for various reasons, 5 were not logged because of co-chief scientists decisions. DMP requests that PCOM provide some guidance in this matter.

For future standard logging, DMP recommended the following priorities:

<u>Leg</u>	<u>Objective</u>	<u>Logging Priority</u>	<u>Comments</u>
89	Old Pacific paleoenvironment	1	Deep hole
90	SW Pacific paleoenvironment	2	Mainly HPC
91	Hydrogeology	1	At least 1 deep basement penetration
92	Mississippi fan	2	Only 1 deep hole?
93	ENA-3 (NW Atlantic)	1	Deep hole, good seismic stratigraphy
94	NE Atlantic paleoenvironments	2	Mainly HPC
95	Morocco	2(?)	Desirable to log 547B cf. physical props./ stratigraphy Subduction margin
	New Jersey transect	1	
	Caribbean (Barbados)	1	

Logging statistics should be considered for publication in an official document; Y. Lancelot (DSDP) will explore this matter.

Discussion:

I. MacGregor informed PCOM that NSF is trying to arrange with Schlumberger for the logging of all holes on Legs 89-93.

Discussion centered primarily on policy regarding logging decisions. J. Heirtzler said PCOM should clarify who is responsible for logging decisions. E. Winterer indicated that PCOM should decide the role of co-chief scientists in logging decisions. J. Kennett felt that Leg 90 co-chief scientists were unsympathetic to logging on that Leg. Discussion was postponed until later, when Leg 90 was discussed in more detail (p. 11).

V. Organic Geochemistry Panel

A report of this Panel was not made, because of the absence of H. Schrader.

PCOM considered the election of PCOM liasion to the OGP. E. Winterer nominated H. Schrader as PCOM liasion, seconded by W. Bryant. J. Honnorez will ask Schrader to act as OGP liasion.

VI. Ocean Paleoenvironment Panel

J. Kennett reported:

The redrilling of site 289 is planned to be carried out at the end of Leg 89. Scientifically this site forms part of the southwest Pacific latitudinal traverse and will be studied by the Leg 90 scientific team. However, Leg 89 scientists will be given the opportunity of also working up the material on shore.

The North Atlantic sites were discussed at length and 6 sites were identified as high priority.

OPP selected the New Jersey Transect as Leg 95.

A problem exists in obtaining accurate core orientation data and in interpreting these data. J. Honnorez will discuss the problem with the co-chief scientists on Leg 85 and then discuss the matter with DSDP.

VII. Stratigraphic Correlations Panel

J. Kennett reported that OPP made a unanimous resolution to make SCP a working group of OPP. Discussions are needed between the SCP and the Planning Committee representative (J. Kennett) concerning responsibility of required tasks before this is considered.

VIII. Passive Margin Panel

W. Bryant reported:

ACTION
PCOM

ACTION
Honnorez

ACTION
Honnorez

PMP met jointly with OPP and was in agreement with the choice of the New Jersey transect for Leg 95.

The Panel decided that Leg 92 should concentrate on the Mississippi fan.

The Panel wishes to maintain itself during the coming year with no membership changes.

PMP requests a meeting after the Leg 92 site survey, late December or early January.

370 JOIDES Office Business

The JOIDES Office has moved from SIO to RSMAS, Miami.

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Dr. Donald S. Marszalek, Science Coordinator
Ms. Jackie Johnson, Coordinating Assistant

Panel chairmen are reminded of the 3 month advance notice for meeting requests.

371 Challenger Pacific ProgramI. Leg 88. - Northwest Pacific Basin (DARPA Leg)

Two holes are planned at the same site. DARPA (Defense Advanced Research Projects Agency) will emplace a borehole seismometer in one of the holes to be drilled into basement. An HIG seismometer, with temperature and tilt recorders, will be deployed in the second hole. Cores will not be taken and logging is not planned for this Leg.

The Navy vessel De Steiguer will take part in the experiment.

In response to a question by J. Heirtzler, Y. Lancelot answered that an initial report will be published for Leg 88.

II. Leg 89. - East Mariana Basin

Ralph Moberly reported that staffing is nearly complete for Leg 89. An exact location is chosen where the site survey data showed a gap in the deep reflectors. Logging is expected to be especially interesting on this leg because of the variety of rock types, including old altered basement and the Jurassic and Cretaceous sequence. Site 462 will be deepened if time permits.

