AGENDA

5th June
(9.00 A.M.) - Joint Session of ODP Council and JOIDES EXCOM
(Co-Chairmen: S. Toye and J. Knauss)

1. Call to Order and Introductions
2. Signing of Japanese Memorandum of Understanding
3. Adopt Agenda
4. NSF Report
5. JOI Inc. Report
7. Wireline Logging Services Operator (LDGO) Report
8. DSDP Phase-down Report
9. Member Country Reports

6th June
(9.30 A.M.) - JOIDES Executive Committee Business Session
(Chairman: J. Knauss)

1. Minutes of Previous Meeting: 18-19 January 1985 (Miami)
2. Planning Committee Report (10-11 April Norfolk meeting)
3. Future Meeting Arrangements
4. Any Other Business

(1.30 p.m.) ODP Council Executive Session (Members Only)

N.B. There will be a JOI Board of Governors meeting on 4 June to
discuss non-drilling matters. On the afternoon of 6th June the
JOI Board of Governors will re-convene to consider drilling
related business.
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MINUTES

Members:
J. Knauss (Chairman) - University of Rhode Island
H. Beiersdorf (for F. Bender) - Bundesanstalt fur Geowissenschaften und Rohstoffe (FRG)
A. Berman - University of Miami
B. Biju-Duval - IFREMER (France)
D. Caldwell - Oregon State University
D. Hayes (for B. Raleigh) - Lamont-Doherty Geological Observatory
R. Heath - University of Washington
C. Helsley - University of Hawaii
W. Hutchison - Department of Energy, Mines and Resources (Canada)
A. Maxwell - University of Texas, Austin
W. Merrell - Texas A&M University
J. Steele - Woods Hole Oceanographic Institution
E. Winterer (for W. Nierenberg) - Scripps Institution of Oceanography

Observer:
K. Kobayashi - Ocean Research Institute (Japan)

Liaisons:
R. Larson - University of Rhode Island/PCOM Liaison
P. Rabinowitz - TAMI/Science Operator Liaison
S. Toye - National Science Foundation Liaison

Guests:
R. Anderson - LDGO/Wireline Logging Services
E. Bloch - Director, National Science Foundation
J. Bowman - Natural Environment Research Council (United Kingdom)
G. Gross - National Science Foundation
M. Keen - Bedford Institute of Oceanography (Canada)
B. Munsch - European Science Foundation
W. Schlager - Leg 101 Co-chief
A. Shinn - National Science Foundation
D. Spearman - European Science Foundation

Joint Oceanographic Institutions Inc.
J. Baker
J. Clotworthy
D. Rucker

JOIDES Office
D. Keith

ODP/Texas A&M University
C. Auroux
A. McLerran
K. Riedel
J. Knauss, Chairman, convened the 18-19 March, 1985 meeting of the JOIDES Executive Committee. A. Berman (RSMAS) welcomed meeting attendees to the area and encouraged their participation in a variety of activities (including a tour of the JOIDES RESOLUTION and a visit from NSF Director, E. Bloch) that were planned during the meeting period.

The meeting was held under the terms of membership as described by a resolution (Motion 311) passed at the October 1984 EXCOM meeting in Narragansett, RI. The motion, known as the Narragansett Resolution, states that:

The EXCOM recognizes that the Ocean Drilling Program is scheduled to begin its operational phase on 5 January 1985. At that time, JOIDES membership will consist of those countries which have a regular member MOU agreement with NSF. Further, those countries who have made a commitment to NSF to join ODP in the future will be given observer status on the EXCOM and POCOM. Scientists from non-JOIDES countries which were formerly candidate member countries will no longer be members of POCOM and panels after 5 January 1985, but they shall be eligible for reappointment. POCOM should consider at its April meeting the completion of membership of panels, including scientists from all countries.

As a result of this resolution, only those countries with full memberships were seated at the table. Japan was given observer status and was also seated at the table. Full members are France, the Federal Republic of Germany and Canada.

The Chairman congratulated Canada on deciding to join ODP as a full member and welcomed W. Hutchison (Canadian EXCOM representative) and M. Keene to the meeting. Also, Knauss congratulated Japan for their commitment to join ODP as a full member on October 1, 1985 and welcomed K. Kobayashi as an observer to the meeting.

For this occasion, the Chairman also extended special guest invitations to J. Bowman (U.K.), J. Stel, B. Munsch, and D. Spearman (ESF) and K. Crook (Australia). However, K. Crook was unable to attend. The Chairman encouraged the special guests to continue their efforts to achieve full membership in the Ocean Drilling Program.

The Chairman closed the opening remarks section by asking the EXCOM attendees if there were any objections to the use of a tape recorder to aid in recording the meeting minutes. It was agreed that the tape would be erased after the minutes were prepared. There were no objections.

ADOPTION OF MEETING AGENDA

The Chairman asked for and received a motion to accept the agenda as presented. The motion was seconded by A. Maxwell (UT) and unanimously adopted by the EXCOM with this amendment:
The Science Operator Report would follow the NSF Report.

314 ADOPTION OF THE MINUTES FROM THE 15-16 OCTOBER 1984 MEETING

A. Berman (RSMAS) moved that they be accepted. The motion was seconded by A. Maxwell. The motion was unanimously adopted by the EXCOM.

315 NATIONAL SCIENCE FOUNDATION REPORT

S. Itoye (NSF) reported that the Director of NSF, the Office of Science Technology and Policy and a number of supporting congressional committees are very pleased that the Ocean Drilling Program has entered into its operational stage. Toye noted that ODP has had the personal support of G. Keyworth in the Office of Science Technology and Policy, and his deputies as well as the support of key members in the U.S. Congress and in non-U.S. governmental agencies. There is also strong support for ODP in the Ocean Sciences Section of the NSF.

The Ocean Sciences Section at NSF has been reorganized into 2 co-equal segments. They are the Ocean Sciences Research Section headed by Robert Wall and the Oceanographic Centers and Facilities Section (OCFS) headed by Sandra Toye. OCFS includes all of the activities formerly included in the Oceanographic Facilities and Support program (OFS) plus the ODP and new activities in Ocean Engineering and Oceanographic Technology. Toye emphasized that for budget presentation purposes, ODP and OFS remain as separate line items. This means that funds cannot be moved between the accounts without Congressional approval.

Toye will continue to represent the NSF at the JOIDES EXCOM, and as Section Head, will continue to be responsible for the international aspects of the ODP. Program activities within the ODP will reside with G. Brass. A. Sutherland will be in charge of contractual and technical aspects of the program.

This reorganization is the result of an effort to elevate within the U.S. government the international aspects of ODP and to separate the U.S. activities in drilling from international drilling activities.

The proposed budget for FY 86 is presently in Congress. Approximate contributions are as follows:

- $28,850,000 U.S.-ODP
- $12,500,000 International-ODP
- $41,350,000 Total for Drilling-related Activities

The U.S. funds are divided into:
$19.00 million ODP-U.S.
2.50 million DSDP
7.35 million U.S. Science Program
$28.85 million

Due to the structure of the national budgetary system, the NSF appropriation is a section of a larger omnibus bill with the Dept. of Housing and Urban Development, NASA and other independent federal agencies. Therefore, the NSF appropriation is vulnerable as a result of problems with other members of the bill. However, NSF was not slated for a budgetary decrease in FY 86 and appears headed for a slight increase in funding.

MEMBERSHIP

Japan

Japan's commitment of full membership in ODP helps to satisfy the budgetary needs of the program. Presently, active negotiations concerning the details of the 10-year agreement are being conducted with the Ministry of Science and Culture. A signing ceremony may occur at the next EXCOM meeting in June.

Canada

The Canadian government's decision to enter ODP as a full member will result in a signing ceremony in Washington, DC around 15 April 1985.

United Kingdom

J. Bowman commented that presently, the U.K. has 50-60% of a contribution and is actively seeking to convert that amount to a full membership. However, the near future does not look promising. Factors such as a 3% annual decrease for the next 10 years in the science budget in combination with the exchange rate situation have made it difficult for the U.K. to purchase a full membership at this time.

European Science Foundation

D. Spearman stated that the ESF sends an enthusiastic message of strong commitment and hope to return to ODP as a full member. Presently, ESF needs one outside partner having 40-50% membership. At this time, that requirement has not been met. However, negotiations are occurring with Australia and a firm decision may occur as early as June or at the latest in August. It also appears that a union with the U.K. may be a possibility. This is an appropriate arrangement as the U.K. is a member of the European Science Foundation.

Despite the exchange rate situation, the ESF is confident that 50-60% of a full membership may be obtained. Several members of the ESF
consortium have expressed a commitment to raise their individual contributions and in one instance, an ESF member has tripled its contribution.

In closing, Spearman stated that the ESF requests additional time to resolve the membership issue and also requests that they be given a status in the program. These requests were made in order to assure ESF of continuity in ODP. It is generally feared throughout ESF that if the continuity is broken, the consortium may be disrupted.

Discussion:

Maxwell (UT): If membership decisions are not made within present fiscal year limitations, will funds appropriated for this time period be lost or will the amount be deducted from the budget of the upcoming FY?

Spearman (ESF): This situation varies from country to country. In some instances, it may be difficult to carry funds from one FY into another FY. The question is additionally difficult to answer as ESF does not actually hold any monies.

Bowman (U.K.): Monies are now available for a candidate membership if this means the U.K. stays in the program. However, the unused funds for FY 84-85 would be returned to the Treasury with new monies becoming available for FY 85-86.

Knauss (URI): Does ESF consider continuity in ODP to be thought as an issue of financial continuity or in terms of panel membership?

Spearman: ESF is specifically referring to the matter of panel membership. The issue of participation must first be solved, then we will settle the financial matter. The future of ESF participation will be set after 1 October. We should like to tell our members that we had participation on panels and on the ship and therefore ESF should make a contribution.

Larson (URI): Presently there are no U.K. or ESF representatives on JOIDES committees and panels. Unless the EXCOM works out a membership arrangement with the U.K. and/or ESF or I am advised to the contrary, those slots will be filled by POOM.

Toye: What is the impact of the Narragansett Resolution on staffing for upcoming legs?

Rabinowitz (TAMU): Staffing is completed up to Leg 102 and includes participants from the ESF and the U.K.

Winterer (SIO): There are ESF participants on Leg 103, however they are not on in the capacity of ESF representatives.

Consensus: The issue of ESF and U.K. participation needs further discussion at this meeting. The EXCOM should examine opportunities that
create an interim membership arrangement for the U.K. and ESF which accommodates the continuity matter, but at the same time deals fairly with those countries that have already made full commitments to ODP.

USSR

The issue of participation by the USSR in ODP raises problems in the U.S. in the areas of licensing and technology transfer. These mainly result from the advanced nature of the drillship. The USSR presently maintains informal contacts with the program through the I.U.G.S. and through scientist to scientist interaction. Membership of the USSR will require complete agreement among EXCOM members and inclusion should not occur on less than a full membership basis. Some official discussion in the U.S. has taken place on the membership matter but no decision has been reached. EXCOM was reminded that because of the layout of the ship, there is no way to restrict the use of technology.

Discussion:

Berman (RSMAS): What items are responsible for the technology issue?

Toye: There are no specific items, but possible items are the drilling technology, the onboard navigation and positioning systems, the science lab equipment and the computers.

Berman: Those appear to be licensing issues and not primarily technology transfer issues.

Toye: Before export licensing requests are granted, an interagency committee, COMEX, suggests which issues may be considered as technology transfer issues. The technology transfer issue is a policy that has not been clearly defined, making it difficult to apply to the Soviet matter.

Maxwell (UT): It appears that the issues of technology transfer and export licensing are all being combined.

After the NSF Report, the EXCOM again addressed the issue of international participation. The EXCOM Chairman read to EXCOM a telex from the ESF President which indicated that the ESF is prepared to sign a Memorandum of Understanding (MOU) for full membership if negotiations with Australia are successful. The Chairman then asked EXCOM if they would consider a one-half year of full price membership for ESF at this time, providing that the ESF consortium obtain a full membership by 1 October 1985.

Discussion:
Spearman (ESF): The ESF is reluctant to make a short-term arrangement until the long-term is known. It is better to resolve the issue of permanent participation before considering short-term interim arrangements.

Toye: Could the ESF be more specific on present financial commitments?

Munsch (ESF): Presently, ESF has $700K in written commitments and $450K in oral commitments. This totals to $1.150M and does not include the Danish contribution which is scheduled for FY 86. Further, all commitments are made on the basis of long-term involvement. This commitment is understood by the participants to be renewable for a number of years. If a short-term plan was adopted with a termination of membership in October, then the ESF would be placed in a difficult position.

Knauss (URI): The proposal was made in an attempt to develop a realistic scenario that might solve membership problems within the ESF and protect the rights of the full members of JOIDES. If this proposal does not solve ESF's problems, then I withdraw it.

A subcommittee of the EXCOM, composed of the 3 non-U.S. full members and 1 U.S. member met to discuss and develop a resolution concerning ESF and U.K. involvement in ODP. The following is a discussion of the results of that meeting.

Discussion:

Helsley (HIG): To summarize the meeting, there was no single consensus reached. However, there is a feeling that there should be an offer of full membership for less than a full year (i.e. from now to 1 October). After 1 October full memberships would be offered for full year duration only and there would only be one class of membership. There was concern expressed over the ESF including the U.K. as a consortium member. The subcommittee also discussed the issue of a 6-month period of less than full membership with strong participation, however, there was no consensus.

Beiersdorf (FRG): When the FRG signed a full MOU with NSF it was understood that the U.K. would be a full member. If this does not occur, then the FRG may have to re-evaluate its position.

Biju-Duval (France): France also joined ODP with the understanding that the U.K. would be a full member. The short-term solution may solve the present problem but a long-term solution must be found. Also, the creation of a membership class other than full membership is not a good idea.

Hutchison (Canada): Canada signed a full MOU with the understanding that the U.K. would also be a full member. If the U.K. joins with the ESF, then Canada may have to re-evaluate its position.

Bowman (U.K.): A membership for FY 84-85 other than candidate membership is presently out of the question. Therefore only after October 85 could another class of membership be addressed. Another course of action
appears to be to join the ESF, however, opinions expressed here indicate that this is not acceptable.

The following resolution was drafted by the subcommittee and presented to EXCOM where it was moved upon and seconded by Maxwell:

**MOTION:** The JOIDES Executive Committee expresses its appreciation and admiration for the United Kingdom's long history of oceanographic research and for its active and vital participation as a charter member of the International Phase of Ocean Drilling.

The Executive Committee is conscious of and sensitive to the current difficulties faced by the United Kingdom in attempting to join the Ocean Drilling Program, and urges the United Kingdom to increase its efforts to join the program.

It is the position of the Executive Committee, that entry of the United Kingdom to the Ocean Drilling Program other than as a full member would be neither appropriate nor in the best interest of the Program or of the other full members. This position is justified by the size of the United Kingdom's relevant scientific community, its economic stature, and the level of its prior involvement in scientific ocean drilling.

The Ocean Drilling Program has now commenced virtually on schedule, within budget, and with a vastly improved scientific capability. For the Program to proceed and reach its full potential as planned, the Executive Committee urges the United Kingdom to become a full member by October 1985.

Vote: for 13, against 0, abstain 0.

**Consensus:** Communications must be kept open and ESF should be encouraged to become a full member by appropriate means. EXCOM encourages the Australians to become active and committed to the ODP. If special arrangements are applied to the U.K. membership issue, then those measures should also apply to ESF. EXCOM noted that the previous statements imply that Australia should seek to join ODP in conjunction with ESF.

The EXCOM advised the POOM Chairman to continue making appropriate panel chairmanship replacements noting that the panels should keep their present size and not grow larger. Panels should keep their present momentum with regard to their functions and objectives. It was also suggested that replacement of panel members be done very slowly, consistent with the resolution of membership issues.

**Discussion:**

Maxwell (UT): What is the present status of panel membership?

Larson (URI): Presently, the panels have been reduced by 2 members with U.K. and ESF members deleted. Action has also taken place at the chairman level with the Tectonics Panel Chairman, J. Leggett, being replaced by D.
Cowan. Future chairmanships to be dealt with are the TEDCOM and the Site Survey Panel. I prefer to keep the panels at their 14-member level and have them work a bit understaffed until the possibilities of membership are worked out.

Bowman (U.K.): Arrangements have been made with the JOIDES Office concerning panel memberships. J. Cann has been rotated off the PCOM and will be replaced if the U.K. joins.

Larson: The invited guests for upcoming panel meetings include two scientists from the U.K. and ESF. These people have data that are necessary for future planning considerations.

Anderson (IDDO): Technical representatives from BP have been invited to the next DMP meeting. Are there problems with their attendance?

Knauss: It is probably best if they did not attend.

Spearman (ESF): The PCOM Chairman should not feel pressure from ESF to keep ESF members on JOIDES panels because of the membership issue.

Munsch (ESF): For the April PCOM, the regular delegate from the ESF will be unable to attend. What message should be sent to his alternate?

Larson: I ask that the EXCOM not become too specific in setting the guidelines for panel invitees.

Consensus: PCOM may continue to invite scientists from the U.K., ESF, and Australia as guests but only when it is absolutely necessary for scientific planning. Panels should be limited to those representatives of member nations except where a specific speciality is needed.

316 SCIENCE OPERATOR REPORT

P. Rabinowitz reported that the results from the shakedown cruise (Leg 100) were very encouraging as all systems worked well. The purpose of Leg 100 was to conduct tests of the dynamic positioning system, to test the drilling and coring equipment (e.g. rotary, APC, XCB, heave compensator), to test the scientific instruments in the labs and to train the science, technical and drilling crews. Drilling resulted in holes at ODP Site 625 which yielded calcareous ooze of Pliocene-Pleistocene (approximately 1.6 m.y. old) age and at BAH-1, to test the re-entry objectives. In the Florida Straits area Leg 100 made an unsuccessful attempt to gather information for Leg 101. At this site, the drill string could not be used due to a combination of shallow depths and strong current conditions that created strumming problems with the drill pipe.

Discussion:
Larson (URI): Is there any idea of what the upper limits for re-entry and normal drilling are?

Rabinowitz: There appear to be no upper limits for normal operations. The problems that were mentioned were a product of shallow water and strong current conditions.

LEG 101

W.O. Schlager, co-chief of Leg 101, reported that the leg was a success with 80% of the scientific objectives achieved. Drilling problems which occurred were the result of thixotropic sands that plugged the drill strings and other problems were hydrocarbon shows.

The objectives of Sites 626 and 634-636 were to test the megabank hypothesis for the development of the Bahama platforms. Sites 628, 629 and 630-633 were drilled in order to sample the Gulf of Mexico side and Atlantic margin slope of a large carbonate bank that once welded Florida and the Bahamas. Theory has it that this bank was disrupted to yield the megabanks.

Results from drilling indicate support for the megabank hypothesis as shallow water platform carbonates were found under the Straits of Florida, the Blake Plateau and under the NE Providence Channel. Drowning of the megabank appears to coincide with the Cretaceous anoxic events. Drilling results of the slope objectives suggest that carbonate platforms are 180° out of phase with the terrigenous systems during periods of sea level rise and fall. Drilling also sampled a large contourite deposit. That suggests the Gulf Stream has had the same intensity over the last 30 m.y. Unfortunately, during drilling operations at this site a bottomhole assembly was left in the drill hole.

Discussion:

Larson (URI): What is the initiation of the megabank segmentation?

Schlager: The timing appears to be L. Albian (approximately 100 m.y.) which coincides with the Cretaceous anoxic events. Also, the drowning of the megabank could have occurred in increments during that period.

Maxwell (UT): Seismic data from the area indicate structures that are suggestive of an E-W current flow. Did you sample these?

Schlager: They were drilled and appear to be longitudinal ridges composed of contourite sands.

Heath (UW): How were the shipboard operations?