A request by Moberly to spot-core until the Mesozoic led to the following motion, introduced by J. Kennett and seconded by J. Hertzler:

In consideration of the deep objectives of hole MZP-6 (Leg 89) PCOM recommends that the co-chief scientists be allowed to spot-core the Cenozoic sequence to the Paleocene, with the option of continuous coring in the upper part of the sequence at a later time, if time permits.

VOTE: 12 for; 0 against; 0 abstain

III. Leg 90. - Southwest Pacific

J. Kennett summarized the objective of Leg 90, to obtain a traverse of 9 Neogene sites between equatorial and northern subantarctic water masses in the southwest Pacific. Scientific objectives and other data are shown in Table 1.

TABLE 1

<u>Site</u>	<u>Coordinates</u>	<u>Water Depth</u>	<u>Location</u>	<u>Estimated Maximum Penetration</u>	<u>Primary Objectives</u>
SW9 (= Site 289)	00°29.92'S 158°30.69'E	2224 m	Ontong-Java Plateau	To limit of HPC. 200 m (Late Miocene to Recent)	Equatorial, high resolution, carbonate sequence; Integrate radiolarian biostratigraphy;
SW8	21°09'S 161°20'E	1100 m	South of Landsdown Bank; northern tip of Lord How Rise	600 m. To base of Neogene.	Section at margin of tropics to link equatorial and warm sequences.
SW7 (= Site 208)	26°06'S 161°13'E	1545 m	Northern Lord Howe Rise	500 m. To Neogene-Paleogene unconformity.	Warm subtropical classical sequence.
SW4	30°41.20'S 163°38.65'E	1416 m	Central Lord Howe Rise	500+ m. To Paleogene/Neogene unconformity.	Transitional water mass. Shallow site for depth transect.
SW6	30°38.86'S 164°23.89'E	2291 m	Central Lord Howe Rise	650 m. Drill to first distinct reflector.	Intermediate depth for depth transect.
SW3	35°52'S 165°30'E	1050 m	Southern Lord How Rise	To limit of HPC. 200 m.	(Secondary, contingency site) Neogene section in north temperate water mass.
SW2 (= Site 284)	40°30'S 167°50'E	1078 m	Challenger Plateau	500 to 600 m. To first distinct reflector or slightly deeper.	Temperate (cool subtropical) water mass.
SW1	45°30'S 174°55'E	1400 m	South of Chatham Rise on edge of Bounty Trough	500 - 600 m.	Northern Subantarctic site Tephrochronology.

Since the Miami PCOM meeting (23-16 Feb. 1982), all profile data for Leg 90 have been received.

Staffing is still in progress.

Safety Panel is currently reviewing sites.

DSDP will check if any arrangements should be made with New Zealand (some holes are near N.Z. territorial waters).

Logging: J. Kennett informed PCOM that logging is not planned for Leg 90. J. Cann noted that OPP is reluctant to log any holes. E. Winterer noted that logging in young pelagic sequences may not be cost effective. PCOM agreed that logging will not be done on Leg 90, after Kennett informed the Panel that 2 sites would be lost if 2 or 3 holes were to be logged.

IV. Leg 91. Hydrogeology

Objective is to study open and closed hydrothermal systems in crust that spread rapidly; the proposed area is between 15° to 20°S west of the East Pacific Rise.

Site survey data are completed and under evaluation.

R. von Herzen (via J. Heirtzler) submitted a memo to PCOM suggesting alternate sites if survey data are inadequate.

PCOM discussion resulted in a decision to go ahead with staffing, etc. on the assumption that the objectives of LEG 91 will not change, even if the site survey data are inadequate. J. Honnorez will instruct the Hydrogeology Working Group to consider alternate sites if necessary.

M. Leinen (URI) has accepted the co-chief scientist position.

Logging is essential to the scientific objectives of Leg 91 and will be performed.

372 Challenger Atlantic Program

I. Leg 92 - Mississippi Fan/Orca Basin

W. Bryant reported on the status of Leg 92.

Primary objective is to study the 3-dimensional anatomy of a major fan.

Sites will be chosen as soon as site survey data are available; HPC will be used at 10 or 11 sites.

A. Bouma (Gulf) and J. Coleman (LSU) have agreed to be co-chief scientists.

Authorization from the Dept. of the Interior to drill the area should be requested now, before specific sites are chosen.

II. Leg 93 - ENA - 3

E. Winterer reported that J. Ewing and others are being considered as co-chief scientists for Leg 93. If J. Ewing accepts, then a sedimentologist/stratigrapher should fill the other position.

Y. Lancelot indicated that timing may be a problem on this Leg, based on 1800-2000 m penetration and anticipated rate of penetration. Leg 93 could be 61 days (Ft. Lauderdale to St. Johns, Newfoundland).

III. Leg 94 Northeast Atlantic

J. Kennett reported on Leg 94.

Objective is to document the response of ocean circulation to changing boundary conditions during the Neogene.

A series of 5 sites has been proposed by OPP in the North Atlantic to study changing surface-water gradients including the highest (up to 12°C) glacial interglacial surface water temperature oscillation. All sites (37°N to 50°N) are east of the Mid Atlantic Ridge.

It is estimated that 55 days (17 transit and 38 drilling) are required.

W. Ruddiman (L-DGO) has accepted the co-chief scientist position; R. Kidd (U.K.) is under consideration. J. Aubouin suggested that H. Chamley (France) be contacted to fill the co-chief scientist position.

R. Moberly suggested that at least 2 holes should be logged.

373 DSDP Report

Y. Lancelot reported for DSDP

I. Leg 85 - Equatorial Pacific

5 sites were drilled and a new record in core recovery (2.2 km) was set.

Preservation of laminations in the cores was excellent.

Only problem on Leg 85 was with the core orientation device. The problem resulted partly from the design of the tool, but mainly from its improper rigging by the drilling crew rather than by a responsible technician.

II. Leg 86

Cretaceous/Tertiary boundary was penetrated twice with piston cores.

Co-chief scientists reported that the geotechnical objectives were achieved.

Site NW-3 was not drilled because of lack of time.

Y. Lancelot requested guidance from PCOM regarding the drilling of NW-3.

III. Legs 87-89

Leg 87A - Challenger on site after being blown off site by unexpected weather. The down-hole assembly was lost but the drill string is otherwise intact.

Additional objectives for these legs are:

- 1) drill NW-3 (not drilled on Leg 86)
- 2) test fly-in reentry system (18 hrs. required)

PCOM discussion: K. Kobayashi reviewed the importance of NW-3. Leg 87 has a schedule fuller than most legs; Leg 88 has contingency time built into it; Leg 89 unsuitable for NW-3 because of steaming time and interests of scientific party. Consensus: Try to drill NW-3 at end of Leg 88 and do fly-in reentry experiment on Leg 89.

J. Honnorez called for a vote on the priority of using Leg 88 contingency time, if available:

Drilling Hole NW-3 is the first priority and the fly-in reentry experiment is the second priority.

VOTE: 10 for; 1 against; 1 abstain.

IV. DSDP Budget

A budget of \$22.4 million has been finalized, allowing DSDP to be funded at approximately the same level as last year.

Shipboard equipment will not be upgraded.

Engineering will be confined to current projects with no new developments except for conceptual projects.

V. Logging

The budget allows for a full logging program in FY1983 (Legs 90-95). Discussions with Schlumberger are underway. Lancelot requested a mandate from PCOM to negotiate a flexible and long-term contract with Schlumberger.

The following motion resulted, introduced by E. Winterer and seconded by R. Moberly: PCOM recommends that Yves Lancelot, Chief Scientist DSDP, negotiate a flexible and long-term contract for logging services with Schlumberger.

VOTE: 12 yes; 0 no; 0 abstain

E. Winterer introduced the following motion, seconded by J. Creager.

PCOM recommends logging priorities on Legs 89-95 according to the following table:

Leg	Objective	Logging Priority
89	Old Pacific paleoenvironment	1st
90	SW Pacific paleoenvironment	2nd
91	Hydrogeology	1st
92	Mississippi Fan	1st
93	ENA-3 (NW Atlantic)	1st
94	NE Atlantic paleoenvironments	2nd?
95	New Jersey Transect (?)	2nd?

VOTE: 10 for; 2 against; 0 abstain

VI. Publications

Russ Merrill is now Associate Chief Scientist at DSDP and charged with increasing the publication rate of the Initial Reports volumes.

Volumes 64, 65, 67-70 are scheduled to be in press by the end of the fiscal year.

Sedimentary Petrology and Physical Properties (SP⁴) manual is a second order priority because of lack of staff at DSDP. An outside publisher is being sought.