Schlager: On the whole, the RESOLUTION is more stable than CHALLENGER. The heave compensator worked well and should work better in deeper water.
The ship is certainly the equal of CHALLENGER and has the potential to be superior. The drilling crew got better with time and the technical staff proved confident. However, more techs dedicated to particular instruments or tasks are needed and the power supply is not consistent as brownout and blackouts occurred.

Winterer: How is the scientific cohesiveness on objectives affected by the size of the scientific party?

Schlager: At times drilling results make it harder to reach a consensus as there are many opinions.

Kobayashi (Japan): Have results from Leg 101 been released to the press and are the objectives of future cruises available?

Rabinowitz (TAMU): Press releases were issued after Leg 101 and prior to Leg 102. Every cruise will have a pre-cruise as well as a post-cruise press statement. Copies are available at this meeting (Appendix A).

Heath: Will copies of the press releases be routinely circulated among all the committees?

Rabinowitz: Copies will be circulated as they become available.

LEG 102

C. Auroux, ODP staff representative for Leg 102, reported on the scientific objectives of the cruise.

The principle objective of the leg is to acquire a comprehensive suite of borehole geophysical data on Mesozoic age crust in the Western Atlantic, namely at Sites 417/418. Specific objectives include the determination of in situ velocity structure and permeability in old oceanic crust as well as a determination of the porosity vs. depth function. The cruise will also attempt to determine the thickness of the magnetic layer and the presence of convection in old crust. Finally, the leg will sample and determine the chemistry of water at the bottom of the drill hole and attempt to determine the direction and magnitude of in situ stress.

Logging will consist of the conventional logging package to determine velocity, density, porosity, resistivity, natural gamma radioactivity and equilibrium temperature structure in the hole. Other logging activities include the use of a multichannel sonic logging tool, packers, flowmeter, the borehole televiwer, the 3-axis magnetometer, resistivity, heat flow and magnetic susceptibility logging tools. Finally, a combined VSP/Oblique Seismic Experiment, using a 3-component borehole seismometer, listening to air gun and explosive sources and the R/V FRED MOORE as the shooting ship, will be conducted.

Discussion:
Toye (NSF): The operating costs of the FRED MOORE and the costs of developing equipment for the VSP experiment are among the first items to be funded by NSF as a result of the new U.S. Science Program for Ocean Drilling.

LEG 103

The Galicia Bank cruise is almost fully staffed and verbal permission to drill has been received from Spain.

LEG 104

The Norwegian Sea leg has had co-chief scientists assigned (J. Thiede, O. Eldholm). Permission to do work is pending on a decision from the Norwegian Petroleum Board.

LEG 105

The Baffin Bay/Labrador Sea leg has had co-chief scientists assigned (M. Arthur, S. Srivastava) and permission to conduct operations is pending a decision from the Canadian and Danish governments.

Discussion:

Anderson (LOGO): Is there any response from SEDCO on the proposed 72-day length of the cruise?

Rabinowitz: I expect to receive comments from SEDCO on the matter and we will approach PCOM with alternate plans. There are, however, a number of reasons for not wanting a 72-day leg at that time period. These reasons are based on scientific as well as logistical points of view.

Larson (URI): A recent meeting at URI between the Science Operator and co-chiefs for 105 yielded a compromise between a regular cruise and the 72-day proposed length. This consensus will be presented at the April PCOM and is subject to their approval.

Rabinowitz: The science operator is not only concerned with the length of the leg but some aspect of the weather windows and the scientific objectives of the cruise. Negotiations are occurring with Canada and NSF for an ice patrol vessel to scout for the low lying icebergs. Costs could approach $10K/day and may total $250K.

Bowman (U.K.): At what time of the year is the leg scheduled?
Rabinowitz: Only approximate dates are available but drilling will start in mid-August.

LEG 106

For the MARK-I Leg, only one of the co-chief slots has been filled at this time (J. Honnorez). Also bare rock drilling is scheduled. The plans for bare rock drilling were presented by A. McLerran.

Bare Rock Drilling

With the successful completion of Leg 101, hard rock drilling is now the thrust of the development program. Meetings with the LITHP Chairman have resulted in the development of a set of criteria for site selection. Contractors have been selected with SEDCO to develop the base structure and Southern International, specialists in drilling holes in hard rock terrain, consulted for planning.

The present target for the delivery of the hardware will be in time for the October cruise date for 106.

Current planning calls for spudding into the bare rock by initiating a pilot hole which is followed by regular drilling. However, in order to start the hole, the drill bit must be stabilized. Stabilization will begin when the structure known as a "gravity base" is planted on the seafloor. The gravity base has dimensions of 20 ft X 7 ft X 5 ft and is equipped with an acoustic telemeter which monitors the tilt of the structure. Once on the seafloor, a frame/cage will be lowered on the outside of the drill pipe with an attached color imaging sonar. The high resolution color imaging system will delineate the bottom morphology and tests of this system proved to be very successful. A black and white TV will also be available for close-up examinations. The box will be pumped full of cement, resulting in a tool weight of approximately 200K pounds.

Actual drilling of the hole will be done using a positive displacement downhole mud motor, developed in the FRG, that will rotate only the drill bit. Presently, this is the best technology available and this technique will solve the problem of rotating/flexing the threaded connections of the drill collar which is a common cause of bottom hole assembly failure. The initial tests will use a conventional mud motor that will not recover the upper 20 m (60 ft) of the hole. Later, the motor will be modified with a hollow shaft that will allow for retrieving a 2-inch diameter core. Once the hole is started, the plan is to revert back to conventional rotary drilling with the retrieval of cores in the conventional manner.

The program is on schedule, proposals are out for the TV system and the technique for lowering the camera has been proven by the deep water mining industry. On the Leg 102B, the transit leg, the high resolution downpipe sonar and the cage will be tested. The base structure will be fabricated in Halifax, NS and will be picked up after Leg 105 is completed.
Discussion:

Winterer (SIO): Is there any provision during drilling in the fast spreading areas to set a conductor casing to compensate for fracturing in zero age crust?

McLerran: Will have the capability to set a conductor casing for hot rock drilling. Also with technology from the mining industry combined with the heave compensator, the rate of core recovery will be increased.

Winterer: Do you think the drill bit life will be increased in comparison to DSDP operations?

McLerran: Since most of the work on Leg 101 was HPC work, data are not yet available.

Maxwell (UT): Is logging a problem on the EPR hole?

Anderson (LDO): A newly designed circulation system will keep the tools cold enough to operate for limited time periods in the hole.

Winterer: Can the temperature be monitored during the drilling operation?

Anderson: We don't have that capability at this time.

At the end of the Science Operator Report, P. Rabinowitz announced that at the end of March, A. McLerran will begin his second retirement. EXCOM proposed the following resolution to express its appreciation and to wish McLerran well.

MOTION: EXCOM recognizes the considerable impact of Mr. Archie McLerran in the successful start of the Ocean Drilling Program and his numerous contributions to ocean drilling technology. We wish him well in his second retirement and thank him for being willing to help us when we needed him the most.

Vote: for 13, against 0, abstain 0.

317 JOINT OCEANOGRAPHIC INSTITUTIONS INC. REPORT

J. Baker, President of JOI Inc. began his report by congratulating TAMU for readying the ship and sending it to sea within the time constraints. Baker also congratulated LDO for the development of state-of-the-art logging activities, the JOIDES committee for lab design and equipment, the former EXCOM Chairman A. Berman, and the former POCM Chairman J. Honnorez, under whose leadership the ODP took shape during the interim period.
Baker stated that the funding problems of the U.K. and cash-flow problems from different national fiscal years have resulted in a $2.2 million budget shortfall that must be made up internally (i.e. from JOI funding and the subcontracts to TAMU and LDGO) for FY 85. However, the budget can be arranged so that the shortfall can be absorbed without major impacts to the program by:

1) The lower than expected day rate charge during the Leg 100 shakedown

2) Deferring a number of items into the FY 86 budget

3) Trimming some internal operations.

By deferring important JOI and high priority JOIDES items into FY 86 and later, the program will have sufficient funds to do the high quality of science proposal and to achieve COSOC objectives. JOI also is attempting to work within the limits of the present budget in order to avoid any major impact to the Program (i.e. eliminating bare rock drilling or deferring it to another year). JOI agreed that the possible elimination or deferral of bare rock drilling would not occur at this time.

JOI strongly suggested that EXCOM find a means with which to accommodate the financial situations of potential member countries because only a limited number of costs can be deferred into the later years without some major impact. The areas that probably will be impacted due to their high costs are the deferral/elimination of bare rock drilling or the deferral of riser drilling, either of which will affect the quality of science in the program.

Discussion:

Knauss (URI): Could you talk specifically on those items that may be deferred?

Baker: I cannot be specific at this time as many are in the negotiating stage.

Merrell (TAMU): Presently the Science Operator is operating with a limited amount of funding. If major problems (e.g. the loss of a couple drill strings) occur, it could require drastic cutbacks.

Winterer (SIO): It is hoped that the impact of the funding decisions will be relayed to the POOM, so not to come as a surprise.

Maxwell (UT): Since we are operating on a very tight budget, JOI should develop a number of scenarios so that POOM will have contingency plans for a given situation before the problem occurs.

Larson (URI): Is there a guarantee that bare rock drilling will occur in FY 86, assuming that only technological and no financial problems exist?
Rabinowitz (TAMU): If no major problems occur between now and Leg 106 then bare rock drilling will occur. However, it must be remembered that there are no contingency funds for major problems.

Further discussion of the ODP budget shortfall centered on the development, by JOI, of a series of scenarios with implications to the program. It was stressed that in order to manage the program on a sound financial basis JOIDES planners must know how much funding is available and that a dialogue must exist between management and the JOIDES community. However, various members of EXCOM disagreed with the idea by indicating that planning will not be improved by such an exercise and usually such exercises are not beneficial. Baker indicated that JOI had already investigated a number of scenarios and their implications and the result was that there were no program reductions planned at this time. It was further noted that the budget shortfall has been an issue at every POCM and EXCOM meeting and therefore is not a new item.

Consensus: There was a consensus among EXCOM that there be a dialogue between JOI Inc. and the JOIDES community when budgetary matters are being decided. This suggestion is made in order that fiscally sound decisions be reached through negotiation and the rationale for those decisions and their impact on planning discussed by all parties.

318 WIRELINE LOGGING SERVICES OPERATOR REPORT

R. Anderson reported that all the Schlumberger and ODP speciality tools, computers, and other equipment are onboard the RESOLUTION and are fully operational.

LEG 101 SUMMARY

At Site 627, the first open hole logging site, the hole caved in on the nuclear combination tool during routine logging activities. The tool was severed at the rig floor and attempts at fishing for the tool were unsuccessful. The hole was cemented in and abandoned. The Schlumberger commitment to ODP is best exemplified by the rapid response (10 days) with which the array of tools was replaced. These tools were taken off a Shell oil rig that is working in the Gulf of Mexico and transported by boat to the RESOLUTION which at that time was working in Exuma Sound. The remainder of the leg was very successful in spite of difficult drilling conditions, every hole was frequently filled with sand due to cave-ins. One logging run was lost as the core barrel could not be retrieved from the pipe. The logging program proved a success due to the gamma spectroscopy logging tool. This non-commercial tool, a nuclear accelerator (Minitron) is on loan to ODP from Schlumberger and recorded a number of firsts during its operation. It has never been run in pure seawater, in drill pipe, in collars and in a situation where the data was available to the public.
This situation provided a better set of logs than were ever produced by CHALLENGER.

Site 634 experienced numerous cave-ins with the drill string becoming stuck when rotation stopped. The problem was solved by placing the drill string approximately 50 m above the bottom of the hole, heaving a 300 m logging interval, placing a wiper on top of the block which enabled circulating water to be pumped through the tool and routinely rotating the pipe. The logging tool remained in the drill case and the lower portion of the hole (lower 80 m) was logged through 2-inch steel casing. The result proved to be spectacular. The standard set of logging runs measures calcium, iron, chlorine, silicon, hydrogen, sulfur, gamma rays and a quality factor. The data from tool yielded synthetic curves that determined lithology with depth. The chemical logging data was converted to density and velocity curves which were then transformed into impedance data. From the impedance, synthetic VSP seismograms were produced which were compared to actual seismic section at the drill site. Results from this exercise proved very favorable as synthetic reflectors and multiples cross-correlated with actual records. In order to verify the use of this technique at other locations, a hole is now needed that has actual sonic and VSP data in order to confirm/calibrate the chemical logs. Also we need to ground-truth the relative percentages of chemical elements in the well with XRF/XRD measurements made on the cores. These results have excited Schlumberger enough that the tool will be again available for Leg 103. The tool which is presently commercially unavailable will probably be on consignment to ODP from Schlumberger at some reduced level beginning in FY 86, beginning with Leg 106. The tool will probably be available on Legs 103, 104, and 105 on a no-cost basis because Schlumberger will also benefit from these field programs. Beginning with Leg 103, every tool must have at least 24 hours of use scheduled before Schlumberger will loan it to ODP at no cost.

The remainder of the downhole logging tools scheduled for use on Leg 101 were not deployed because of the unstable nature of the drill holes.

LEG 102

For Leg 102, Schlumberger has provided three specialty tools that were ordered by the co-chief scientists. They are the Tracer Ejection Tool (TET) which measures flow rates, the tool also includes temperature and pore water samplers. In addition the entire suite of LDGO logging tools is onboard with two 12-channel VSP tools and two borehole televiewers. However due to tight financial constraints within the LDGO bore hole group and the fact that the TET and one VSP are additional items to our contact with Schlumberger, there will be an additional amount charged per day to total program costs. The end result is the TET and the VSP will only be available for this leg and no others because there are presently no funds available to pay for their use on future legs. The other VSP has been borrowed from the U.S. Navy. Two of each tool are required for a standard logging program.
The logging program has been asked to reduce its FY 85 program budget by 7%. Presently LDGP has expended a good portion of its FY 85 appropriation. The program can continue to deliver services for the remainder of the fiscal year, even with the loss of downhole tools. The tool loss should not affect the insurance premium; however, another disaster may greatly affect our operating budget. The budget for FY 86 is already very constricted with items deferred from FY 84. Logging services requires at least 3 of each tool in order to provide a safety net for logging services. The third tool originally scheduled as part of the FY 86 budget has been eliminated and replaced with the second of these tools. Again, Wireline Logging Services is confident that services comparable to any in the world can be delivered.

Discussion:

Winterer (SIO): Which items will be dropped from the present suite of downhole logging tools?

Anderson: Plans call for the elimination of those tools that are part of the Schlumberger specialty tools, the WST (Well Seismic Tool), the Tracer Ejection Tool and the High Resolution Temperature Log. The only tool that presently is not contracted to ODP is the WST, all the others are under contract.

Beiersdorf (FRG): Are the non-U.S. tools also covered by the insurance policy?

Anderson: The magnetometer developed by the FRG is not, as an example, covered by the insurance policy. The policy can be amended to include those tools.

Beiersdorf: Can the gamma spectrometry tool work in rough seas without the heave compensator and how do you plan to use it on Leg 103?

Anderson: A heave compensator is presently scheduled from Schlumberger. However, if one is not available, the procedure would be to secure the tool to the drill pipe heave compensator. Bear in mind, that the tool will work much better with the heave compensator aboard.

Keene (Canada): Could a list of tools and charges be published? This would allow a scientist to possibly obtain specific tools through a funding agency.

Anderson: This mechanism presently exists through the Downhole Measurements Panel, which should be contacted concerning particulars on obtaining the tools.
FEDERAL REPUBLIC OF GERMANY

H. Beiersdorf reported that the exchange rate presents some problems but does not endanger present program participation. The research vessel, SONNE, is now collecting site survey data in Australian waters together with BMR participants. Work has been completed in the Lau Basin in the SW Pacific. Investigators found evidence of a spreading center with recently extruded basalt and hydrothermal deposits located in the back arc region. The SONNE also visited the NE edge of the Manahiki Plateau in order to examine volcaniclastic sediments (200 m thickness) that are continuous from DSDP Hole 317 on the plateau to a distance of 200 km north.

FRANCE

B. Biju-Duval reported that in FY 85-86 CNRS increased the amount of funding for scientists. Increases in funding are also expected from the Committee on Petroleum and Mines. Finally, IFREMER has also contributed support by providing funding as well as ship time. The total of French support to ODP will be approximately 5 million francs. Difficulties are expected in FY 86-87 and many programs may be deferred. These problems are the result of the exchange rate and not the quality of the program.

France has scheduled a number of regional site surveys. One ship is scheduled to conduct Tyrrhenian Sea MCS site surveys in the Mediterranean. The CHARCOT recently accomplished a site survey in the China Sea using Seabeam and high resolution seismic surveying. Current plans call for ending the 1985 campaign by conducting regional site surveys in the South Pacific. These surveys will be followed by an MCS survey in 1987. Surveys of the Chile Triple Junction have been proposed but presently there are no definite plans. In 1986, a one-month site survey cruise is planned in the Indian Ocean. The proposal to conduct the survey has been submitted but has not yet been approved.

There will also be an increased submersible activity in the future. France presently has the capability to dive to 6000 m. A program is planned in June-July 1985 in conjunction with Japan and in 1987, there are plans to dive in the Atlantic on the Galicia Bank. The decisions on the dive program for 1986 will occur in June 1985.

IFREMER is working with WHOI and TAMU in the development of the fly-in re-entry system. Plans also include using a submersible to locate a re-entry cone in conjunction with the re-entry system.

The French scientific community is planning a conference to discuss results of the French involvement during the IPOD phase of DSDP.

Discussion:

Beiersdorf (FRG): Will Cyana still be operated?
Biju-Duval: Cyana will be operated at sea and a special program is planned (with the FRG) for diving in the Red Sea.

Toye (NSF): Is it new that CNRS has earmarked funds for involvement in ODP?

Biju-Duval: This is not new but is a continuation of an existing program.

CANADA

W. Hutchison reported that the Department of Energy, Mines and Resources together with the Ministry of State for Science and Technology and Environment of Canada have developed a mechanism for funding Canada's involvement in ODP. An ODP-like council has been established to promote government to government interaction. A Canadian national committee for ODP will be put in place which will embody the Canadian Geoscience Council. This will establish the Canadian EXCOM and PCOM representatives and a secretariat. Presently we will continue the ad hoc group that is responsible for Canada's entry into ODP. The group is composed of W. Hutchison as President, M. Keene as Vice-President, and J. Malpas as Secretary.

The only questionable element concerning Canada's involvement in ODP is the possible lack of sufficient numbers of marine geoscientists to fully participate. We would like to address this problem by stimulating interest in marine geosciences in Canada through the involvement of graduate students and cooperation with non-Canadian members of the worldwide scientific community.

Leg 105 (Baffin Bay/Labrador Sea) is of prime interest to Canada and to a lesser extent Leg 106. The only problem foreseen for Leg 105 is locating a scout vessel for iceberg patrol.

In closing, Hutchison thanked all parties in the U.S. for their support during the discussion of membership.

JAPAN

K. Kobayashi reported that Japan is pleased to be headed for a full membership in ODP. The Japanese government decided to enter ODP for the FY period of April 85-March 86.

Long-term plans call for a joint French/Japanese program using the CHARCOT. Further plans include a site survey/dive program to be conducted in the Japan Sea. Many regional site surveys in the Southern Ocean and Bonin arc areas are also planned. Proposals to conduct these surveys will be submitted to PCOM by late May 85. In the near future, plans call for the development of down hole measuring instruments.

Japan expressed concern over the public relations aspects of ODP. This concern is based on the current ship schedule that has the RESOLUTION visit the NW Pacific in 1989. At that time Japan will have been an ODP
Japan requested that video programs or other materials be distributed to Japan in order to publicise ODP.

Discussion:

Merrell (TAMU): Video equipment is available on the RESOLUTION to record activities and possibly a video/slide show could be produced to highlight ODP activities.