373B
ACTION
Lancelot

373C

VII. Engineering

Y. Lancelot reported on engineering/development tasks relating to FY 1983.

Drill string design: a computer assisted study is underway to determine the location and magnitude of stresses within a drill string under a variety of operating conditions. Programming still to be done for the DARPA leg 88.

A prototype wire-line reentry system will be tested on the Challenger. Approximately 18 hours ship time are required. FY 1983 funding level = \$20K.

Small diameter heat-flow measurement device of R. von Herzen. The design is being adjusted to improve accuracy. FY 1983 = \$20K.

Improved core recovery through controlled circulation for the corer and extended core barrel. FY 1983 = \$70K.

Drill bit and core cutter testing and development. Legs 89 and 93. FY 1983 = \$10K.

Hard rock spud and advanced (bare rock) reentry. This is a conceptual study only. FY 1983 = \$10K.

Advanced piston corer development.

Operational engineering. FY 1983 = \$10K.

VIII. Shipboard Engineering

The shipboard computer will be installed at Yokahama; Leg 89 will be the first leg to use the onboard computer.

The replacement drill string will also be delivered at Yokahama.

IX. DSDP Staffing

Russ Merrill joined DSDP as Associate Chief Scientist; Audry Wright as Staff Scientist.

374 Leg 95 Alternatives

J. Honnorez requested that PCOM decide on the drilling site for Leg 95. The Planning Committee should assume that no time will be lost on preceding Legs or while in port. E. Winterer reminded the Panel that Challenger must be delivered "clean" to a U.S. port on 9 October 1983, and that approximately 12 days (prior to 9 October) are required to strip the ship.

Four ship track options were considered, shown in Table 2.

Each option was discussed at length. Options A and C-1 were considered unrealistic, mainly because of the lack of time required to meet the drilling objectives.

Discussion of the feasibility of including a N.E. Paleoenvironment Leg (Circumsahara, Morroco Leg) led to the following motion, introduced by E. Winterer and seconded by W. Bryant:

The Planning Committee recommends that the Circumsahara (Morroco) transect not be considered as an option for Leg 95; this recommendation is based on considerations of cost-effectiveness and logistics, and not on the scientific merit of the transect.

VOTE: 12 for; 0 against; 0 abstain.

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J. Honnorez called for a vote to decide between options B and C-2. The results were as follows:

<u>For Option B</u>	Vote: <u>7</u> for
<u>For Option C-2</u>	Vote: <u>4</u> for
<u>Abstain</u>	<u>0</u>

374B

E. Winterer suggested that the Leg 95 options should be re-examined at the next PCOM meeting (October, L-DGO), when more information on Legs 92 and 94 will be available.

AMP, OPP and PMP chairmen will be asked to prioritize the objectives for the relevant Legs, and will be informed of the number of drill days available.

TABLE 2

OPTION A

LEG	START	DRILL/TRANSIT DAYS	END	PORT DAYS	THEME
92	Balboa 27 Mar	18/15	Balboa 18 Apr	5	504B
93	Balboa 23 Apr	35/10	Ft. Laud. 7 Jun	5	Mississippi Fan
94	Ft. Laud. 12 Jun	51/9	St. Johns 11 Aug	5	ENA-3
95	St. Johns 16 Aug	36/22	Norfolk 9 Oct		NE Atlantic Paleoenvironment

OPTION B

92	Balboa 27 Mar	35/10	Ft. Laud. 11 May	5	Mississippi Fan
93	Ft. Laud. 16 May	51/9	St. Johns 15 July	5	ENA-3
94	St. Johns 20 Jul	36/22	New York 12 Sep	5	NE Atlantic Paleoenvironment
95	New York 17 Sep	16/2	Norfolk 9 Oct		New Jersey Transect

OPTION C-1

94	St. Johns 20 Jul	36/23	San Juan 13 Sep		SE Atlantic Paleoenvironment
95	San Juan 18 Sep	8/9	Ft. Laud. 9 Oct		Barbados

OPTION C-2

92	Balboa 27 Mar	12/11	Norfolk 23 Apr	5	Barbados
93	Norfolk 28 Apr	51/7	St. Johns 25 Jun	5	ENA-3
94	St. Johns 30 Jun	36/26	Ft. Laud. 27 Aug	5	NE Atlantic Paleoenvironment
95	Ft. Laud. 1 Sep	35/3	Galveston 9 Oct		Mississippi Fan

375 Phase-Down Guidelines for Challenger Program

J. Honnorez requested that Y. Lancelot (Chief Scientist, DSDP) identify major DSPP tasks.

I. Publication of Challenger Results

Approximately 26-28 months are required to complete Initial Reports volumes after completion of last leg (= April 1986).