320 PLANNING COMMITTEE REPORT

R. Larson, POCM Chairman, reported that the POCM's high priority items are the scheduling of the Weddell Sea Leg and the Baffin Bay Leg. POCM's concern was that the Weddell Sea Leg start no later than 1 January 1987 and that Baffin Bay/Labrador Sea start no later than 15 August 85. To accommodate these dates, Leg 102 was initially shortened by 18 days and later an additional 5 days to get to Baffin Bay/Labrador Sea in August. Leg 103 is now locked in on the schedule with no anticipated changes in length or scientific objectives. Legs 104-106 are still in the preliminary planning stages with Leg 105 being the most difficult to plan. Difficulties for 105 lie in the ice problem in Baffin Bay and the weather problem in Labrador Sea. POCM has asked the science operator to increase the length of the leg to 70 days. However, a meeting at URI resulted in another plan that will shorten the leg to less than 70 days but keep it longer than the standard 55-day length. The highest scientific objectives are in Baffin Bay where ice presents a problem. The alternative is to go to Labrador Sea for one-half the leg (assuming no weather problems) and spend the other half in Baffin Bay.

Discussion:

Anderson (IDGO): Will the leg be shortened due to ice conditions?

Larson: The time will be adjusted but finalized plans will not be known until the RESOLUTION leaves port in Stavanger, 2 weeks before the start of Baffin Bay drilling. At the April POCM, those plans will be finalized.

Knauss (URI): Are there backups if bare rock drilling on Leg 106 fails?

Larson: There are contingency plans for Leg 106 such as drilling in the sediment pockets in the Kane Fracture Zone for oceanic Moho. If bare rock drilling totally fails there are 2 fall-back locations in the Atlantic - the Yucatan Basin and a deep site off Northwest Africa.

PACIFIC DRILLING
The future of drilling at the Chile Triple Junction is site survey dependent. Proposals to conduct site surveys have been submitted by the U.S. and France. However, it looks as though the French proposal may fall through. The decision to include Chile TJ will be made at the April PCOM meeting. It should be noted that alternatives exist if Chile TJ is eliminated from the schedule.

Plans presently call for one leg of Weddell Sea Drilling in January/February 1987. Plans then call for 1.5 years of drilling in the Indian Ocean after Weddell Sea drilling and prior to drilling on the Western Pacific active island arcs. The IOP and SOP should provide PCOM with a prioritized listing of objectives for that time period. Again in this region, weather is a problem.

The highest objective is the Kerguelen Plateau area with drilling being planned in the austral summer of 1987-88. This plan contrasts with the objectives in the NW Indian Ocean and the June-September monsoon season. Plans may call for drilling in the Red Sea during that weather period. There is international support from France, Germany, Japan and Australia for drilling in the Red Sea.

Discussion:

Bowman (U.K.): The CHARLES DARWIN will be in the Indian Ocean in mid 1985-85 and this schedule may benefit ODP in producing site survey data. Proposals for the Indian Ocean do exist and perhaps the JOIDES Office could match proponents with interests in the region.

Knauss (URI): The JOIDES Office can maintain those connections through a number of mechanisms (e.g. a wider distribution of the JOIDES Journal).

Larson: The international aspects of site surveys are being overseen in the JOIDES Office by T. Mayer.

Hayes (LDGO): If the Chile TJ site survey cannot be done within the present time frame, then it will not be dropped from the program, but deferred until the next round of drilling.

LONGER-RANGE PLANNING/COSOD OBJECTIVES

The PCOM stated that in regard to the first 2 years of ODP, the objectives found in the COSOD report are indeed being addressed with the exception of the deep hole into Layer 3. LITHP has been asked to respond to the issue with possible trade-offs with shallower objectives. In short, planning to date is in accordance with these objectives.

The PCOM considered riser drilling after the first circumnavigation by the RESOLUTION. The feeling was that this issue needs years of advanced planning with very high priorities in order to make the program viable in
terms of objectives that would be sacrificed. Drilling would probably occur after 1991.

PANEL STRUCTURE

All previous Working Groups are presently disbanded with the exception of the Mediterranean Working Group which has requested one more meeting to formulate a drilling program to be presented at the PCOM in Germany.

A Red Sea Working Group was formed at the January 1985 PCOM. This Working Group will report to the IOP on a drilling campaign. The philosophy in the member selection process was that the international rules were suspended and only the most knowledgeable people for the slots were selected.

The rotation of panel members was also changed at the last PCOM. The present procedure is found in the PCOM Motion (518) below:

The appropriate lines of the 1984 Terms of Reference shall be replaced with "panelists appointed in 1985 and in the future will serve 3 years; one-third of the panelists will be replaced each year."

Discussion:

Winterer (SIO): The final meeting of the Mediterranean Working Group is over-represented by non-JOIDES members. The panel listing indicates that 4 of 10 of the positions are filled with members from the U.K. and ESF. This large number transcends the argument of scientific expertise.

Hayes (IDGO): This meeting should probably be delayed to a time when the site survey data has been fully evaluated and possibly, the ESF membership resolved.

Winterer: I am also concerned with the balance of expertise on the LITHP. The panel is very under-represented in the area of geochemistry and over-represented with respect to hard rock petrologists.

Knauss (URI): This concern should be expressed to your PCOM representative.

PROPOSALS

Proposals received by the JOIDES Office are categorized in the format that is printed in the JOIDES Journal. This format lists the proposal title, its reference number, the date received in the JOIDES Office, the principal investigators as well as site survey information and the status/distribution of the proposal.
Discussion:

Knauss (URI): Are a significant number of proposals being received from non-JOI institutions?

Larson: From the present listing of proposals received, the number of proposals from U.S. non-JOI institutions is 23. Only 5 proposals have been received from non-IOIDES nations.

Winterer (SIO): This number should increase after USSAC workshops are convened.

It was the consensus of EXCOM that an update list of proposals received be included as part of every EXCOM meeting packet.

Unsuccessful Proposals

The POCM chairman asked the advice of EXCOM concerning the old policy of publishing the reason for acceptance or rejection of proposals (EXCOM Motion 268C). This view is asked as POCM rejected the idea in that proposals have not been rejected but have been given low priority ratings. The PCOM indicated that the POCM Chairman should write a letter to unsuccessful proponents informing them of the schedule and suggesting that they might wish to resubmit revised proposals prior to the next round of drilling in that particular area.

Discussion:

Helsley (HIG): The old policy was set so that proposals would not be "in limbo" forever and the EXCOM wanted a document which could be referred to when questions arose.

Larson: There is no formal rejection of a proposal. However, a proposal is understood to be rejected if it is not included in planning.

Winterer (SIO): It is unclear what the status of a proposal is in between acceptance into planning and the letter of rejection.

The tone of the EXCOM discussion was that the present format does not adequately illustrate the proposal status if no rejection letter is received. Also, EXCOM suggested the POCM Chairman structure his letter to include any necessary details concerning the rejection of the proposal. Finally, the EXCOM agreed that the disposition of proposals received be published and not the reasons for rejection.

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Consensus: Adopt the treatment of proposals as proposed by the PCOM. Furthermore, the following motion should supercede EXCOM Motion 268C.

MOTION: The EXCOM agrees that EXCOM Motion 268C should be amended to read:

To ensure that all sites are treated fairly, the list of drill sites and their disposition should be published.

The motion was moved by Winterer and properly seconded.

Vote: for 13, against 0, abstain 0.

321 PARTICIPATION OF SCIENTISTS FROM DEVELOPING COUNTRIES

R. Larson commented that at the Austin PCOM this issue was raised in response to an EXCOM request. Discussion of the matter focused on two different situations. The PCOM agreed that where possible, scientists from developing countries should be invited on a personal level and ODP-like organizations should be contacted (on a formal and informal basis). Secondly, the ODP application for clearance to drill in non-U.S. waters includes an invitation for scientists of that country to participate in drilling activities scheduled for that particular leg.

Discussion:

Helsley (HIG): Possibly the Science Operator could include a visitor on board when bunks are not completely filled. Also students should be incorporated in the participation process.

Merrell (TAMU): TAMU agrees and will act as the situation arises.

Consensus: The EXCOM agrees with the position taken by PCOM on the participation of scientists from developing countries. Further, in order to fully address the matter the EXCOM would like a variety of different approaches to be investigated.

322 PUBLIC RELATIONS/PUBLICITY FOR ODP

R. Larson introduced a paper prepared by T. Mayer of the JOIDES Office. Mayer reported that at the end of January 1985, JOI convened a meeting in Miami to specifically discuss port-calls but which also covered other aspects of public relations. With regard to port-calls and visits to the JOIDES RESOLUTION, the principle was established that invitations to tour the drillship should originate from TAMU/ODP only. It was expected that a
local institution wishing to host an on-shore activity would be responsible only for the invitations to the on-shore activities.

At the following port-calls, opportunities exist for JOIDES-member countries to stage open days:

- Bremerhaven (FRG): approximately 20-25 June 1985
- St. John's, Newfoundland (Canada): approximately 12-16 October 1985
- Marseilles (France): approximately 2-6 February 1986

An open day is being planned for the Norfolk, Virginia port-call to enable senior officials from NSF and other agencies, Congressional members and staff and embassy officials an opportunity to see the JOIDES RESOLUTION.

Exhibition material is being prepared for a JOI booth at the annual convention of the American Association of Petroleum Geologists to be held in New Orleans at the end of March 1985. This material can be used for subsequent exhibitions and open days on the RESOLUTION.

Copies of the JOI Public Release of Information statement for subcontractors were circulated among EXCOM members at the close of the report.

323 FUTURE EXCOM MEETINGS

4-5 June 1985 - Washington, DC area (Note subsequent to Miami meeting: In order to accommodate schedule of one non-U.S. members for ODP Council meeting it was agreed to hold the EXCOM meeting on the 5th, EXCOM and ODP Council meeting on the 6th. The JOI Board of Governors will therefore meet on June 4).

16-17 September 1985 - Bonn, FRG

19-20 November 1985 - Location to be announced.

324 OTHER BUSINESS

As part of his address to EXCOM, Erich Bloch (Director of NSF), encouraged ODP to examine the possibility of including university (graduate and undergraduate) as well as high school students to be a part of the seagoing program. Bloch also encouraged ODP to include high school science teachers in the participation process. It was suggested that JOI investigate these possibilities.

The EXCOM also considered and approved a JOIDES pennant designed at the URI JOIDES Office. The pennant emphasizes the thematic objectives of the COSOD Report and will be flown on the RESOLUTION.
In closing, the EXCOM expressed its appreciation to A. Berman and the University of Miami's Rosenstiel School of Marine and Atmospheric Science for their hospitality.

EXCOM also expressed its thanks to J. Bowman, D. Spearman, and B. Munsch for their attendance and their efforts on behalf of the U.K. and the ESF.

EXCOM expressed its gratitude to E. Bloch for interrupting his schedule in order to address the Committee.
March 14, 1985
Ocean Drilling Program
Texas A&M University
409/845-9322

MIAMI--The JOIDES Resolution arrived in Miami today after six weeks at sea during which time scientists investigated the geological history of the Bahamas, announced Dr. Philip D. Rabinowitz, director of the Ocean Drilling Program (ODP) at Texas A&M University.

The scientific drillship, whose registered name is SEDCO BP/471, is the vessel for ODP, a project funded by the U. S. National Science Foundation and Canada, France, Japan and West Germany.

The Bahamas cruise was the first of a decade-long series of geological studies to be conducted throughout the world's ocean basins. The crew comprised 25 scientists from the U. S. and abroad, plus 25 ODP technicians, scientists and engineers, and a ship's crew of 65.

Co-chief scientists were Dr. Wolfgang Schlager of the Rosenstiel School of Marine and Atmospheric Sciences, University of Miami, and Dr. James A. Austin Jr. Institute of Geophysics, the University of Texas at Austin. Dr. Amanda Palmer was Texas A&M University staff scientist representative.

During Leg '101, scientists tested two opposing theories by analyzing sediments from the channels between the banks to determine whether they were of shallow water (megabank) or deep water (trough) origin.

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The present-day topographic configuration of shallow-water banks and intervening deep-water troughs has particularly interested geologists. One theory contends that until approximately 100 to 110 million years ago, a single, large megabank covered the entire Bahamas region until a rising sea level drowned the bank, leaving only isolated high-standing areas (the present Bahamas Banks). Other scientists maintain that the Bahamas have always existed in a form similar to their present-day appearance, with fault-bounded banks and troughs unchanged through time.

After drilling 19 boreholes at 11 sites throughout the Bahamas, and recovering more than a mile of cored sediments, the scientific crew determined that a large megabank did exist in the northwestern region of the Bahamas, drowned by a rising sea level about 100 million years ago. Similar results have been reported from studies of rocks in other regions of the world, suggesting that whatever caused the disintegration of the Cretaceous Bahamas megabank was a major worldwide event, possibly linked to climatic changes.

The JOIDES Resolution is a 470-foot drillship with a derrick that towers 200 feet above the waterline. The heart of the research vessel is a seven-story laboratory stack which provides space and equipment for on-board examination of cores including chemical, gas and physical properties, and paleontological, petrological, paleomagnetic and sedimentological studies. Marine
add two

geophysics research is conducted while the ship is under way.

Texas A&M is science operator for the program and is responsible for the ship's staffing and scientific operations, overseeing core collection and analyses, and dissemination of results.

The NSF funds the program through the Joint Oceanographic Institutions, Inc. (JOI, Inc.), which manages the project. JOI, Inc., is a not-for-profit consortium of 10 major oceanographic institutions. Joint Oceanographic Institutions for Deep Earth Sampling (JOIDES), an international group of scientists, provides overall planning and program advice.

Plans for upcoming cruises include drilling off the coast of Spain, in the Norwegian Sea and high latitude drilling in the North Atlantic.

-30-

(Note: JOIDES institutions are: University of California at San Diego, Scripps Institution of Oceanography; Columbia University, Lamont-Doherty Geological Observatory; University of Hawaii, Hawaii Institute of Geophysics; University of Miami, Rosenstiel School of Marine and Atmospheric Science; Oregon State University, College of Oceanography; University of Rhode Island, Graduate School of Oceanography; Texas A&M University, Department of Oceanography; University of Texas, Institute of Geophysics; University of Washington, College of Ocean and Fishery Science; and Woods Hole Oceanographic Institution.

Non-U. S. members are: Department of Energy, Mines and Resources, Earth Sciences Sector, Canada; Bundesanstalt fur Geowissenschaften und Rohstoffe, Federal Republic of Germany; Institut Francais pour l'exploration des mers, France; and University of Tokyo, Ocean Research Institute, Japan.)
Scientists participating in Leg 101 were:

Co-Chief Scientists—
James A. Austin, Jr. (University of Texas at Austin, Institute for Geophysics)
Wolfgang Schlager (University of Miami, Rosenstiel School of Marine and Atmospheric Science)

ODP Staff Representative—
Amanda Palmer, Texas A&M University

Participating Scientists—
Paul Comet (The University, Newcastle-Upon-Tyne, UK)
Andre Droxler (University of Miami)
Gregor Eberli (Geologisches Institut, FRG)
Eric Fourcade (Universite Pierre et Marie Curie, France)
Raymond Freeman-Lynde (University of Georgia)
Craig Fulthorpe (Northwestern University)
Gill Harwood (The University, Newcastle-Upon-Tyne, UK)
Gerhard Kuhn (Geologisches Institut, FRG)
Dawn Lavoi (NORDA—U. S. Navy)
Mark Leckie (Woods Hole Oceanographic Institution)
Allan Melillo (Rutgers University)
Arthur Moore (Marathon Oil Co.)
Henry Mullins (Syracuse University)
Christian Ravenne (Institute Francais du Petrole, France)
Will Sager (Texas A&M University)
Joost Verbeek (Dutch Geological Survey)
David Watkins (University of Nebraska)
Colin Williams (Columbia University)
MIAMI—The JOIDES Resolution embarks on the second of a decade-long series of scientific cruises when it leaves Miami Tuesday, announced Dr. Philip D. Rabinowitz, director of the Ocean Drilling Program (ODP) at Texas A&M University.

The scientific drillship, whose registered name is SEDCO BP/471, is the research vessel for the ODP, a $300-million project funded by the U. S. National Science Foundation and Canada, France, Japan and West Germany.

Approximately every two months, 50 scientists and technicians plus a ship's crew of 65 embark on a cruise, exploring the oceans to retrieve core samples from beneath the sea floor. An international team of scientists works together to extract information and analyze the data from samples of the retrieved cores. In the process, they learn more about the evolution of the oceanic crust, long-term changes in the earth's climate, and movements of continents.

Leg 102 will seek to obtain comprehensive geophysical data from 110-million-year-old crust in the western Atlantic.

The crew will clean out, deepen and log a previously drilled hole at the southern end of the Bermuda Rise. The project requires using a variety of tools—seismic recorders, magnetometers, and heat flow and logging equipment—to learn more
about the geophysical make up of old ocean crust. A two-ship seismic experiment will also be conducted in cooperation with the University of Texas research vessel Fred Moore.

The specific objectives of the cruise are to measure certain physical and chemical properties of the crustal rocks. Measurements include seismic velocity structure, permeability, porosity, in situ stress and paleomagnetic field intensities. These properties will be compared to those previously obtained from younger crustal rocks. Results should yield important information on how crustal rocks evolve as the seafloor spreads from the mid-ocean ridges.

Co-chief scientists for Leg 102 are Dr. Matthew H. Salisbury of the Scripps Institution of Oceanography, the University of California at San Diego, and Mr. James J. Scott of the U. S. Geological Survey in Denver, Colo. Dr. Christian A. Auroux, is Texas A&M staff scientist representative.

The JOIDES Resolution returned Thursday from her first official cruise. During Leg 101, more than a mile of cored sediment was obtained from 11 sites throughout the Bahamas.

The drillship is 470 feet long and 70 feet wide with a derrick that towers 200 feet above the waterline. A computer-controlled dynamic positioning system, supported by 12 powerful thrusters and two main shafts, maintains the ship over a specific location.

The heart of the 470-foot long floating scientific research center is a seven-story laboratory stack which provides space and
add two equipment for on-board examination of the cores including chemical, gas and physical properties, and paleontological, petrological, paleomagnetic and sedimentological studies. Marine geophysics research is conducted while the ship is under way.

Texas A&M University is science operator for the program and is responsible for the ship's staffing and scientific operations, overseeing core collection and analyses, and dissemination of results.

The NSF funds the program through the Joint Oceanographic Institutions, Inc. (JOI, Inc.) which manages the project. JOI, Inc., is a not-for-profit consortium of 10 major oceanographic institutions. Joint Oceanographic Institutions for Deep Earth Sampling (JOIDES), an international group of scientists, provides overall planning and program advice.

Plans for upcoming cruises include drilling off the coast of Spain, in the Norwegian Sea and high latitude drilling in the North Atlantic.

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JOIDES OFFICE
GRADUATE SCHOOL OF OCEANOGRAPHY
UNIVERSITY OF RHODE ISLAND
NARRAGANSETT, RHODE ISLAND

DRAFT MINUTES

10-12 APRIL 1985
CENTER FOR MARINE STUDIES
OLD DOMINION UNIVERSITY
NORFOLK, VIRGINIA

PCOM Members:
R. Larson, Chairman (University of Rhode Island)
H. Beiersdorf (Federal Republic of Germany)
R. Buffler (University of Texas)
J-P. Cadet (France)
S. Gartner (Texas A&M University)
D. Hayes (Lamont-Doherty Geological Observatory)
J. Honnorez (University of Miami)
M. Kastner (Scripps Institution of Oceanography)
J. Malpas (Canada)
R. McDuff (University of Washington)
R. Moberly (University of Hawaii)
H. Schrader (Oregon State University)
R. Von Herzen (Woods Hole Oceanographic Institution)

Observer:
A. Taira (Japan)

Liaisons:
G. Brass (National Science Foundation)
D. Fornari (LDGO, Wireline Logging Services)
L. Garrison (ODP/TAMU Science Operator)

Guests:
J. Austin (Leg 101 Co-chief)
M. Salisbury (Leg 102 Co-chief)

Others:
J. Clotworthy (Joint Oceanographic Institutions Inc.)
D. Keith (JOIDES Office)
A. Mayer (JOIDES Office)
D. Rucker (Joint Oceanographic Institutions Inc.)
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Lithosphere Panel
Tectonics Panel

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R. Larson, Planning Committee Chairman, convened the 10-12 April 1985 meeting held at the Center for Marine Studies at Old Dominion University. Harris Stewart, Director, welcomed meeting participants to the Norfolk, VA area.

Dr. A. Taira was welcomed as the Japanese representative to the Planning Committee. Dr. Taira presently has observer status until October 1985, when Japan has agreed to sign a full MOU and he replaces K. Kobayashi who is now the Japanese representative to the JOIDES Executive Committee.

The opening remarks were closed by asking meeting attendees to agree to the use of a tape recorder to aid in recording the meeting procedures.

ADOPTION OF MEETING AGENDA

H. Schrader moved (seconded by Moberly) that the Committee adopt the agenda.

Vote: for 12, against 0, abstain 0.

MINUTES OF THE AUSTIN PLANNING COMMITTEE MEETING

H. Schrader requested that his affiliation be corrected from the University of Oregon to Oregon State University.

R. Moberly moved that the minutes be amended to include the following listing of major themes by oceans to be added to LITHP report:

1. Atlantic: bare rock drilling at MARK
2. Eastern Pacific: bare rock drilling at 90-13ON (EPR) and 504B.
3. Indian: single hot spot trace
4. Western Pacific: young back-arc spreading

Vote: for 6, against 2, abstain 4.

(amenment carried)

The Committee suggested that a copy of these amendments be sent to M. Purdy, LITHP Chairman.

It was moved by Kastner, and seconded by Malpas, to adopt the minutes with the requested amendments.
Vote: for 12, against 0, abstain 0.

The PCOM Chairman reported that action items resulting from the Austin PCOM meeting had been completed by the JOIDES Office.

529 JOIDES EXECUTIVE COMMITTEE REPORT

R. Larson, POOM liaison, reported that at the EXCOM meeting on 18-19 March 1985 in Miami, Florida, the United Kingdom, European Science Foundation and Australia were unable at this time, to join ODP as full or consortium members. However, the possibility of an ESF/Australian consortium may occur in the near future and was strongly encouraged by EXCOM. Further, a resolution was passed by the EXCOM that states that the entry of the United Kingdom to the ODP other than as a full member was not acceptable or in the best interest of ODP or to the other full members. The resolution further urged the UK to become a full member by October 1985.

The EXCOM recommended that the ESF, Australia and the UK continue to be invited to EXCOM as personal guests of the EXCOM Chairman as long as a possibility of membership exists. EXCOM further recommended that all Australian, ESF and UK names be deleted from the JOIDES PCOM and panels. This proviso is dated as of the sailing date of the RESOLUTION. EXCOM did approve the attendance of guests to the panel meetings but only when it was absolutely necessary for scientific planning. Representation on panels was limited to those representatives of member nations except where a scientific specialty was needed. A problem potentially exists with the Mediterranean WG because 4 panel members are from the ESF or the UK; the expulsion of these people could lead to a dismembering of the Working Group.

The EXCOM Chairman read a telex from the President of ESF in which he stated that ESF is prepared to enter ODP as a full member as soon as negotiations with Australia are completed.

Regarding the staffing of scientists from developing countries, the EXCOM agrees with the position taken by the PCOM. In summary, the PCOM stated that wherever possible, scientists from developing countries should be invited on a personal level and that relevant international scientific organizations should be contacted (formally and informally). Panels were also asked to explore opportunities for scientific collaboration with non-ODP members.

Discussion:

Schrader (OSU): What is the present listing of ESF members?
Larson: To date, the ESF consists of 9 countries: Norway, Sweden, Italy, Greece, Belgium, Denmark, Switzerland, the Netherlands and Spain.

Honnorez (UM): What is the status of O. Eldholm as he is a member of the Atlantic Regional Panel, a co-chief scientist and at the same time an ESF representative?

Larson: Eldholm no longer represents the ESF on the ARP. He has been designated as a co-chief scientist on Leg 104 on an ad hoc basis.

Hayes (LDGO): An alternative that was discussed by the EXCOM was that Eldholm participate on Leg 104 as a member of the scientific crew but not in the capacity of co-chief scientist.

It was noted by members of the PCOM that the UK and ESF panel members who were eliminated previously could be reappointed on the basis of their scientific specialties. (More discussion of panel memberships will be found under that appropriate section in the minutes.)

530 NATIONAL SCIENCE FOUNDATION REPORT

G. Brass (NSF) reported that the Ocean Sciences Section at NSF has been reorganized into 2 co-equal segments. They are the Ocean Sciences Research Section headed by Robert Wall and the Oceanographic Centers and Facilities Section (OCFS) headed by Sandra Toye. OCFS includes all of the activities formerly included in the Oceanographic Facilities and Support program (OFS) plus the ODP and new activities in Ocean Engineering and Oceanographic Technology. G. Brass has become the Program Director of the ODP. The Ocean Science Research Section (OSRS) has been returned to the 4 traditional programs (i.e. chemical, biological, geological, physical) of the Foundation. The vacancy created by the promotion of G. Brass to ODP Program Director will be filled by R. Buffler, the PCOM representative from the University of Texas at Austin, as from September 1985.

MEMBERSHIP

Canada

Canada will sign a Memorandum of Understanding with NSF for full membership in the Ocean Drilling Program on 15 April 1985. With this signing, the ODP now has 3 full members.

Japan

Japan will join ODP as a full member on or before 1 October 1985. At that time, the ODP will consist of 4 full members.
Draft MOUs are under consideration with the ESF and UK that would continue their participation as candidate members until they make a commitment of full membership to ODP (i.e. Japanese solution). It is expected that if these countries join under the "Japanese solution," a commitment to full membership will occur on or before the beginning of next fiscal year. It is not the intention of EXCOM to allow them to extend their participation in ODP beyond 30 September 1985.

Discussion:

Von Herzen (WHOI): How has the lack of a UK membership affected the financial situation for this year and will things look better in the future?

Brass: Not having the UK (or a 5th member) in ODP has resulted in a $2.5M deficit in the budget. So the Program needs to find one more member. With the number of membership opportunities available, we are optimistic that another member will be found to fulfill the plan of 5 international partners.

Von Herzen: Has NSF prepared a document which addresses the lack of a fifth member and its impact on the cost overrun for the construction of the laboratory stack on the RESOLUTION and its effect on the U.S. science program?

Brass: A summary of the cost overrun matter can be found in the minutes of the EXCOM meeting in Narragansett. Brass noted that he did not think that it was entirely appropriate to fully discuss funding activities of the U.S. Science Program in view of the international nature of the ODP.

Beiersdorf (FRG): Is the NSF wholly responsible for the DSDP phase out?

Brass: Monies for the phase out come from co-mingled funds.

Cadet (France): Does the ODP budget contain funds to guard against major problems (e.g. the loss of a couple of drill strings)?

Brass: On both the short- and long-term outlooks, there is not much flexibility in the budget to guard against major problems.

Von Herzen: After reviewing the Narragansett EXCOM minutes, it is still not clear how the cost overrun occurred.

Garrison (TAMU): The size of the overrun is still not fully known as negotiations over the costs are continuing.

Brass: This issue is policy and not a planning matter. I have been asked to urge the PCOM to consult with their EXCOM counterparts on this matter.
Hayes (LDGO): Science planning will be affected by the cost overrun and therefore should be addressed by PCOM.

J. Clotworthy (Vice President, JOI Inc.) reported that JOI has put together a management proposal to cover the next 3 years of ODP. The program plan for FY 86 is not yet complete but is being done with guidance from NSF and input from the subcontractors (TAMU, LDGO, and the JOIDES Office). The program plan (scheduled for completion on 1 May) is being prepared on the basis of 4 international members, and it should be ready for discussion at the EXCOM meeting on 5 June and at PCOM on 25 June. The program proposal will be ready by 1 June.

JOI in its original management program to NSF scheduled a program performance evaluation that was to be conducted every 2 years. Within the coming year, a review panel of 6 members (whose appointments will be filled by the end of April) will conduct evaluations of the drillship at St. John's port call in October and will visit TAMU and LDGO. A report of these findings will be submitted to the President of JOI, J. Baker, and ultimately to NSF.

The report of the ad hoc review panel that met in March to evaluate the ODP Databank will be ready by the June PCOM meeting.

Discussion:

Hayes (LDGO): Will the FY 86 program plan be given to PCOM for comment or on an information only basis?

Clotworthy: If compromises are needed, JOI will approach the PCOM with alternatives and will request guidance for their prioritization.

Brass (NSF): If alternatives exist, they will contain scenarios for budget surpluses as well as budget deficits.

Kastner (SIO): If the program plan is ready by 1 May 1985 and the full proposal by 1 June 1985, is it possible that the PCOM could review both documents at the 25 June meeting?

Clotworthy: It is probable that the program plan will be available and possible that the proposal may be available.

Larson (URI): Will the program plan contain a full budget with options?

Clotworthy: The plan will contain a full budget with alternatives.
Several PCOM members noted that a review of the Miami EXCOM minutes indicated that a number of items are planned to be deferred from the FY 85 budget into FY 86. These planned deferrals will impact on science planning in the long term and members expressed apprehension on receiving this information after the fact.

Members stressed that it is very important to have PCOM input into the budgetary planning and urged the development of several "crisis" scenarios to be presented at the next PCOM meeting. It was further suggested that a standby committee be formed to address any problems that may occur in FY 86. To aid in financial planning the PCOM suggested that JOI develop a list of items to which ODP is contractually bound by leasing or other arrangements.

532 SCIENCE OPERATOR REPORT

L. Garrison (ODP/TAMU) reported.

CO-CHIEF STAFFING

Leg 106 (MARK I) - J. Honnorez and R. Detrick
Leg 107 (Tyrrenian Sea) - not yet selected
Leg 108 (NW Africa) - not yet selected
Leg 109 (MARK II) - W. Bryan and J. Juteau

SHIPBOARD SCIENCE STAFFING

Staffing for Leg 104 (Norwegian Sea) under the co-chiefs J. Thiede and O. Eldholm has been completed. For leg 105 (Baffin Bay/Labrador Sea), selections are due after the co-chief meeting at the end of May.

BARE ROCK DRILLING

Garrison reported that the plans for hard rock drilling are proceeding on schedule and that requests for proposals for the high resolution black and white television system have been issued.

Discussions have been held with Southern International (SI) concerning the drilling operations and a conference between one of the co-chiefs on Leg 106 and S.I. will combine the proposed drilling operation with scientific objectives. Presently, drilling is based on a mud motor design in which the drill pipe does not rotate. The design further calls for the use of an inner core barrel that would simultaneously recover core samples while continuing drilling activities. The rotating design reduces the effect of fatigue and compression during drilling and predicts a very stable configuration.
CLEARANCES

The clearance to drill in Spanish waters has been received which acknowledged the invitations to include Spanish scientists among the shipboard party. However, Spain has requested an additional 4 scientific berths due to their membership of the ESF-ODP consortium. R. Kidd (Manager of Science Operations) will go to Barcelona to clarify the invitation which is one of coastal countries representation and not one of ODP representation. Kidd will also discuss ODP benefits, their participation in ESF and clarify their ODP obligations. It is hoped that this meeting will clarify the issue of participation.

Talks have occurred with the Norwegian Petroleum Directorate (NPD) and the Canadian Oil and Gas Lands Administration (COGLA). In both countries, the protocol is to negotiate with the agencies that administer offshore petroleum activities. TAMU is in communication with both agencies and it appears that many of the requirements will be waived as the RESOLUTION is a non-industry vessel. However, COGLA states that 3 requirements must be met:

1. use of a support vessel for ice spotting and tracking
2. a trained ice observer must be onboard together with a regular weatherman
3. survival suits for all personnel on the RESOLUTION

TAMU is now purchasing the survival suits (at $350/suit) and they will be available for Legs 104 (Norwegian Sea) and 105 (Baffin Bay/Labrador Sea), and all subsequent legs.

Discussion:

Larson (URI): What is the status of procuring the scout vessel?

Garrison: Negotiations are in progress with private and public agencies with regard to the cost of the scout vessel. Presently, estimates are running between $250-300 K for the charter. It has been suggested that the USCG NORTHWIND may be available specifically for the use of ODP.

Brass (NSF): The Coast Guard has been contacted and will consider the suggestion.

Malpas (Canada): Do the costs cover Baffin Bay of Labrador Sea or both?

Garrison: The costs cover both locations.

REPORT ON SHIPBOARD ACTIVITIES
TAMU has developed a 2-part reporting system on the ODP Bulletin Board in the OCEAN.NET system. The first part of the series contains the latitude and longitude of the drillship while the second part, which is addressed to specific individuals, contains a weekly summary of the science report and the operations report. The second part is updated every Monday and it is not on the public bulletin board. However, all PCOM members who wish to gain access to this system will be added to the listing.

Also, TAMU reports the whereabouts of the drillship to the Defense Mapping Agency who in turn notifies the U.S. Navy and other interested parties.

Discussion:

Schrader (OSU): During hard rock drilling will the upper 30-50 m be recoverable?

Garrison: There is no mechanical reason why the upper section cannot be recovered, provided there are no rubble zones. If rubble zones exist then it becomes necessary to stabilize the hole initially with cement. This would make recovery of the upper section difficult.

Honnorez (UM): Since the cementing process is very important in stabilizing the drill hole, are there plans to obtain different types of cements?

Garrison: Studies of the various kinds of cements have been done but these were done in regard to cementing in the guidebase. The data suggests that 2 types of cements are needed.

Kastner (SIO): How long will it take to establish the drill hole?

Garrison: If there are no problems, it should take 2 weeks to stabilize and drill the hole.

Larson (URI): In terms of unrecoverable hardware, what is the cost of those items that will be left on the seafloor?

Garrison: Estimates show that approximately $150-175 K (approximately $60K-hardware + approximately $90 K- cement, gel, casing) worth of material will remain on the ocean floor.

Moberly (HIG): Will the guidebase frame be specially coated for re-entry at a later date?

Garrison: Presently, a standard organic zinc coating is applied. What will happen to the coating in the next 40-50 years is unknown.

Honnorez: What is SEDOC's role in the guidebase project and are they responsible for the selection of the drilling cement?
Garrison: In a couple of weeks, SEDCO will deliver to ODP the design for the guidebase. The selection of drilling cements should be discussed when the co-chief scientists for MARK I and Southern International representatives meet.

Honnorez: Do you have an idea as to scheduling of the system?

Garrison: Two complete systems will be ready by August 1985. A final design for the guidebase will be ready by late April and requests for estimates to build will be sent out shortly thereafter. At about that time, testing of the Meso-Tech sonar and television camera will occur. One proposed camera was eliminated due to the cost (approx. $40K), so if one could be borrowed or rented from one of the oceanographic institutions there is room on the bracket for it.

Schrader: Is the drilling rate slower on the RESOLUTION than on CHALLENGER and will it increase in the future?

Garrison: The rate did start off slower than CHALLENGER but, this is due to a number of reasons - the use of the iron roughneck and various other tools and the inexperience of the drilling crew. At the end of Leg 101 (Bahamas), the rate did increase and was comparable to CHALLENGER.

Schrader: Could you give us an update on shipboard instrumentation and their installation status?

Garrison: The XRF was not onboard for Leg 101 but was onboard for Leg 102. The cryogenic magnetometer will be installed during the Norfolk port call. The underway geophysics lab is complete but cavitation problems exist with the 12.5 kHz and 3.5 kHz transducers. EDO Western has been made aware of the problem and will try to solve it before the ship goes into drydock.

CHANGES TO LEG 103 (GALICIA BANK) DRILLING PLANS

TAMU advised the POCM Chairman that in early February, based on their best estimates for drilling and recovery rates of the scientific objectives for Leg 103, an additional 7 days was required to be added to the Leg. After consulting with the action committee (Larson, Honnorez, Beiersdorf), it was recommended that 5 days be added to Leg 103 at the expense of 5 days from Leg 102 (W. North Atlantic). This resulted in the abandoning of the scientific objectives at DSDP Site 603. The co-chiefs on Leg 103 were asked to devise other time-saving possibilities to achieve the scientific goals in order and as prioritized at the Austin POCM.

Presently, plans call for drilling the lherzolite ridge initially within the 7-day time frame as decided in Austin. The original plan was to then drill sites 4A and 4B, with a re-entry cone set at Site 4B for deeper penetration. This has been changed to save time and the
consensus is to now drill for the objectives of 4A and 4B at one site. The plan calls for setting a cone at 4B with continuous coring. It should also be noted that depending the site has the approval of the Safety Panel down to a depth of 2 km. The time saved is approximately 2 days.

Discussion:

POOM members expressed concern over the timing of the request after discussions and decisions were made at the Austin POOM.

Hayes (LDCO): Scenarios and drilling times were discussed and decided on in mid January at the Austin POOM. Between then and early February more time is required. How did this happen?

Garrison: The initial drilling estimates presented in Austin contained operational days but no contingency time was built in. More time is required to account for contingencies.

Kastner (SIO): I was informed that the time request is the result of a mistake in the calculation of drilling time estimates and not so much one of contingency times.

Larson (URI): The mistake is the result of miscalculations in determining the time it would take to drill the Cretaceous section of the site. The root of the problem was a misapplication of the drilling rates used during DSDP drilling of the Vigo Seamount. The time request is a combination of correcting the mistake plus contingency time.

Kastner: How much contingency time is planned in the change to drilling the entire section of Site 4B?

Garrison: Those figures are not known at this time. Legs are adjusted to give every leg sufficient operational days to meet objectives and in the case of Leg 103 adjustments had to be made.

Gartner (TAMU): If this time request is over-estimated, can it be used to supplement additional legs?

Garrison: It is unlikely that the time will be used to supplement other legs due to scheduling commitments.

Various POOM members expressed concern with regard to the trading of days between Legs 102 and 103. It was suggested that perhaps all the POOM members should have been polled for advice rather than leaving such decisions to an ad hoc committee. There was general agreement that in the future once drilling times were determined to meet agreed scientific objectives there should be every effort made to adhere to them. It was suggested that the ODP reinstate a DSDP procedure in which panels were contacted at such times in order to avoid having a theme suffer.
LEG 106 (MARK I) SITE SURVEY

The site survey for the MARK I area is presently scheduled to be conducted in May 1985. Plans call for using a variety of new equipment on CSS HUDSON to conduct the SeaMARC side scan and deep towed camera surveys.

This section of the meeting closed with requests from PCOM members to the Science Operator concerning public relations material. Requests were also made for the publishing of drill site summaries and results in detail in the JOIDES Journal.

533 WIRELINE LOGGING SERVICES OPERATOR REPORT

Dan Fornari reported that a general summary of logging activities on Leg 101 (Bahamas) is found in the draft minutes of the 18-19 March 1985 EXCOM meeting. Initial logging reports from Leg 102 suggest that logging was very successful with some logging experiments conducted through the drill pipe. Fornari commented that this may be the standard logging operation in the future and that this procedure greatly reduces the chances for losing logging tools.

On Leg 102, the Natural Gamma Tool worked very well and the logging crew was able to resolve the sediment/basalt contact and delineate smectite and basalt through the drillpipe.

The Logging Services Operator wants to ensure that a complete suite of standard logging tools be available for each ODP leg. LDCO has made an agreement with Schlumberger to take 2 of each tool in order to assure that standard logging activities will be conducted. Two of each tool onboard the drillship are being charged ODP at a rate that is $300-400/day less than commercial costs.