J. Cann introduced the following motion, seconded by J. Creager:

Essential to the task of completing the Challenger project is to maintain the present level of effort in publishing the Initial Report volumes and other DSDP publications for a period of 30 months after drilling.

VOTE: 12 for; 0 against; 0 abstain.

II. Data Base

Data processing (encoding, etc.) and dissemination in response to user requests is expected to continue at present level for at least 30 months after drilling, then decrease to a "steady state" level.

The following motion introduced by E. Winterer and ammended by D. Hayes, was seconded by J. Creager:

Recognizing that data processing and dissemination are long-term tasks and will continue into the indefinite future, PCOM recommends that the present DSDP staff continue these functions for at least 30 months after Challenger drilling.

VOTE: 12 for; 0 against; 0 abstain.

III. A. Core Curating and Sample Distribution

1500-2000 samples/month are curated and distributed.

This level of requests is expected to continue for 2-3 years after drilling.

E. Winterer introduced the following motion, seconded by R. Moberly:

Whilerecognizing that the Challenger cores will provide an invaluable asset for the indefinite future, PCOM recommends to NSF that curatorial activities continue at the present level for a period of five years beyond drilling.

VOTE: 12 for; 0 against; 0 abastain.

B. Distribution of Archive Material

Y. Lancelot informed PCOM that some cores are depleted and archive material is occasionally distributed, after approval from the NSF "Sample Panel."

E. Winterer felt that distribution of archive material should be terminated.

ACTION
Honnorez PCOM decided to invite W. Riedel (Curator of cores, DSDP) to the next PCOM meeting for clarification of this matter.

The following motion, introduced by E. Winterer and seconded by R. Moberly, resulted:

375D PCOM advised DSDP and the Curator of Cores not to disseminate archive material until a decision regarding this matter is made at the next PCOM meeting.

VOTE: 11 for; 0 against; 1 abstain.

376 Post 1983 PlanningI. Future Advisory StructureA. Science Advisory Structure

Committee members discussed at length the present science advisory structure, and a variety of modifications to the present structure. A consensus developed, based on the following and other considerations:

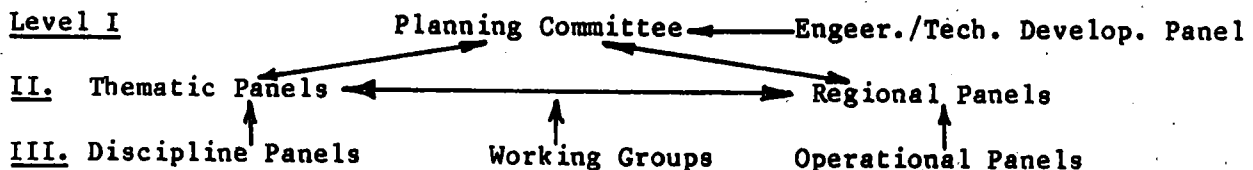
The present science advisory structure has worked well and changes should be made only if an improvement to the existing structure is to be realized.

Subject (= thematic) panels and regional panels are both needed. Thematic panels should be permanent, whereas regional panels should be transient, meet with variable frequency, and reflect the region of ship operations.

An Executive Committee should remain as part of the advisory structure, to maintain a separation between scientific and other (political, etc.) considerations.

The advisory structure should reflect the 12 main scientific themes as identified in the COSOD document, and must also provide a means of recognizing and addressing science which may not fit into the 12 themes.

A two-tier science advisory structure is desirable. The diagram illustrated below reflects the general view of PCOM on the future science advisory structure.



Continued discussion of the proposed advisory structure resulted in a decision to appoint a subcommittee of PCOM to refine the above diagram and present PCOM with two or three alternative advisory structures at the next PCOM meeting.

J. Honnorez appointed the subcommittee which consists of the following PCOM members:

H. Beiersdorf
 D. Hayes
 R. Moberly
 E. Winterer
 J. Honnorez (Chairman)

B. JOI/JOIDES/NSF/Science Operator Relationship

Evaluation by PCOM of the Executive Committee's endorsement of a management plan which interposes JOI between NSF and the Science Operators (figure p. 27, EXCOM minutes, 21-22 May 1982) resulted in general disagreement with the EXCOM management plan.