Operations in FY 85-86 look favorable as the budget allows LDCO to provide standard and specialty logging services. However, there are some tools (that were unused on the first 2 legs) that are being removed at a substantial savings to the program. These are the temperature log, the Schlumberger pore fluid sampler and the tracer ejection tool. These specialty tools will be reinstated in the future as requests warrant them and after a means to provide funding for them has been found. The decision as to which tools are needed for logging is made by Downhole Measurements Panel with advice from co-chief scientists.

The daily cost of the standard logging operation is $2150 and this includes the cyber unit and standard tools. Within the ODP-Schlumberger contract, there is enough flexibility to remove or replace tools (dependent on availability) as needed with no penalty costs to ODP.
For Leg 103 (Galicia Bank), two gamma spectroscopy tools (GST) as well as a newly trained logging technician will be available and starting with Leg 104 (Norwegian Sea), GST capabilities should be a routine part of logging activities.

At LDGO, the first edition of the logging manual has been published and distributed. Furthermore, shipboard as well as on shore facilities are completely operational. The only major shipboard problem encountered so far has been the inability to get the winch, which lowers the logging tools, to operate sufficiently slowly at the necessary speed of 20 ft./min.

HIGH TEMPERATURE TOOLS

Groups at Los Alamos, Sandia Labs, U.S.G.S. and Lawrence Livermore Labs have expressed considerable interest in the development of high temperature tools. The most promising approach to keeping tools cool appears to be using a tool pusher to circulate cooling fluids. This concept would allow logging operations to be conducted using conventional equipment.

TAM WIRELINE PACKER

There are presently no funds in FY 84-85 for packer development. Agreements have been signed with AMOCO, but there has been no progress due to the lack of funding. AMOCO continues to develop the packer, however, ODP must streamline and miniaturize the unit to fit within the drill string.

There will be no new packer for Leg 110 (Barbados N.); however, the Lynes packer and the TAM drill string packer will be available. The budget for FY 86 will contain funds for the wireline packer development and the tool should be ready by 1987.

HEAVE COMPENSATOR

D. Yurger (WHOI) was contracted by ODP to conduct numerical analyses of the heave compensator and the results were sent to the engineers at Schlumberger. The compensator should be available prior to Leg 105 (Baffin Bay/Labrador Sea) with a more definite date known by the June POOM.

The result of the analysis indicates that the Schlumberger design is quite functional but data did indicate problems with the controller system. Schlumberger has been made aware of the problems and sees no problems with Leg 105 delivery date.
Discussion:

Kastner (SIO): Why were the 3 logging tools that were removed from the program not used on Legs 101 and 102?

Fornari: On Leg 101, time constraints were such that some tools did not get used.

Honnorez (UM): It was suggested that there was no time to conduct logging due to complaints about the time involved from the co-chiefs on Leg 101?

Fornari: This is not entirely correct. Standard logging activities need a maximum of 36 hours to a depth of 4000 m. The chief scientists should be aware of this time constraint and factor this into the cruise plans.

Schrader (OSU): Are these figures factored into the operational days calculation?

Garrison (ODP/TAMU): Time for logging is indeed scheduled into the calculation.

Kastner: The co-chief scientists should probably be informed on the amount of time it takes to conduct the specialty logging tools.

Brass (NSF): Perhaps, Wireline Services could produce a publication, similar to drilling time estimates, which explains estimates of logging times for standard and specialty tools.

Larson (URI): What is the status of the back-up tools?

Fornari: All the standard tools have a replacement tool with the exception of the multichannel sonic tool and the borehole televiwer. There are funds in the FY 86 budget to purchase a second for each of these tools.

Beiersdorf (FRG): Does this policy include spare cables?

Garrison: Plans now call for the inclusion of spare cables since cable was lost on Leg 101.

Von Herzen (WHOI): What is the status of software development on the ship?

Fornari: On the ship, we have unlimited use of the cyber unit program. However, there is no funding for the logging analysis software on the shipboard computer. The capability to analyze this data exists on shore but not yet at sea. We have asked for funds in FY 86 to extend this capability to the RESOLUTION.
Von Herzen: It was suggested that LOGO explore the possibility of converting the logging computer at Palisades to a sea-going unit in order to facilitate logging analysis at sea.

Pomari further reported that a summary of logging reports for Legs 101 and 102 are being prepared. Also, DSDP logs are being prepared for publication as a catalogue which will be available (along with ODP logs) on an annual or biannual basis.

Schrader (OSU): Will the logging results be part of the ODP site chapters?

Garrison (ODP/TAMU): It has been suggested that they appear in the "blue book" format with a summary of standard logging information and analyses of data and special sections but the format is still in a state of flux.

Larson (URI): The ODP publication scheme presently suggests that the summary of standard logging information would be in the first publication and the analyses and special sections would appear in the second publication.

Consensus: It is the consensus of the PCOM that the data from the standard logging tools be printed as a logging summary in the initial site chapters (Part A) and interpretations and analyses should appear in Part B of the Proceedings of the ODP. This consensus should be referred to the Information Handling Panel and the Downhole Measurements Panel.

Several PCOM members expressed concern over the consensus. It was emphasized that such a general statement cannot be made until the details of the format and the amount of data are known. Further it was asked if the release of the logging data falls within the guidelines as set by the ODP Sample Distribution Policy. Continued debate centered on whether this material should really be handled differently than core photos or core description data. The discussion ended with another consensus.

Consensus: The format question will reside with the IHP and DMP. The PCOM consensus is general advice.

The Wireline Services Report was concluded with the Operator asking advice of the PCOM and making the following closing remarks:

1. Is it necessary to carry an LOGO person on the bare rock drilling tests (Leg 106)?

2. There will be 2 LOGO technicians on the ship until Leg 105; beginning with leg 106 (MARK I) there will only be 1 LOGO technician.
3. LDGO expressed concern over whether the Spanish logging technician on Leg 103 is sufficiently informed about ODP logging capabilities and asked if the LDGO logging technician could be given staff representative status equal to the TAMU staff representative for this leg to assure that the logging program is fully completed.

534 REPORTS FROM CO-CHIEFS ON LEGS 101 AND 102

LEG 101 SUMMARY

J. Austin, Co-chief Leg 101, reported that the objectives of the cruise were to test two hypotheses (graben vs. megaplatform) for the development of the Bahama Banks and to examine types of carbonate slopes in terms of their Paleogene and Neogene evolution.

Attempts at setting a re-entry cone in the Straits of Florida proved to be unsuccessful as surface currents with speeds of 1.5 to 3.5 knots caused vibration problems along the drill string. Of 4 sites proposed only one single bit hole was drilled. Site 626 was the first site and was probably the most difficult technical site. Drilling yielded 460 m of carbonate rubble and resulted in very low recovery rates in the unconsolidated sand (less than 5%). However, HPC work resulted in 80-90% recovery. At Site 627 (Blake Plateau), HPC and EXB systems worked with 97% HPC recovery and 60% XCB recovery. However, there was evidence of drilling artifacts from the XCB. On the first logging attempt with the neutron gamma ray tool, normal recovery of the tool failed. Attempts to recover the tool by fishing failed and the tool was left in the hole which was plugged with cement. Traces of hydrocarbon gas were also found. Site 628 (Little Bahama Bank) was continuously cored with the APC/XCB with 73% overall recovery rates and the hole was terminated in nannofossil ooze of L. Paleocene age. Site 629 (Little Bahama Bank) was an unsuccessful attempt to spud in at Site BAH-7. Recovered material consisted of sandy carbonate ooze, lime sand and rubble, and fragments of friable limestone, all of Quaternary age. At Site 630 (Little Bahama Bank), the APC/XCB had an 88% recovery rate and the HPC had a 99% recovery rate. Site 630 provided an excellent record of the off bank transport of fine-grained sediment from the carbonate platform during the last 10 million years. Drilling at Site 631 (Exuma Sound) yielded sediments with very high sedimentation rates, a high organic carbon content, pyritized layers and a large amount of subsurface diagenesis. The APC/XCB had a 65% recovery rate. At Site 632 (Exuma Sound), the APC/XCB system yielded 59% recovery rates. The section was drilled with a rotary bit; however, drilling was terminated because of minor occurrences of hydrocarbons. Recovery of the hole generally was 21%. Site 633 (Exuma Sound) was drilled with APC and XCB coring achieving 48.7% recovery. The section contained aragonite which was interpreted as bank-derived material. Site 634, NW Providence Channel, was drilled with a rotary bit that resulted in 5.8% recovery. The site was abandoned because of poor hole conditions.
In summary, the ship operated quite well, although there are two major problems - a) the navigation system must be upgraded, and b) the core handling area should be protected before a serious accident occurs.

Discussion:

Von Herzen (WHOI): Could you summarize the problems of setting the re-entry cone in the Straits of Florida?

Austin: The major problem was that vibration problems along the drill string prevented setting of the cone. The vibration is the result of streaming action that was produced when current at depth is going in an opposite direction to that at the surface.

Honnorez (UM): Has there been any improvement in the navigation system?

Garrison (ODP?TAMU): Nothing has been done yet as onboard equipment of that nature is the responsibility of SEDCO. TAMU, in the future, will purchase a GPS system.

Austin: I strongly advise the system be immediately upgraded as Leg 101 lost 6-12 hours waiting for satellite fixes.

POCM expressed concern over the state of the satellite navigation system and recommended the problem be solved in the following consensus.

Consensus: The co-chief scientist for Leg 101 has identified a serious deficiency in the satellite navigation system. The Science Operator was advised to negotiate with SEDCO in order to correct the situation. The POCM requests that this issue be reported on at the June POCM.

LEG 102 SUMMARY

M. Salisbury, Leg 102 Co-chief, reported that Leg 102 had 2 objectives to re-enter Hole 418 A and to conduct borehole geophysical experiments. The hole was successfully re-entered and cleaned to a depth of 5863 m, then washed down to 6232 m. A logging tool that was presumed left in the hole during DSDP drilling was not found and appears to have been sheared off and lost outside the hole while it was being raised.

All logging tools worked well with the exception of the lateral log, which had calibration problems, and the packer, which developed mechanical problems down hole. Also the large scale resistivity experiment was not done.
The 3-axis magnetometer worked very well and produced good data. The susceptibility tool and the IDQO 12-channel sonic tool performed well although the multichannel sonic tool worked better in the lower two-thirds of the section. The borehole seismometer performed well until it experienced an electrical short. The borehole televiewer was deployed but not used due to problems in the hole. Finally, temperature profiles were made in the sediment section and at depth. Water samples were also taken at depth.

The oblique seismic equipment worked very well and produced a spectacular data set for R. Stephen.

Salisbury recommended that the hole be cased within the sediment section to prevent slumping which made the handling of wireline activities delicate and that wireline re-entry not be attempted until the hole is cased.

During subsequent discussions, it was pointed out that 2-3 days were lost due to technical problems with the acoustic unit on the beacon and problems with the re-entry tools. One to two days were lost due to the inexperience of the drilling crew and a few hours were lost due to positioning problems. Further, it was indicated that problems with the speed control on the winch made it difficult to conduct logging of holes at slow speeds.

535 PANEL REPORTS RELEVANT TO SHORT-TERM PLANNING (LEGS 104-114)

ATLANTIC REGIONAL PANEL

R. Buffler reported.

Leg 103 (Galicia)

ARP expressed concern that its September 1984 recommendation to move Site 4B upslope in order to sample oldest syn- and pre-rift sediments in a more abbreviated way was not followed. However, events at this meeting seem to have addressed this concern.

Leg 105 (Baffin Bay/Labrador Sea)

ARP was not aware of recent modifications concerning Baffin Bay/Labrador Sea drilling and asked that in the future all documents related to Atlantic drilling be copied to them.

ARP recommended that the co-chiefs be reminded of the importance of the Paleogene and Neogene paleoceanographic objectives in the region. ARP also recommended that if drilling at BB-3 is going well, the hole should be deepened to a total depth of 1600-1700 m. If Baffin Bay cannot be drilled, then the co-chiefs are advised to set a cone at LA-5 and drill to basement (about 25 days). Then they should proceed to IA-2A (HPC and rotary drilling - 10 days). Finally, ARP advises
drilling IA-9A (about 13.5 days). This is Plan C as suggested by Labrador Sea drilling proponents.

Leg 110 (Barbados North)

Co-chief recommendations: C. Moore and A. Mascle.

Leg 107 (Tyrrenian Sea)


ARP has yet to evaluate the drilling plan for the Tyrrenian Sea because the Mediterranean WG has not yet met to finalize a drilling program. It was noted that a very successful multichannel seismic survey was recently conducted in the area and additional time is needed to process the data. The Chairman of the Med-WG was asked to schedule a meeting before June to supply the ARP Chairman with recommendations and priorities to be presented at the June PCOM and to give the Science Operator sufficient time to prepare the cruise.

After discussion, the PCOM strongly suggested that the data from the area be rapidly processed so that the Med-WG could meet and decide on drilling priorities prior to the June PCOM. L. Montadert (ARP Chairman) should at that time present a prioritized list of drilling objectives to the PCOM. The Committee noted that it is essential that the drilling schedule be presented at this time.

CENTRAL AND EASTERN PACIFIC PANEL REPORT

R. Buffler reported that CEPAC recommended that the Gulf of California drilling proposals be re-entered into scientific planning. The Panel reaffirmed its position that the Chile Triple Junction is conceptually important but more information and extensive marine geological and geophysical work is required before a drilling program can be developed. The Panel suggested that Chile Triple Junction should not be considered for drilling at this time.

CEPAC strongly recommended that two legs be devoted to EPR hydrothermal drilling at 13°N. The Panel continues to view DSDP 504B as exciting science but it remains a lesser objective in the short-term planning than the "new" ridge crest processes.

CEPAC reaffirms that one leg of Peru drilling and two legs of EPR hydrothermal work are of top priority. Further, the 504B and 504B area proposal of Mottl should be the back-up to EPR drilling. The Panel proposed the following:

Leg 111 EPR
Leg 112 EPR 504B and 504B (Mottl) area (back-up)
Leg 113 Peru

At the March 1985 meeting, CEPAC re-evaluated their short-term objectives as decided on at the Oxford, UK meeting in September 1984. This reconsideration has occurred in light of actions taken by the PCCM since September and the availability of new documentation concerning DSDP Hole 504B (Lithosphere Panel Proposal) and 504B area drilling (Mottl proposal).

Discussion:

Von Herzen (WHOI): I thought that two site surveys (U.S. and France) were scheduled for the Chile TJ area?

Brass (NSF): Reviews of the S. Cande proposal have not yet been received in our office and the French survey using the JEAN CHARCOT does not appear forthcoming.

Cadet (France): In view of the delay in a decision being reached on the Cande proposal and from logistical and scientific points of view, IFREMER has decided that it would be very difficult to conduct the site survey.

Larson (URI): Will the ODP position on the Chile Triple Junction (i.e., whether to keep it in the schedule or not) affect funding decisions of the Cande proposal?

Brass: The proposal will be judged based on its scientific merit. The decision of where it will be funded, whether it be in the ODP or Submarine G&G Offices of NSF, has not yet been decided. If the Chile Triple Junction is removed from the drilling schedule, the proposal may be referred to other appropriate areas of NSF.

SEDIMENTS AND OCEAN HISTORY PANEL REPORT

H. Schrader reported that SOHP recommends the development of a "sand core-catcher" to enhance the recovery of unconsolidated sand-dominated sequences, that continuous "strip" photography (black and white and color) be considered for all cores recovered, and that a palynologist be included as a part of routine shipboard staffing.

Recommendations of co-chiefs:

Leg 107 (Tyrrhenian Sea): R. Thunell and M. Cita
K. Kastens and J. Mascle
Leg 108 (NW Africa): M. Sarnthein and W. Ruddiman
Leg 109 (MARK II): no suggestions
Leg 110 (Barbados N.): C. Moore
Leg 111 (EPR): no suggestions
Leg 112 (Peru Margin): E. Suess and L. Kulm
Leg 113 (Chile TJ): no suggestions
Leg 114 (Weddell Sea): J. Kennett and D. Futterer

SOHP recommended that, for short-range planning, the PCOM be advised of the following:

Leg 103 (Galicia): Continuous coring at and below the Cenomanian-Turonian boundary (L. Cretaceous).

Leg 105 (Baffin Bay/Labrador Sea): Requested 70 days for BB-3B and IA5 drilling. SOHP emphasized that the Paleogene records from both sites are necessary.

Leg 108 (NW Africa): SOHP strongly endorses a comprehensive L. Paleogene-Quaternary package proposed by Sarnthein/Ruddiman.

Leg 114 (Weddell Sea): SOHP recommends the following site priority rankings:
1-W1, 2-W2, 3-W4, 4-W5, 5-W10, 6-W6, 7-W7, and 8-W8.

SOHP remarked that the above program, in its entirety, ranks above the proposed Subantarctic traverse. SOHP also suggested that the operations times suggested by SOP are very optimistic and when more realistic times are used the proposed sites probably cannot be accommodated in a 70-day leg. Sites W6-W8 would rank above W5 if it can be demonstrated that the objectives can be achieved (i.e. using grain size and magnetic fabric in order to monitor AABW production through time and to examine water masses at different depths). SOHP considers this an important objective and suggests that the method be demonstrated on piston or gravity core samples as part of the site survey requirement.

SOHP recommended that SA8, SA2, and SA3 be drilling items of a lower priority during the Subantarctic transect. However, if W6-W8 cannot be drilled in the Weddell Sea it may be possible to use the three sites as alternatives.

Discussion:

Larson (URI): How do Sites W6-W8 compare to the SOP recommendations?

Schrader: Sites W6-W8 were given equally high priority by SOP. However, their ranking by SOHP is contingent on the demonstration of scientific objectives.

Hayes (IDGO): Did SOHP prioritize the 11 first priority sites proposed for Leg 108 drilling?

Schrader: The present number of priority sites is a distillation from 25 first priority listings.
Moberly (HIG): It must be stressed that if the panels do not prioritize their listings, the P.COM will have to do so. Therefore, it is in the best interest of the panels to do so since they have the expertise.

Consensus: It is the consensus of P.COM that SOHP prioritize the 11 first priority sites proposed for NW Africa.

LITHOSPHERE PANEL REPORT

J. Honnorez reported that LITHP continues its strong support for 504B drilling and for a higher priority to be set for lithosphere drilling within ODP. LITHP also reiterates the need to have K. Becker appointed as a member. LITHP further continues its strong support for TAMU drill pipe TV acquisition but recognizes the complexity of the problem and urges TAMU to take advantage of existing expertise within the community.

MARK I Drilling

LITHP reported that final site selection for MARK I (Leg 106) is presently not practical as the SeaMARC I survey has been delayed until May. However, the majority of LITHP preferred using Legs 106 and 109 to get two holes started rather than concentrating on a single hole.

East Pacific Rise Drilling

Because of the intensive collection of data along the EPR during the summer of 1985 (4 cruises: 2 ALVIN, 1 dredging, 1 MCS), LITHP decided to defer final site selection until early 1986 following the processing of the MCS data. LITHP hoped that other activities, such as staffing and logistics could proceed on schedule and not be delayed by decisions on detailed site selection. The Panel did, however, request that the co-chiefs be appointed as soon as possible so that they can take part in planning activities.

Discussion:

Larson (URI): Are co-chief nominations dependent on LITHP drilling plans?

Honnorez: It was understood by proposal proponents that their selection as a co-chief is not dependent on whether their proposal is or is not incorporated into planning. All proponents are aware of this and all would accept, if nominated, even if their proposals were not included in the drilling package.
Downhole Measurements

As reported earlier, several groups at Los Alamos, Sandia, U.S.G.S and Lawrence Livermore have expressed considerable interest in the development of high-temperature tools. LITHP has been made aware of a concept in which a tool pusher allows fluid to flow around the tools, sufficiently cooling them to a point where they can be used in hot holes. This appears to be extremely promising for using the borehole televiwer, sonic, caliper, 3-axis magnetometer and resistivity measurements using conventional equipment. However, it was suggested that large scale resistivity or OSE was probably not practical and that temperature and water sampling data would probably contain no useful information. Finally it was suggested that one of the major problems associated with EPR drilling lies in protecting the relatively temperature-sensitive logging cable.