J. Aubouin noted that JOI, unlike JOIDES, is a purely U.S. entity. France and other non-U.S. AODP members would be concerned about fair representation under the EXCOM management plan.

PCOM was in general agreement that: JOI was necessary to represent the program in contractual agreement; and that the EXCOM endorsed management plan did not adequately reflect non-U.S. interests.

Motion originally introduced by J. Cann and seconded by J. Creager, amended by D. Hayes and seconded by R. Buffler:

376A PCOM believes that interposition of JOI between NSF and the science operator, and between JOIDES and the science operator in the overall structure of AODP is inappropriate. Filtering by JOI at this level would, in the view of PCOM, compromise the fully international nature of the project and the efficient flow of advice from scientists to operator.

VOTE: 12 for; 0 against; 0 abstain.

Motion introduced by J. Creager and seconded by E. Winterer:

376B The Planning Committee views the need to retain scientific control over ship operations as essential. It therefore recommends that whatever future operational structure is established, the ship operations be a subcontract of the scientific operations contract.

VOTE: 12 for; 0 against; 0 abstain.

C. Engineering/Technology Advisory Structure

During discussion of an engineering and technology advisory structure, the following issues were raised:

Engineering and development are generally the first to suffer in any budget cuts.

COSOD objectives cannot be met without new engineering and technological developments.

Development of new engineering and technology must begin soon if the AODP is to begin shipboard operations in 1986.

Motion introduced by E. Winterer and seconded by R. Moberly:

376C

To ensure the availability of new engineering and technological developments necessary to achieve the scientific objectives of AODP as identified in the COSOD document PCOM designates the establishment of an Engineering and Technological Developments Panel.

VOTE: 12 for; 0 against; 0 abstain.

Motion introduced by W. Bryant and seconded by R. Buffler:

The Planning Committee hereby establishes a Working Group to advise PCOM on membership and guidelines for the newly established Engineering and Technological Developments Panel.

VOTE: 10 for; 0 against; 0 abstain.

PCOM recommended that the Working Group consist of the following four persons:

Max Newson
 Stan Serocki
 Roy Hyndman (Pac. Geoscience Center, CAN)
 Alfred Jageler (AMOCO, Tulsa)

C. Hocott and R. von Herzen were mentioned as alternatives.

D. COSOD-Type Advisory Structure

A general consensus exists among PCOM members that a COSOD-type meeting should be held at approximately 3-year intervals, to incorporate the views of the scientific community as a whole into the AODP advisory structure.

II. Implementation of 8-Year Plan

A. Science Planning

Discussing leading to a tentative and incomplete list of AODP drilling objectives considered the following:

It is unknown at this time whether the AODP platform will depart from an Atlantic or Pacific port.

The Explorer is unable to traverse the Panama Canal.

The ship will most likely traverse the world two times within an 8-year period.

Explorer has the capability to remain on site for extended time periods, and has the capacity to accommodate a large (multi-objective?) scientific party.

376D
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Scientific objectives not accomplished during the Challenger program will be incorporated into the AODP program.

Approximately 18 months lead time is required between receipt of a proposal and actual drilling.

J. Aubouin objected to the selection of potential drilling sites at this time, and prefers that site selection wait the establishment of the new AODP management and advisory structure.

Motion introduced by R. Moberley and seconded by J. Cann:

376E

In order to start efficient planning for the post-1983 drilling program, in terms of site surveys, requisite engineering and technical developments, logistics, and weather, the Planning Committee has considered areas and purposes in the Atlantic, Pacific and Antartic Oceans listed in the COSOD report and JOIDES 8-year Program Plan. We recommend to the EXCOM that an initial year or two of drilling include both (A) work in areas for the purposes shown in Table 3, and (B) certain additional regional work not yet identified, so that the areas in Table 3 may be connected by a ship/s track that is reasonable in terms of scientific balance, weather and logistics. Proposal of a specific initial ship track will await advice from participants in future drilling and a decision as to whether the ship will start from an Atlantic or a Pacific port.

VOTE: 9 for; 0 against; 1 abstain.