LITHP also emphasized the importance of wireline re-entry to the progress of downhole experimentation.

Discussion:

Larson (URI): What is the schedule for the co-chief meeting for Leg 106?

Honnorez: A definite date has not been set but it could occur as early as June but probably in July/August.

Von Herzen: In regard to MARK drilling, is there a preference expressed in the two sites recommended?

Honnorez: Site preference depends on the results of the site survey. Both sites are on the MAR with one located 50 km south of the Kane FZ and the other closer to the Kane FZ to examine lithospheric thinning. The idea is to deploy two guidebases and drill until normal drilling conditions begin. We have chosen drilling in the Kane FZ as an alternative should this fail.

TECTONICS PANEL REPORT

R. Moberly reported that the TBCP reconfirmed its priorities for drilling during Legs 111-113, as they were presented at the Austin PCOM. These are Peru drilling as its highest priority, Chile T4 as its second highest priority, and Barbados South as third highest priority.

TBCP recommended the following persons for the co-chief scientist positions on Leg 110 (Barbados N.): J. Ladd, A. Mascle, C. Moore, and M. Marlow.

POLLUTION PREVENTION AND SAFETY PANEL REPORT
Drilling in Hot Hydrothermal Areas

The Panel discussed potential safety considerations from drilling in hydrothermal areas, such as steam flashes. It was agreed that specialist advice should be sought from experts in the area of hot rock drilling such as the Los Alamos Laboratories.

Safety Manual and Related Matters

The Safety Manual is being revised and will need Panel review prior to publication as a special issue of the JOIDES Journal. Early publication is recommended to assist the Science Operator in negotiations for drilling permissions with coastal authorities. It was recommended that guidelines for data to be provided for safety reviews should be included in the "Guidelines" special issue of the JOIDES Journal.

Leg 105 (Baffin Bay and Labrador Sea)

Baffin Bay sites - Approved by the Safety Panel (with conditions) at August 1984 meeting (3B-1, BB-3A, and BB-3B).

IA-5 - Site approved as proposed noting that there may be a need to move around the site in order to avoid boulders (to 1486 m).

IA-5A - Approved on condition of site relocation to the cross-point of lines 12 and 14 (to 650 m). Site was relocated because of poor record quality and lack of crossing line at the proposed location.

IA-9 - Approved with the recommendation that the site be located at the cross-point of lines 8N and 4E (to 850 m). Site was relocated for same reasons as IA-5A.

IA-2A - Approved as proposed to 903 m depth.

IA-2B - Approved as a re-entry site drilling to basement. Relocated 7 kms west to shot-point 6340 on line BGR 17 (to 1385 m).

IA-7 - Not approved because insufficient information was available at this time. If more information becomes available safety review can be obtained by mail.

IA-4 - Approved as proposed (to 600 m).

IA-4A - Approved to a depth of 700 m at shot-point 1186 on line 73 I 13-70164.
Leg 104 (Norwegian Sea)

VQR-2A - Approved to 1500 m and to be drilled first.

VQR-2B - Approved on the condition that there are no significant hydrocarbon shows at site 2A (to 1000 m).

VQR-1 - Approved as proposed to 1400 m on the same condition as 2B. 
Note: The Panel expressed concern with the general location of sites 2A, 2B, and 1 at a structurally high position with a large potential drainage area. Drilling was approved on the condition that the down dip location (2A) be drilled first to confirm the absence of a drilling hazard.

VQR-3A - Approved to 1500 m.

VQR-3B - Approved to a depth of 1300 m with a recommendation to move the site N (seaward) to shot-point 1400 on line C/194. A further condition is that site 3A must be drilled before 3B. Site was relocated from the top of a structural high.

VQR-4 - Approved as proposed (shot-point 9600 on line NH-1).

VQR-5 - Approved for hydraulic piston coring to sediment refusal or 300 m, whichever comes first. 
Note: Previous drilling in the area (DSDP Site 341) has demonstrated shallow biogenic gas and fluorescence suggestive of migrated hydrocarbon. For this reason, rotary drilling was not approved in this area.

Leg 106 (MARK)

MARK-1A - This is the bare rock site and was approved as proposed.

MARK-1B - Nodal basin drilling was approved as proposed. 
Note: Final sites will be chosen following a SeaMARC survey and using TV and imaging sonar.

536 SHORT-TERM PLANNING

LEG 104 (NORWEGIAN SEA)/LEG 105 (BAFFIN BAY/LABRADOR SEA)

Legs 104 and 105 were considered as a single package because decisions based on weather constraints on Leg 105 would impact planning for Leg 104.

At the Austin PCOM, Leg 104 was assigned 47 days (total) with 41 drilling days. PCOM at that time requested that the drillship depart Stavanger, Norway no later than 15 August 1985. After drill times were estimated, the Science Operator developed 2 sets of scenarios:
<table>
<thead>
<tr>
<th>SITE</th>
<th>ESTIMATED TIME (DAYS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOR 2A (re-entry)</td>
<td>Plan A: 22, Plan B: 24</td>
</tr>
<tr>
<td>VOR 2B (re-entry)</td>
<td>Plan A: 19, Plan B: 25</td>
</tr>
<tr>
<td>VOR 4</td>
<td>Plan A: 5, Plan B: 11</td>
</tr>
<tr>
<td>VOR 5 (HPC only)</td>
<td>Plan A: 1, Plan B: 47</td>
</tr>
</tbody>
</table>

There are presently 47 days assigned to reach the scientific objectives (42 drilling + 5 transit days). The Science Operator found it difficult to achieve cruise objectives with the 47-day time frame and asked that 8 days be added to increase the total number of days to 55 days. These 8 days would come from what was taken from Leg 102 and by delaying the Stavanger departure date (Leg 105) from 15 August to 23 August.

Discussion:

Schrader (OSU): What becomes of the 8 days, if the most optimistic scenario (Plan A) works?

Garrison (ODP/TAMU): In that case we would still leave Stavanger on 23 August instead of 15 and we would not lose any ice-out time because the optimum days for ice out in Baffin Bay occur no earlier than the last week in August and no later than the second week in September.

Von Herzen (WHOI): At Austin, PCOM wanted the ship to leave Stavanger on the 15th in order to get to the Labrador Sea Site (LA-5) and be ready so that when the ice cleared out drilling operations could begin to optimize the time spent in Baffin Bay. This proposal plan may compromise these objectives.

Malpas (Canada): The deferral of the start date means that if the ship goes straight into Baffin Bay (BB-3) from Stavanger, you delay the IA-5 drilling. If you return to IA-9 that results in additional transit time. If that occurs that time puts you in early November which is the beginning of the storm period.

Larson (URI): The real compromise is that the whole Labrador Sea drilling plan is delayed to the point that it conflicts with the storm period.

Malpas: With the additional transit time you may completely lose IA-5. Is it possible that the ship could take on more fuel and steam at 12-12.5 knots into Labrador Sea from Norway in order to save time?

Garrison: This is very easily arranged and estimates show that time could be saved by going at 12 knots and would not really increase fuel costs by very much.
Von Herzen: Could the scientific objectives of Leg 104 be reviewed?

Larson: Voring Sites 2A and B will test the dipping reflector hypothesis and Sites 4 and 5 will address paleoenvironmental considerations and will sample Eocene and Quaternary environments. Voring 2A will sample shallow objectives and 2B will be drilled to basement to sample Reflector K.

Kastner (SIO): Since the objectives of VQR 2B call for drilling 450 m of sediment followed by 1 km of drilling into basement, would ARP consider drilling only 100 m or so into basement?

Austin (UT): At the last ARP meeting, the co-chiefs for Leg 104 suggested drilling VOR 2A then drilling Site 4 with no attempt at Vor 2B. Site 4 is very important in terms of paleoenvironmental objectives.

Larson: How would ARP react if there was an omission of some objectives of VOR 2A and 2B? Would there be serious alterations in the overall objectives?

Austin: ARP would probably place a major emphasis in VOR 2A, if adjustments were in order, then steam to Site 4.

It was the consensus of PCOM that the paleoenvironmental objectives remain as a backup to drilling the dipping reflectors. Presently the plan calls for drilling the dipping reflectors and resolving Reflector K. If these objectives cannot be reached then the ship should go to Site VOR 4. Honnorez moved; Schrader seconded.

MOTION: Leg 104 (Norwegian Sea) includes as first priority objectives drilling at VOR 2A to resolve the nature of dipping reflectors leaving the co-chief scientists the freedom to decide when to stop drilling 2A and dedicate the remainder of the 40 working days to the leg to either resolve the dipping reflectors at VOR 2B or to go to Site 4 to pursue paleoenvironmental objectives.

Vote: for 11, against 0, abstain 1.

Larson: Does the proposed 70-day length of Leg 105 cause TAMU/SEDCC problems?

Garrison: The 70-day length causes problems in 4 areas: weather, morale, logistics and expenses (minor). If Leg 105 is 70 days (based on a Leg 104 at 47 days) then the ship arrives in St. John's approximately 2 November which is the storm season. Discussions with the co-chiefs of Leg 105 indicated that good information could be obtained by doing less at IA-5 which results in a leg that is less than 70 days. A series of options based on a 60-day leg had been discussed between Garrison, the Co-chiefs and the JOIDES Office (Plans A-D).
The co-chiefs for leg 105 (Srivastava and Arthur) have suggested a further compromise plan with 62.5 total days. This compromise, known as Plan E, involves a compromise between the objectives at IA-5 and IA-9. The result is a new IA-5A that is approximately 27 km NE of IA-5. The objectives of this site lie in the upper 650 m of the sequence with the penetration of reflector R2 (Oligocene) as the deepest objective.

During discussion, it was stated that the 8-day delay at the beginning of Leg 105 and the present arrival date in St. John's of late October/early November could combine to affect the attaining of the scientific objectives. Therefore, a 70-day length is needed for Leg 105. The Science Operator replied that if all goes perfectly then 70 days is reasonable but in reality, the weather, problems with the ship and the science objectives combine to make a 70-day leg not feasible.

The PCOM asked if a port call change from Stavanger to Reykjavik would aid the Science Operator in planning logistics. The Science Operator stated that change of ports would create additional problems in resupplying the ship and the time potentially saved does not outweigh the problems that would be created.

The following motion was moved by Malpas and seconded by Moberly.

MOTION: The Science Operator should attempt to arrange that Leg 105 commence on a date such as not to compromise the original scientific objectives of the drilling plan (i.e. 25 days for drilling at BB-3B and 25 days of drilling to basement at IA-5) and to finish in St. John's by the end of October. The port of departure for Leg 105 should be arranged to facilitate operational procedures.

Vote: for 8, against 1, abstain 3.

LEG 106

Leg 106 is designed as an engineering test leg and prepares the groundwork for Leg 109 (MARK II) scientific operations. The backup for bare rock drilling is drilling in the Kane Fracture Zone at the ridge-transform intersection basin. The second priority is drilling along the fracture zone valley wall and to the north of the basin. It should also be noted that all holes are single bit objectives.

In January 1984, the PCOM set a limit of 30 days for bare rock drilling after which the ship was to proceed to other objectives in the fracture zone. Presently, Leg 106 is scheduled to last 40 operational days plus 17 transit days, for a total of 57 days.

J. Honnorez (co-chief) proposed an alternative plan to the January 1984 directive in which he suggested using 30 days to set two guidebases and to proceed with drilling and using the remaining 10 days to drill in
the R-T nodal basin. The PCOM indicated that the plan was a reasonable alternative to the January 1984 decision and decided to readdress the issue at the June PCOM after the SeaMARC site survey of the area is completed.

INTERMEDIATE SHORT-TERM PLANNING

Leg 107 (Tyrrhenian Sea) Co-chief Recommendations

PCOM discussed the possible inclusion of an ESF representative (M. Cita) as a co-chief scientist. Discussion reflected a cautious reluctance concerning the inclusion of a non-ODP member to such a position; however, it was indicated that similar situations had occurred during the DSDP. PCOM agreed the following co-chief nominations for Leg 107 as advice to the Science Operator: J. Mascle, K. Kastens. Also nominated were M. Cita, W. Ryan, J-P. Rehault, R. Thunell.

Leg 108 (NW Africa)

M. Sarnthein and W. Ruddiman were nominated as co-chiefs by the ARP and SOHP and PCOM accepted these nominations and passed them to the Science Operator advising him to leave sufficient time for ARP and SOHP to make further nominations in the advent that they decline the invitation. PCOM also requested that a drilling plan with priorities be readied by the co-chiefs and which would be presented at the June PCOM.

Leg 109 (MARK II)

T. Juteau and W. Bryan are the co-chief scientists.

Planning for Leg 109 will begin in April 1986. However, it was indicated that a geophysicist should be added to the science staff.

Leg 110 (Barbados North)

PCOM nominated the following as possible co-chiefs: C. Moore and A. Mascle with alternates J. Ladd, W. Bryant, M. Marlow.

Discussion:

Larson (URI): Is the wireline packer available for Leg 110?

Pomari (LDGO): The packer, which was deferred due to budgetary constraints, will not be ready by Leg 110 because development and engineering will not result in a prototype until 1987. Even if funds were made available, the packer may not be ready by Leg 110.
Von Herzen (WHOI): How much money is needed to develop the packer?

Fornari: If $200K were available, the packer could be developed.

It was the view of PCOM that the delay in the development of the wireline packer is an example of how the lack of appropriate funds is impacting on the science of the program. PCOM suggested that LIDO investigate their present budget and use the funds available to develop the packer. The Wireline Operator's response was that the funds needed for development are not in the FY 85 budget. However, if advised, LIDO will refocus their program in FY 86 to develop the wireline packer. It was recommended that a list of tools (with priorities) be established which would facilitate a reference listing when budgetary problems occur. This was officially expressed in the following consensus.

Consensus: A subcommittee should be formed to prepare a PCOM priority listing of items from which short-term decisions on purchasing will be made. The committee will be composed of the PCOM Chairman (R. Larson), R. McDuff, and R. Von Herzen. The list will be compiled after reviewing previous lists and adjustments to the present list will be made as they are needed.

Fornari: The LIDO logging group will develop scenarios that will deal with the lack of funding as of 1 October 1985.

It was further recommended that the panels be notified concerning the lack of the new wireline packer on Leg 110 and suggested that they review the possible impact on their scientific objectives.

Leg 111 (EPR Drilling)

Co-chief scientists recommendations:


CEPAC: no recommendations

It was the consensus of PCOM that Bougault and Macdonald be invited as co-chief scientists for Leg 111 and that there be no prioritization of the alternates. J-P. Cadet abstained from the PCOM consensus.

Leg 113 (Chile Triple Junction)

R. Buffler proposed the following motion which was properly seconded by Beiersdorf:

30
MOTION: Remove the Chile Triple Junction from the current schedule due to logistical and not scientific issues.

Vote: for 8, against 4, abstain 0.

After further discussion a second motion developed that was proposed by Kastner and seconded by Hayes.

MOTION: Defer the decision on the extra time issue until there is more information on Legs 107-114 (June PCOM).

Vote: for 10, against 0, abstain 2.

Consensus: PCOM agreed that a "watchdog" system be put in place to aid in planning whereby a PCOM member would be assigned to compile a 2-page summary with maps and act as a proponent for one of the legs up to and including the Weddell Sea. The JOIDES Office will compile the information which will be discussed at the next PCOM meeting.

Watchdogs and their assigned packages are as follows:

Tyrrhenian Sea - J-P. Cadet
NW Africa - H. Schrader
MARK I & II - J. Honnorez
Barbados N. - R. Buffler
EPR I & II - R. McDuff (will develop 1- & 2-leg scenarios)
Peru Margin - M. Kastner and H. Schrader
Weddell Sea - D. Hayes
504B - JOIDES Office

("Watchdog" reports are needed by the JOIDES Office no later than 1 June.)

Consensus: There are a sufficient number of important scientific opportunities (palaeoenvironment) in the Chile Triple Junction area that would be lost if some attempt at drilling is not done. Therefore the area should be kept in competition for future science planning.

Schrader agreed to ask SOHP to consider the submission of a proposal to address palaeoenvironment objectives in the SE Pacific as part of a transit leg.

537 PANEL REPORTS RELEVANT TO LONG-TERM PLANNING
There was agreement among the PCOM that the length of the initial Weddell Sea leg be extended to the 70-day limit as suggested by the Science Operator. However, some members of PCOM objected to assigning to the leg the maximum number of total days at this time. It was suggested, on the other hand, that the assigning of the 70 days would be a minimum commitment for which to continue planning.

The PCOM requested that drilling plans be prepared for presentation at the June PCOM.

SOUTHERN OCEANS PANEL REPORT

As the Panel would not meet until 22 April, R. Larson distributed copies of a letter from the SOP Chairman, J. Kennett. The letter stated the following:

"The Southern Oceans Regional Drilling Panel strongly recommends to the Planning Committee that the proposed Subantarctic Leg in the South Atlantic remain as part of the future drilling plans. The scientific objectives are considered to be of high priority, although of slightly lower priority than most of the Weddell Sea objectives. The data from the Falkland Plateau and the anticipated results of Weddell Sea Drilling provide a framework for evaluation and interpretation of Subantarctic sites, and can reasonably be expected to yield as coherent a set of results as that from any other comparable region.

Two legs will also allow full utilization of the brief austral summer weather-window (January-April) while the drilling vessel is making one of its rare visits to the Southern Hemisphere. Given the severe logistic constraints and the large number of scientific objectives, a second Southern Ocean leg in the South Atlantic will be of major importance.

Like the Weddell Sea, very high priority is given to the completion of drilling objectives on the Kerguelen Plateau-east Antarctic margin, including the extension of the north-south transect between Kerguelen Island and Broken Ridge. Our mail vote resulted in the highest priority for the other objectives being given to the transect between Kerguelen Island and Broken Ridge. The next highest ranking was given to the Adelie Land Coast drilling, although realistically it does not compete as an Indian Ocean objective because of its location far to the east. The next priority in the ranking was the Crozet Plateau-Fracture Zone drilling, followed closely by Agulhas Plateau and lastly by the central Antarctic-Australian mid-ocean ridge (cold-spot trace).

Given the remoteness of the Kerguelen-East Antarctic margin area coupled with the large number of drilling objectives, our panel strongly requests the Planning Committee investigate the possibility of crew-change-resupply at Kerguelen Island using a second vessel."
Discussion:

Garrison (ODP/TAMU): SEDCO reports that two 51 1/2-day legs, with a 3-day port call in between (at Kerguelen), are needed in order to conduct the crew change-resupply operation. This assumes the ship would leave from Durban, go to the Kerguelen area, do 40 days of operations, and return to Kerguelen Island. This also assumes that another ship would bring out a new crew and 25 tons of supplies with no new drill pipe. The RESOLUTION would then do another 40 operational days at a different site and then transit 8 days to Perth. The supply ship would need to bring out 110-120 new people to make the crew change. This plan is possible if a supply ship is available.

Cadet (France): The MARION DUFRESNE is available to fulfill the role of the supply vessel. The MARION DUFRESNE is capable of transporting approximately 90 passengers, 25 tons of cargo and approximately 250K gallons of fuel. The cost would be about $17K/day from Reunion Island to Kerguelen back to Reunion Island.

During discussion other ship possibilities were mentioned such as the use of Australian supply ships and former whaling vessels based in South Africa. However, it was decided that the DUFRESNE was the best possibility. The POCM asked if there would be problems scheduling the DUFRESNE if a decision was delayed until June. TAMU agreed to contact ODP-France to discuss scheduling and the French POCM representative would contact the group in charge of the DUFRESNE.