TABLE 3

	<u>Location</u>	<u>Weather</u>	<u>Site Survey</u>	<u>Regional Synthesis</u>	<u>Engeer. Tech. Dev.</u>	<u>Panel/Working Groups</u>	<u>Primary Panel</u>
ATLANTIC	Barbados	-	Yes?	Yes	+	AMP-TECT	AMP
	N.W. Africa	-	Report	"	OK	PMP-OPP-TECT-SED-HIST	PMP-OPP
	New Jersey	N. Summer	Yes	"	OK	PMP-HIST-SED	PMP
	Nenez Columbia	-	Yes?	"	OK	PMP-REG.W.G.	PMP
	Norwegian Sea	N. Summer	Yes	"	OK	OPP-PMP-HIST-TECT	OPP
	Mid Atl. Ridge	?	No	"	+++	OCP-TECT	OCP
	Weddell Sea	S. Summer	?	"	OK	OPP-PMP-HIST-SED	OPP
	Scotia Sea	S. Summer	?	"	OK	OPP-AMP-HIST-TECT-SED?	AMP
PACIFIC	Hole 504B	-	Yes	"	+	OCP-ICP	OCP
	Peru Chile Trench	-	RFP Out.	"	?	AMP-OPP-TECT-SED	AMP
	Japan Sea	N. Summer	No	"	OK	AMP-TECT	AMP
	Bearing Sea/ Gulf of Alaska	N. Summer	No	"	OK	OPP-HIST	OPP
	EPR Crust	-	No	"	+++	OCP-TECT	OCP

B. Engineering Planning

Y. Lancelot mentioned some engineering developments which relate to the post-1983 program but which require substantial lead time. This discussion among PCOM members resulted in Table 4 and the relevant motions.

Motion introduced by E. Winterer, seconded by R. Moberly:

376F

The Planning Committee, having considered proposals for engineering developments related directly to the Challenger drilling program, moves that the developments be prioritized as follows: (see Table 4).

VOTE: 11 yes; 1 no; 0 abstain.

Motion introduced by J. Cann, seconded by W. Bryant:

376G

The Planning Committee recognizes that in order to ensure the success of drilling with Explorer certain engineering developments need to be undertaken now and these developments as listed in Table 4. We urge the Executive Committee and the National Science Foundation to fund these developments as soon as possible. We draw the attention of EXCOM and NSF to the deep-sea engineering expertise existant at DSDP.

VOTE: 12 yes; 0 no; 0 abstain.

C. Site Survey Planning

PCOM requires information on the status of site survey and regional synthesis so that site survey planning can proceed.

D. Hayes (PCOM liaison to the Site Survey Panel) will contact J. Jones (SSP Chairman) regarding status of site survey data. J. Honnorez will then contact D. Hayes in two weeks.

J. Honnorez will ask L. Dorman to remain as chairman of JOI Site Survey Panel until F. Dunnebier returns from Leg 85.

377 Closing Remarks

I. J. Honnorez and other PCOM members thanked K. Kobayashi for the thorough meeting arrangements and excellent facilities.

II. Future meetings.

The next Planning Committee meeting will be held at Lamont-Doherty Geological Observatory, 6-8 October 1982.

Tentative: 25-28 January 1982, San Francisco Bay area (Explorer visit)
 Early June 1983, U.K. (Swindon or Glasgow suggested)
 September 1983, Seattle, Washington
 January 1984, College Station, Texas

J. Honnorez adjourned the PCOM meeting at 17:00, 9 July 1982.

TABLE 4

PCOM Priority List for 1983 and Post-1983 Engineering Development

(A) = Highest Priority (C) = Lowest Priority

<u>Subject</u>	<u>1983</u>	<u>Post-1983</u>
Drill string characteristics	A	A
Wire-line reentry	A	A
Heat-flow measurement	A	-
Controlled circulation	A	A
Drill bit and core cutter testing and development	A	-
Hard rock spud	-	A
Advanced piston corer (very long stroke)	C	A
Engineering maintenance	A	-
Cutting shoe instrumentation	-	A
Hi-Temperature drilling (600°C max.?)*	-	A
Straddle packer	-	B
Core orientation	A	-
Directional drilling	-	C
HPC disturbance reduction	A	-
Large diameter drill string	-	A
Slim-line riser/concentric string	-	B
High-speed drilling (improve recovery rate)	-	A
Reverse circulation	-	A
Aseptic core barrel	-	C
Down-hole measurements while drilling	-	C

*Ocean Crust Panel will determine temperature maximum.