INDIAN OCEAN PANEL REPORT

The POCM received the following revised list of drilling objectives with scores of the voting and estimated drilling legs.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Location</th>
<th>Score</th>
<th>Legs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Kerguelen-Gaussberg, first leg</td>
<td>9.50</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>90° East Ridge</td>
<td>8.25</td>
<td>1</td>
</tr>
<tr>
<td>3.</td>
<td>Neogene Package</td>
<td>8.00</td>
<td>1</td>
</tr>
<tr>
<td>4.</td>
<td>Red Sea</td>
<td>7.63</td>
<td>1</td>
</tr>
<tr>
<td>5.</td>
<td>SEIR</td>
<td>7.38</td>
<td>1/2</td>
</tr>
<tr>
<td>6.</td>
<td>Broken Ridge</td>
<td>6.88</td>
<td>1</td>
</tr>
<tr>
<td>7.</td>
<td>Kerguelen, second leg</td>
<td>6.75</td>
<td>1</td>
</tr>
<tr>
<td>8.</td>
<td>Argo AP &amp; Exmouth Pl.</td>
<td>6.75</td>
<td>1</td>
</tr>
<tr>
<td>9.</td>
<td>Cent. Ind. Basin &amp; Distal Bengal F.</td>
<td>6.25</td>
<td>1</td>
</tr>
<tr>
<td>10.</td>
<td>Davie Ridge</td>
<td>5.00</td>
<td>1/2</td>
</tr>
<tr>
<td>11.</td>
<td>SWIR PZ</td>
<td>4.88</td>
<td>1/2</td>
</tr>
<tr>
<td>12.</td>
<td>Chagos-Laccadive-Mascarene</td>
<td>4.63</td>
<td>1/2</td>
</tr>
<tr>
<td>13.</td>
<td>Makran</td>
<td>4.50</td>
<td>1/2</td>
</tr>
<tr>
<td>14.</td>
<td>Agulhas Pl., 1st site</td>
<td>3.50</td>
<td>1/2</td>
</tr>
<tr>
<td>15.</td>
<td>Rodriguez TJ</td>
<td>2.88</td>
<td>1/2</td>
</tr>
</tbody>
</table>
16. Fossil Ridges 2.25 <\frac{1}{2}\)
17. Cold Spot (Australian-Ant. Discordance) 1.75 \frac{1}{2}?
18. Agulhas Pl., 2nd site 1.25 <\frac{1}{2}\)
19. W. So. Australia 1.13 1
20. N. Somali Basin 0.63 1+

The IOP indicated that these objectives and their arrangement into a schedule are constrained by severe weather limitations, especially for the Kerguelen-Gaussberg (1 and 7) and northern Arabian Sea objectives (3 and 13). The IOP discussed several possible schedules which are presented in the full minutes of the 20-22 March 1985 meeting.

Red Sea Working Group Report

Three themes that are unique to the Red Sea area emerged from the March 11-13, 1985 meeting which was held at LDGO. These are:

1. Evolution of the lithosphere as expressed by the nature of the igneous rocks produced through the transition from continental to oceanic rifting.
2. Hydrothermal activity and metallogenesis in a young rifted margin.

They then proposed various strategies for addressing these themes and an ideal drilling program involving 11 sites was developed:

1. Axial Trough
2. Atlantis II Deep (natural laboratory)
2a. Thetis Deep (alternative to AII deep)
3. Nereus Deep (possible natural laboratory)
4. Kebrit Deep
5. Mabahass Deep
6. Shaban Deep
7. Bannock Deep
8. Zabargad Ridge
9. Coral Seapeak
10. No. Red Sea Site
11. Main Trough (Sudanese Delta)

The Red Sea Working Group concluded that one leg would be needed to accomplish the primary objectives of the Red Sea.

WESTERN PACIFIC PANEL REPORT

R. Moberly reported that WPAC presented the following preliminary list of priorities for drilling in the western Pacific region. A firmer ranking will result from the next WPAC meeting in August.
### Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>So. China Sea</td>
<td>1</td>
</tr>
<tr>
<td>Nankai Trough</td>
<td>2</td>
</tr>
<tr>
<td>Banda Sea</td>
<td>3</td>
</tr>
<tr>
<td>Okinawa Trough</td>
<td>4</td>
</tr>
<tr>
<td>Sulu Sea</td>
<td>5</td>
</tr>
<tr>
<td>Japan Sea</td>
<td>6</td>
</tr>
<tr>
<td>Bonin Trench (Toe)</td>
<td>7</td>
</tr>
<tr>
<td>Sumba Region, Trench Toe</td>
<td>8</td>
</tr>
<tr>
<td>Bonin Trench</td>
<td>8</td>
</tr>
<tr>
<td>Coriolis Trough</td>
<td>10</td>
</tr>
<tr>
<td>Bonin Forearc</td>
<td>11</td>
</tr>
<tr>
<td>D'Entrecasteau Ridge</td>
<td>12</td>
</tr>
<tr>
<td>Lau Basin</td>
<td>13</td>
</tr>
<tr>
<td>South of Taiwan</td>
<td>14</td>
</tr>
<tr>
<td>Palawan Toe</td>
<td>14</td>
</tr>
<tr>
<td>Ozborn Smt/Louisville Ridge</td>
<td>16</td>
</tr>
</tbody>
</table>

Site surveys needed to better define the high priority regions include: Banda Sea, seismic reflection and swath mapping; Bonins, MCS lines in forearc basin, sampling of serpentine diapirs; and Sumba forearc and South of Taiwan, MCS.

WPAC supports workshops on arc systems (Hawkins) planned for June 1985 in La Jolla and Western Pacific drilling planned for Singapore (Circum-Pacific Min. Resources conference) in 1986.

### SEDIMENTS AND OCEAN HISTORY PANEL REPORT

H. Schrader reported that SOHP consulted the COGS-2 document in determining Indian Ocean and Western Pacific Drilling. Rankings are as follows:

**Indian Ocean Drilling**

1. Amery (Antarctic) margin-Southern Kerguelen transect
2. Oman-Owen Ridge-Somali margin-Indus Cone, Neogene package
3. Somali Basin deep hole (Mesozoic Tethys), one deep hole
4. North Kerguelen-Southeast Indian Ridge transect polar front
5. Exmouth Plateau-Argo Abyssal Plain transect
6. Chagos-Laccadive Ridge (or 90° East Ridge)

**Western Pacific**

In addition to areas of interest summarized at the last meeting, further discussion (prioritization will await formal liaison with WPAC and CEPAC) revealed strong interests in:

1. Great Barrier Reef program
2. Queensland Plateau-Ontong Java Plateau
3. Scott Plateau and environs
4. Pore water chemistry-diagenesis in accretionary (generic) prisms
5. Volcanic episodicity, eolian transport, tephrochronology (generic)

Riser Targets

1. With stated limitations (1800 water depth; 1992 start)
   a. penetration of evaporite sequences (Med., Red Sea, S. Atl.)
   b. penetration of gas hydrates (Sea of Japan, Sea of Okhotsk, Cariaco Trench, Chilean Margin).
   c. Continental slopes (Niger Delta, NW Africa Mesozoic)

2. SOHP argued strongly that longer riser (3 km) would significantly enhance capabilities and the number of attractive targets.

LITHOSPHERE PANEL REPORT

J. Honnorez reported for LITHP.

Indian Ocean

Priorities are:
1. Red Sea - L1 (Working Group)
2. Aus-Ant Discordance - L6 (Langmuir)
3. SW Indian Ridge Fracture Zone - L4 (Dick and Natland)
4. Carlsberg Ridge - L2 (Natland)

If a good hot spot trace program (e.g. 90° East Ridge) is formulated it would place that second only to the Red Sea. If Brocher can show reasonable possibility of solving technical problems then Crozet Basin (L7) would be ranked below Dick and Natland but above Natland.

IMPORTANT: These are LITHP's priorities only within the Indian Ocean. Back-arc spreading center drilling in the Western Pacific is considered to be a significantly higher priority than all of the above projects.

Western Pacific

Major progress planned at next meeting when results of Hawkins' workshop are available.

TECTONICS PANEL REPORT

R. Moberly reported on TECP recommendations for Indian Ocean Drilling. A brief justification is provided for the top four choices.
The scores, as well as the range of scores and proposal proponents, are also presented.

1. Makran accretionary prism and slope basins (Leggett proposal) 8.75; 6-10. Excellent opportunity to address rates of deformation and uplift in clastic-dominated prism, and transition from slope-basin sediments to basement.

2. Intraplate deformation and fluid flow (Weissel et al.) 8.43; 7-10. Innovative plan to determine timing and rates of deformation of long wavelength flexures in an intraplate setting, and to address how fluid flow influences high heat flow.

3. (tie) Southwest Indian Ocean fracture zone (Dick and Natland) 7.0; 2-9. Opportunity to document vertical sequence of rock types and fabrics, in a setting characterized by slow relative plate motions, for comparisons with deformed parts of ophiolites on land.

4. (tie) Bengal-Indus fans (Curray et al.) 7.0; 3-10. Addresses a fundamental on-land tectonic problem, the uplift history of a collisional orogen, the Himalayas. Distal fan facies may reflect timing and rate of uplift as well as eustatic sea-level changes.

Targets 5-10 were ranked as follows. Comments in the minutes explain that drilling on Kerguelen (7) and in the Red Sea (10) would have ranked higher if proposals at hand had included specific tectonic objectives:

   5. 90° East Ridge, Broken Ridge hot spot targets 6.50
   6. Broken Ridge rifting and uplift (Weissel et al.) 6.43
   7. (tie) Chagos-Laccadive ridges (Duncan; Heirtzler) 6.25
   7. (tie) N. Somali Basin (old Tethyan crust) 6.25
   7. (tie) Kerguelen 6.25
   10. Red Sea (proposal of RS-WG presented by Cochran) 6.20

Riser Drilling

TECP suggested that the earlier stages of the rifting process could possibly be addressed during riser drilling.

Discussion:

After the panel presentations discussion centered on a philosophical difference between LITHP and WPAC concerning the plan for focused drilling in a back-arc region. WPAC presently does not believe that the controls are sufficiently understood to allow for detailed planning. It was decided to defer further debate on the issue until after a 25-27 June workshop on the matter has convened and reported on in August.
The POCM Chairman suggested that since there would not be another meeting before June, it is important for POCM members to study the complete minutes of the Indian Ocean Panel, the Lithosphere Panel, and the Tectonics Panel in order that detailed planning for the Indian Ocean could be conducted at the next POCM. The SOHP and SOP chairmen are to be consulted for more detailed information on their panel's high priority objectives and this information will be sent in the June POCM meeting package. A summary of each panel's objectives for the Indian Ocean is presented in Appendix A.

R. Moberly and G. Brass expressed disappointment that detailed planning of the Indian Ocean, which was the purpose of this meeting as decided in Austin, did not occur at this meeting.

R. Moberly: In view of the general responsibility of planning drilling three years in advance, one of the two main purposes of this meeting was to plan general drilling in the Indian Ocean. I ask that the minutes reflect my disappointment that we were unable to do so.

The POCM asked the SOP for more specific details concerning Subantarctic and Weddell Sea drilling.

Each POCM member was asked to bring a map with their own favorite drilling plan for the Indian Ocean.

Future POCM meetings are:

25-27 June 1985 - Hannover, FRG
8-10 October 1985 - Narragansett, RI
4-7 February 1986 - La Jolla, CA (with panel chairmen)

POCM members were advised to plan for three full days at the POCM meeting in Hannover.

Panel Membership

At the EXCOM Narragansett meeting the POCM Chairman was advised to fill panel vacancies at the April POCM meeting if the membership issue was not resolved. However, due to the potential for membership by the ESF/Australia consortium and the UK, the EXCOM at Miami advised the POCM Chairman not to fill those slots within the panels until the June POCM.
The PCOM Chairman said that it was necessary to fill the chairmanship slots of two JOIDES panels - TECP which was chaired by J. Leggett (UK) and SSP which was chaired by J. Jones (UK).

The following motion was moved by Beiersdorf and seconded by Malpas.

**MOTION:** The PCOM approves the appointments of J. Peirce as chairman of the Site Survey Panel and D. Cowan as chairman of the Tectonics Panel.

*Vote:* for 12, against 0, abstain 0.

The PCOM Chairman requested nominations for the chairmanship of TEDCOM as soon as possible.

**SCIENCE OPERATOR LIAISON WITH JOIDES PANELS**

The PCOM Chairman has approved the attendance of ODP/TAMU Staff Scientists as panel liaisons. In agreeing to this liaison, the PCOM Chairman has advised the staff scientists in the following terms:

Attendance at panel meetings is to facilitate information transfer between ODP/TAMU and the JOIDES panels. Staff scientists are to provide technical and logistical information about the ship, the instruments and the program so that the panel members have a better idea of what's possible, impossible, and equally importantly, marginal. In return, attendance at these meetings gives staff scientists some insight into possible upcoming scientific programs, plans and policies. Staff scientists are to participate in this information transfer but not to participate actively in the formulation of the science. Staff scientists must not mistake scientific programs, plans and policies made by the panels as the final words on these subjects. All of this information is funnelled up to the Planning Committee which is the final arbiter of the scientific program.

<table>
<thead>
<tr>
<th>Staff Scientist</th>
<th>Speciality</th>
<th>Liaison For</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Andrew Adamson</td>
<td>Igneous Petrology</td>
<td>LITHP</td>
</tr>
<tr>
<td>Dr. Christian Auroux</td>
<td>Geodynamics</td>
<td>SSP</td>
</tr>
<tr>
<td>Dr. Jack Baldauf</td>
<td>Diatom Micropaleontology</td>
<td>ARP</td>
</tr>
<tr>
<td>Dr. Brad Clement</td>
<td>Paleomagnetics</td>
<td>IOP</td>
</tr>
<tr>
<td>Dr. Audrey Meyer</td>
<td>Sedimentology</td>
<td>TECP &amp; WPAC</td>
</tr>
<tr>
<td>Dr. Amanda Palmer</td>
<td>Radiolarian Micropaleontology</td>
<td>SOHP</td>
</tr>
</tbody>
</table>
Further liaisons will be announced once staffing is completed.

REVISED GUIDELINES FOR PROPOSAL SUBMISSION

Guidelines for the submission of proposals/ideas were revised by the JOIDES Office and were presented to the PCOM for approval.

The guidelines were reviewed by the PCOM and the following changes were agreed:

Reword section C.2 to read:

Proponents are asked to identify available data in three categories:

a) The primary data necessary and sufficient to support the scientific proposal. The ODP Databank is authorized to duplicate and distribute these data as needed for ODP evaluation and planning procedure.

b) Other data relevant to the proposal which may be obtained from publicly accessible data bases in the U.S. and elsewhere.

c) Data which will eventually be available for public access but has release clauses imposed by the data holder (proponent). These data are not normally considered as part of the evaluation of the scientific merit of the related proposal.

Section D should be changed from 24 months to 36 months to be consistent with the flow diagrams shown in Figure 1.

TERMS OF REFERENCE

The JOIDES Office has also revised the Terms of Reference. The revision was presented to PCOM for approval.

The following motion was moved by Moberley and seconded by Buffler.

MOTION: The words "task group" be removed from Section 1, and Section 3.2 and that Section 6 be deleted. Section 9 should replace Section 6 and within that section, the words "task groups" be removed and replaced with "working groups."

Vote: for 12, against 0, abstain 0.
Consensus: The concept of working groups should be revised to the original wording as written at Morpeth PCOM and the Swindon EXCOM acceptance.

The PCOM expressed its sincerest thanks to R. Moberly for his service to the Committee as his period of membership has expired. D. Hussong (HIG) will replace Moberly.

The PCOM thanked H. Stewart for his hospitality in hosting the PCOM meeting in Norfolk and the meeting was adjourned.
PARTICIPATION OF THIRD WORLD COUNTRIES IN ODP

1. At its meeting in Austin (January 8-11, 1985), the JOIDES Planning Committee discussed the issue of the inclusion of scientists from developing countries. It was considered that there were two distinct cases, one being the inclusion of a scientific observer on the ship's party as part of a condition of clearance to drill in non-U.S. waters. This was an operational matter. The other case is that of scientific collaboration with developing countries to the benefit of both ODP and the country concerned and this was considered to be a scientific planning issue.

2. The relevant extract of the PCOM minutes is given below:

Minute -
Discussion: Whenever possible, scientists from developing countries should be invited on a personal level and it was suggested that ODP-like organizations be contacted (on a formal and informal basis). Presently, the ODP application for clearance to drill in non-U.S. waters includes an invitation for scientists of that country to participate in drilling activities during that leg.

Consensus -
Panels should be asked to explore opportunities for scientific collaboration from non-ODP member states in areas of drilling in the interests of maximizing scientific opportunities.

3. At the Miami meeting, the Executive Committee agreed with this position and asked that a variety of different approaches be investigated.

4. It was recently suggested by Dr. A.W. Bally to the JOIDES Atlantic Regional Panel that a possible approach to having membership of Third World countries directly in ODP is through the World Bank or a similar development organization. Bally is concerned that the JOIDES RESOLUTION will be drilling in the Eastern Pacific, South Atlantic, Indian and West Pacific Oceans in the next four years and that there is or will be considerable interest in the Program from scientists in South America and nations such as India, Indonesia, the Philippines, China, etc. Bally's viewpoint is that these scientists could be organized to take a full part in the Program and he believes that the World Bank could be persuaded to finance their membership on the basis of a technology transfer exercise.

5. This suggestion has been followed up by the JOIDES Office and a brief discussion has been held with Mr. Schweighauser of the World Bank. Although the prospects of World Bank funding are small it is, nevertheless, worth exploring whilst there is a sympathetic member of the World Bank staff available. A package of material about ODP, emphasising
possible opportunities for training and technology transfer, is being sent to the World Bank.

6. Related to the above is the request from the Commission for Marine Geology of the International Union of Geological Sciences which has requested that avenues of communication are kept open between members of ODP and other nations, particularly in the Third World. This could be mutually beneficial as not only would geologists from coastal nations possess information or expertise which could contribute to the ODP in terms of site surveying and site selection but they may also help to secure favourable actions from their governments concerning operations in the coastal states EEZ.

7. EXCOM is asked to advise whether this is acceptable to JOIDES. Further reports on progress will be made at future meetings.
ANALYSIS OF PROPOSALS RECEIVED BY THE JOIDES OFFICE (AS OF 30 APR 1985)

Total number of proposals received

139

a. Atlantic Ocean

comprising: General
Mediterranean Sea
Caribbean Sea
Norwegian Sea

from: U.S./JOIDES institutions

11

U.S./non-JOIDES institutions

3

France

11

ESF nations

2

U.K.

4

FRG

3

Canada

2

b. Indian Ocean

comprising: General
Red Sea

from: U.S./JOIDES institutions

25

U.S./non-JOIDES institutions

12

France

8

ESF nations

2

U.K.

2

FRG

1

c. Southern Oceans

from: U.S./JOIDES institutions

6

New Zealand

1

France

2

d. West Pacific Ocean

from: U.S./JOIDES institutions

2

U.S./non-JOIDES institutions

4

France

6

Japan

4

FRG

2

U.K.

1

Australia

3

New Zealand

1
e. Central and Eastern Pacific Ocean

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<tr>
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<th>13 proposals</th>
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<tr>
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<td>U.S./JOIDES institutions</td>
<td>8</td>
</tr>
<tr>
<td>U.S./non-JOIDES institutions</td>
<td>2</td>
</tr>
<tr>
<td>France</td>
<td>2</td>
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<td>Canada</td>
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f. General/Instrumental

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<tr>
<td>U.K.</td>
<td>1</td>
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<tr>
<td>ESF nations</td>
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<tr>
<td>FRG</td>
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Total (by country) 139 proposals

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<tbody>
<tr>
<td>U.S./JOIDES institutions</td>
<td>56 78</td>
</tr>
<tr>
<td>U.S./non-JOIDES institutions</td>
<td>22 29</td>
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<tr>
<td>France</td>
<td>29</td>
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<td>U.K.</td>
<td>8</td>
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<tr>
<td>ESF nations</td>
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<tr>
<td>FRG</td>
<td>7</td>
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<tr>
<td>Japan</td>
<td>4</td>
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<tr>
<td>Canada</td>
<td>3</td>
</tr>
<tr>
<td>Non-JOIDES nations (Australia)</td>
<td>3</td>
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<tr>
<td>(New Zealand)</td>
<td>2</td>
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</table>

In addition, 51 ideas or suggestions for drilling have been received. These range from brief letters of intent to immature proposals. Several of the items listed have now been re-submitted as full proposals. There are also several proposals for workshops.

A. E. S. M.
April 1985
<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Date Rec'd.</th>
<th>Title</th>
<th>Investigator(s)</th>
<th>Inst.</th>
<th>Site Available Date</th>
<th>Survey Future Need</th>
<th>Panel Reference</th>
<th>FOXM Reference</th>
<th>Remarks</th>
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<tr>
<td>1/A</td>
<td>12/16/82</td>
<td>Pre-middle Cretaceous geologic history of the deep S.E. Gulf of Mexico</td>
<td>Fair, R.L.</td>
<td>U.T. Austin</td>
<td>Same</td>
<td>SOHP 2/84</td>
<td>CAR-V4G (P) ARP (P) PMF (P)</td>
<td>Reference to DSDP Panels</td>
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<tr>
<td>5/A</td>
<td>7/13/83</td>
<td>Structural &amp; sedimentological development of carbonate platforms (Blake-Bahamas area)</td>
<td>Mullins, H.T. Sheridan, R.E. Schlager, W.</td>
<td>RMSAS</td>
<td>No</td>
<td>Ref'd to JOI SSP 7/25/83</td>
<td>SOHP 2/84</td>
<td>ARP (P)</td>
<td>Approved 3/84</td>
</tr>
<tr>
<td>6/A</td>
<td>8/1/83</td>
<td>Ocean crust and high latitude paleoceanography in the Labrador Sea</td>
<td>Gradstein, F.M. et al.</td>
<td>Atlantic Geoscience Centre, Canada</td>
<td>Some</td>
<td>SS needed (11/83)</td>
<td>SOHP 2/84 TECP 1/84 SOHP 10/84 (for added 14 days drilling)</td>
<td>Approved 3/84</td>
<td>Proposal revised 1/84 and 5/84 Leg 105 To include Baffin Bay drilling (Proposal 58/A)</td>
</tr>
<tr>
<td>7/A</td>
<td>8/1/83</td>
<td>Future drilling sites in the Gulf of Mexico &amp; Yucatan</td>
<td>Buffler, R.T. Bryant, W. R.</td>
<td>U.T. Austin</td>
<td>Same</td>
<td>Yes</td>
<td>CAR-V4G 1/84 ARP 7/84</td>
<td>Approved 9/84</td>
<td>Approved as back-up leg, see Props. 23/A &amp; 32/A</td>
</tr>
<tr>
<td>9/A</td>
<td>1/1/84</td>
<td>Pre-Messinian history of the Mediterranean</td>
<td>Hsu, K.J. (on behalf of the Swiss Working Group)</td>
<td>ETH, Zurich Switz. (ESF)</td>
<td>Yes</td>
<td>SEA (P)</td>
<td>MED-V4G (P) SOHP (P)</td>
<td>Approved 4/B4 4/85</td>
<td>Leg 108 Revised 3/84 &amp; further revised 4/85</td>
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<tr>
<td>12/A</td>
<td>1/1/84</td>
<td>A transect across the Tyrrhenian Back-arc Basin</td>
<td>Cita, M.B. Malinverno, A.</td>
<td>Milan Univ Italy (ESF)</td>
<td>Some</td>
<td>MED-V4G 3/84 ARP 7/84</td>
<td>Approved 9/84</td>
<td>See Tyrrenian Sea revised Proposal 21/A</td>
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<tr>
<td>15/A</td>
<td>1/10/84</td>
<td>Paleocommunication between the North and South Atlantic seafloor during the Cretaceous: Formation of the Atlantic Ocean</td>
<td>Herbin, J.P.</td>
<td>IPP, France</td>
<td></td>
<td></td>
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<td>French Blue Book</td>
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<tr>
<td>16/A</td>
<td>1/10/84</td>
<td>Atlantic-Mediterranean relationship (Gulf of Cadiz, Alboran Sea); Paleoceanographic and paleohydrological evolution since the Miocene</td>
<td>Faure, J.C.</td>
<td>Univ. of Bordeaux 1, France</td>
<td>Same</td>
<td>Yes</td>
<td>TECOP ARP</td>
<td></td>
<td>French Blue Book</td>
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<tr>
<td>Date</td>
<td>Proposal Title</td>
<td>Authors/Institutes</td>
<td>Category</td>
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<td>17/A</td>
<td>Deep oceanic crust and up, mantle proposal for deep sea drilling in the Gorringe Bank</td>
<td>Mevel, C. (Univ. P &amp; M Curie, Paris, Fr.)</td>
<td>Some</td>
<td>1/10/84</td>
<td></td>
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<td>18/A</td>
<td>DSDP Proposal off Galicia Bank</td>
<td>Mauffret, A., Boillot, G., Montadert, L. (Univ. P &amp; M Curie, Paris, Fr.)</td>
<td>Yes</td>
<td>No</td>
<td>Approved 5/84</td>
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<td>19/A</td>
<td>Proposal for drilling on the Eleuthera Fan (Bahamas)</td>
<td>Ravenne, C., Le Quellec, P. (IFP France, CFP France)</td>
<td>Yes</td>
<td>No</td>
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<td>20/A</td>
<td>Subduction Collision: the outer Hellenic Arc</td>
<td>Mascle, J. (Univ. P &amp; M Curie, Paris, Fr.)</td>
<td>Some</td>
<td>Yes</td>
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<tr>
<td>21/A</td>
<td>Rifting, stretching and oceanic accretion in the Tyrrhenian Marginal Basin</td>
<td>Rehault, J.P., Fabbrini, A. (Univ. P &amp; M Curie, Fr., Instituto di Geolog. Marina, CNR, Italy)</td>
<td>Some</td>
<td>Yes</td>
<td>Approved 9/84</td>
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<td>22/A</td>
<td>The Rhone deep sea fan site: Proposal for deep sea drilling</td>
<td>Bellaiche, G., Droz, L., Got, H., Orsolini, P. (Lab. de Geodynam. sous marin Villefran. France, CRSM, Perpignan, Fr., Université P. et M. Curie, Paris, IFP)</td>
<td>Yes</td>
<td>Only</td>
<td></td>
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<td>23/A</td>
<td>Caribbean Basins</td>
<td>Mascle, A., Biju-Duval, B. (IPP, France, CNEXO, Paris)</td>
<td>Yes</td>
<td>CAR-WG 2/84</td>
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<tr>
<td>24/A</td>
<td>New drilling along Barbados transects</td>
<td>Mascle, A., Biju-Duval, B. (IPP, France, CNEXO, Paris)</td>
<td>Some</td>
<td>Approved 3/84</td>
<td></td>
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<tr>
<td>32/A</td>
<td>Primary drilling sites for ADOF (Yucatan Basin)</td>
<td>Rosencrantz, E., Bowland, C. (U, T, Austin)</td>
<td>Some</td>
<td>Yes</td>
<td>Approved 9/84</td>
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<tr>
<td>35/A</td>
<td>Additional proposed sites for drilling on the Barbados Ridge accretionary complex</td>
<td>Westbrook, G.K., Durham, Univ., U.K.</td>
<td>Some</td>
<td>Approved 3/84</td>
<td>Related to Prop. 24/A &amp; 41/A. Now incorporated in Prop. 72/A. Part of back-up</td>
<td></td>
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<tr>
<td>Proposal Number</td>
<td>Date</td>
<td>Proposal Details</td>
<td>Authors/Institution</td>
<td>Funding Agency</td>
<td>Status</td>
<td>Panel</td>
<td>Revised Date</td>
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<tr>
<td>36/A 2/-/84</td>
<td>Drilling in the Norwegian Sea during the IPOD-extension drilling</td>
<td>Hinz, K. and Norwegian Sea Working Group</td>
<td>BGR, FRG</td>
<td>Yes</td>
<td>No</td>
<td>NOR-WG ARP (P)</td>
<td>TECP 2/84</td>
<td>Approved 3/84</td>
<td>revised 4/84 &amp; 5/84 (incorporates NOR-WG views) Leg 104</td>
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<tr>
<td>38/A 2/15/84</td>
<td>Proposal for drilling in N.E. Gulf of Mexico (DeSoto Canyon)</td>
<td>Kennett, J. and Moore, T.</td>
<td>URI</td>
<td>Yes</td>
<td>Yes</td>
<td>SCHP 4/84</td>
<td></td>
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<td>39/A 2/27/84</td>
<td>IPOD drilling in Cape Verde</td>
<td>Hill, I. and Leicester Univ., U.K.</td>
<td></td>
<td>Yes</td>
<td></td>
<td>ARP (P)</td>
<td></td>
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<td>40/A 2/27/84</td>
<td>Re-entry for logging of Site 534 (Blake-Bahamas Basin)</td>
<td>Sheridan, R. and Shipley, T. and Stoffa, P.</td>
<td>U.T. Austin, U.S.</td>
<td>Yes</td>
<td></td>
<td>ARP</td>
<td></td>
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<tr>
<td>41/A 3/-/84</td>
<td>Northern Barbados Forearc: structural and hydrological processes</td>
<td>Moore, C. and UCSC</td>
<td></td>
<td>Yes</td>
<td>Some</td>
<td>AR (P)</td>
<td></td>
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<tr>
<td>45/A 3/21/84</td>
<td>West Baffin Bay</td>
<td>Grant, A.C. and Jansen, et al.</td>
<td>Atlantic Geoscience Centre</td>
<td>Yes</td>
<td></td>
<td>SCHP 10/84</td>
<td>Approved 3/84</td>
<td>incorporated within Proposal 6/A Leg 105</td>
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<tr>
<td>59/A 3/27/84</td>
<td>Continental margin sediment instability investigated by drilling adjacent turbidite</td>
<td>Weaver, P.P.E. and Kidd, R.B. and et al.</td>
<td>IOS, UK</td>
<td>Yes</td>
<td></td>
<td>AR (P)</td>
<td></td>
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<tr>
<td>60/A 4/20/84</td>
<td>Newfoundland Basin: Eastern Canadian Margin</td>
<td>Masson, D.G. and IOS, UK</td>
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<td>Yes</td>
<td>AR (P)</td>
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<tr>
<td>64/A 6/25/84</td>
<td>To drill at Site NJ-6</td>
<td>Poag, C.W. and USGS, MOI</td>
<td></td>
<td>Yes</td>
<td></td>
<td>SCHP 4/84</td>
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<tr>
<td>68/A 7/6/84</td>
<td>Deep basins of the Mediterranean</td>
<td>Montadard, L. and IPP, France</td>
<td></td>
<td>Yes</td>
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<td>TECP 4/84</td>
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<td>Speed, R.C. and Northwest Univ. and Westbrook, G.K. and Mascle, A. and Moore, J.C.</td>
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<td>Yes</td>
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<td>ARP (P)</td>
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Notes:
- CAR W/G proposal; incorp. Leg 110
- See Prop. 24/A, 35/A and 41/A

Related to Proposals 24/A, 35/A, and 41/A.
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<td>Winterer, E.L. Hinz, K.</td>
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<td>Salem St. Brown Univ.</td>
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<td>Univ. of Hawaii</td>
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<td>Curray, J.</td>
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<td>CEPM-IFP, Musee Natn. d'Hist. Nat France</td>
<td>Yes</td>
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<td>D.S.I.R. N.Zealand</td>
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<td>Centre ORSTOM, New Caledonia, Fr.</td>
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<td>NOUMEA team</td>
<td>Centre de Noumea, New Caledonia, France</td>
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<td>ORI Tokyo Japan</td>
<td>Yes</td>
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<td>Kagami, H. Tamaki, K. Kobayashi, K.</td>
<td>ORI Tokyo, Japan</td>
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<td>7/6/84</td>
<td>ODP drilling on Tonga-Lord Howe Rise transect</td>
<td>Falvey, D.A. Exon, N.P. Willcox, B. Symonds, P.</td>
<td>BMR, Australia</td>
<td>Yes</td>
<td>TECOP (P) WPAC (P)</td>
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<td>8/30/84</td>
<td>Sunda and Banda Arc drilling: a study of convergent margin processes</td>
<td>Karig, D.E. Moore, G.F.</td>
<td>Cornell U., Tulsa U.</td>
<td>Yes</td>
<td>IOP (P) TECOP 10/84 SOHP 10/84 Revised 10/84 following US Indium Ocean Workshop</td>
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<td>9/4/84</td>
<td>Drilling in the Sulu Sea, Western Equatorial Pacific</td>
<td>Thunell, R.</td>
<td>Univ. S. Carolina</td>
<td>Some</td>
<td>WPAC (P) TECOP 9/84 SOHP (P) TECOP 9/84</td>
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<tr>
<td>1/14/85</td>
<td>Site proposals for scientific ocean drilling in the Australian region (composite proposal)</td>
<td>Crook, K.A.W. Falvey, D.A. Packham, G.H.</td>
<td>ANU, Canberra BMR, Canberra U. Sydney Australia</td>
<td>Yes Yes</td>
<td>SOHP 1/85 TECOP 1/85 IOP 1/85 WPAC 1/85 Composite proposal from Australian community COGS-2 super-proposal.</td>
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<tr>
<td>1/21/85</td>
<td>Evolution of the SW Pacific: drilling proposal for the area north of New Zealand</td>
<td>Eade, J.V.</td>
<td>N.Z. Ocean Institute, N.Zealand</td>
<td>Some</td>
<td>TECOP 1/85 MPAC 1/85 LITHIP 1/85 SOHP 1/85</td>
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<tr>
<td>Ref. No.</td>
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<td>Title</td>
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<td>2/E</td>
<td>12/16/82</td>
<td>Regional seismic reflection profiles across the Middle America Trench and convergent margin of Costa Rica</td>
<td>Crowe, J.C., Buffler, R.T.</td>
<td>U.T.Austin</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>3/E</td>
<td>6/27/83</td>
<td>Drilling in the vicinity of the Hawaiian Islands</td>
<td>Watts, A.B.</td>
<td>UMO</td>
<td>Some</td>
<td>Yes</td>
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<tr>
<td>4/E</td>
<td>undated</td>
<td>Drilling in the Tuamoto Archipelago(French Polynesia)</td>
<td>Okai, E.A.</td>
<td>Yale Univ.</td>
<td>Some</td>
<td>Yes</td>
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<td>8/E</td>
<td>9/18/83</td>
<td>Ridge crest subduction along the Southern Chile Trench</td>
<td>Cande, S.C.</td>
<td>UMO</td>
<td>Some</td>
<td>Yes</td>
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<td>14/E</td>
<td>1/10/84</td>
<td>Zero age drilling: East Pacific Rise 130° N.</td>
<td>Bougault, H.</td>
<td>OB, France</td>
<td>Yes</td>
<td>Yes</td>
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<td>34/E</td>
<td>2/-/84</td>
<td>Pacific-Aleutian-Bering Sea (PAC-A-BERS) proposal</td>
<td>Scholl, D., Vailier, T.</td>
<td>USGS, Menlo Park</td>
<td>Some</td>
<td>Yes</td>
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<td>37/E</td>
<td>2/25/84</td>
<td>Costa Rica drilling - a test of the duplex model</td>
<td>Shipley, T., Moore, G., Buffler, R., Silver, E., Lundberg, N.</td>
<td>U.T.Austin, UCSC Princeton</td>
<td>Some</td>
<td>Yes</td>
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<td>75/E</td>
<td>8/13/84</td>
<td>Gulf of California drilling</td>
<td>Becker, K. et al.</td>
<td>SIO</td>
<td>Some</td>
<td>Yes</td>
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<td>76/E</td>
<td>8/17/84</td>
<td>Proposal for drilling oceanic crust at the axis of the East Pacific Rise</td>
<td>Francheteau, J., Hekinian, R.</td>
<td>Univ.Paris IFREMER, Brest</td>
<td>Some</td>
<td>Yes</td>
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<td>84/E</td>
<td>9/10/84</td>
<td>Peru Margin drilling proposal</td>
<td>Kulm, L., Hussong, D</td>
<td>UMO</td>
<td>Need to be decided</td>
<td>Yes</td>
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<td>123/E</td>
<td>12/28/84</td>
<td>Regional drilling studies at IPPO Site 501/504</td>
<td>Mottl, M.J.</td>
<td>MAID</td>
<td>Yes</td>
<td>No</td>
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<td>124/E</td>
<td>01/02/85</td>
<td>Proposal to deepen Hole 504B</td>
<td>Becker, K. (on behalf of LITIP)</td>
<td>SOUP</td>
<td>Yes</td>
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**Remarks:**
- Reference to DEP Panels
- Leg 113
- Related to Prop. 76/E, Leg 111, French Blue Book
- Revised 8/84
- Revised 11/84, Rel. to Prop. 14/E, Leg 111
- Leg 112
- Related to Prop. 124/E
- Approved as back-up Leg
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<th>Date</th>
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<tr>
<td>04/02/85</td>
<td>Equatorial Pacific depth transect: Ontong Java Plateau</td>
<td>Mayer, L.</td>
<td>Dalhousie U. Canada</td>
<td>Some</td>
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<td>Berger, W.H.</td>
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<td>Yes</td>
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<td>Investigator(s)</td>
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<td>Site Availability (Site Available)</td>
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<td>13/F</td>
<td>1/5/84</td>
<td>Setting-up of a water column research laboratory</td>
<td>Wiebe, P.H.</td>
<td>WHOI</td>
<td>N/A</td>
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<td>53/F</td>
<td>3/19/84</td>
<td>Vertical seismic profiling for ODP</td>
<td>Phillips, J.D., Stoffa, P.L.</td>
<td>U.T. Austin</td>
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<td>66/F</td>
<td>7/5/84</td>
<td>Laboratory studies of basalt rock cores on SEDCO/BP 471. Principal horizontal stresses in the oceanic crust from anelastic strain recovery and other rock studies</td>
<td>Whitmarsh, R.B.</td>
<td>IOS, UK</td>
<td>Some</td>
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<td>69/F</td>
<td>7/23/84</td>
<td>Rock stress measurement in the southern part of the Norwegian Sea</td>
<td>Stephansson, O.</td>
<td>Univ. of Lulea Sweden</td>
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<td>70/F</td>
<td>7/23/84</td>
<td>Borehole seismic experiment at DSDP sites 417 and 603</td>
<td>Stephen, R. Mayer, L. Shaw, P.</td>
<td>LIDO</td>
<td>Some</td>
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<td>128/F</td>
<td>01/21/85</td>
<td>Proposal for an ODP hole dedicated to the physical properties, mechanical state, and structural fabric of deforming sediments in accretionary prisms</td>
<td>Karig, D.E.</td>
<td>Cornell Univ.</td>
<td>Yes</td>
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<td>133/F</td>
<td>03/21/85</td>
<td>In situ sampling of pore fluids during ODP</td>
<td>McDuff, R.E., Barnes, R.O.</td>
<td>U. Washington</td>
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<td>143/F</td>
<td>04/15/85</td>
<td>In situ magnetic susceptibility measurements with a well log probe</td>
<td>Kramer, K., Pohl, J.</td>
<td>Inst. fur Allgemeine u. Angewanteu, Munich, FRG</td>
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