

DRAFT MINUTES

25-27 JUNE 1985

BUNDESANSTALT FUR GEOWISSENSCHAFTEN UND ROHSTOFFE
HANNOVER, FEDERAL REPUBLIC OF GERMANY

PCOM Members:

R. Larson, Chairman (University of Rhode Island)
H. Beiersdorf (Federal Republic of Germany)
R. Buffler (Univ 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)
D. Hussong (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)
J. Clotworthy (Joint Oceanographic Institutions, Inc.)
D. Fornari (L-DGO, Wireline Logging Services)
L. Garrison (ODP/TAMU Science Operator)

Guests:

B. Biju-Duval (EXCOM Budget Subcommittee)
H. Durbaum (EXCOM Budget Subcommittee)
R. Heath (EXCOM Budget Subcommittee)
K. Klitgord (Chairman, JOI Databank Review Panel)
J. Masçle (Chairman, Mediterranean Working Group)
P. Rabinowitz (ODP/ TAMU Science Operator)
J. Winterer (Leg 103 Co-chief)

D. Maronde (Deutsche Forschungsgemeinschaft)
Prof. Rexhauser (Vice-Pres. of Bundestalt fur Geowissenschaften und
Rohstoffe - Federal Republic of Germany)
K. Hinz (BGR, Federal Republic of Germany)
U. von Rad (BGR, Federal Republic of Germany)
U. von Stackelberg (BGR, Federal Republic of Germany)

JOIDES Office:

D. Keith
A. Mayer

ACTION ITEMS

- JOI, Inc. - Contract examination and policy decision on the responsibility and location of logging database.
- Wireline Logging Services - Status and capabilities of the shipboard logging software.
- Use of the Schlumberger pore fluid package for future activities.
- Science Operator - Weather summaries of the Indian Ocean.
- PCOM Chairman - Consideration by Panels of the Indian Ocean schedule and options.
- Request detailed back-up program for Legs 106/109 should the guidebases fail.
 - Request that TECP and ARP develop a back-up program for Leg 110 if drill-in casing fails.
 - Obtain Co-Chief recommendations from LITHP and CEPAC for Hole 504B.
 - Request from the Panels their opinions on the balance of expertise in their membership.
 - Invite Jean Jarry to chair TEDCOM and arrange a TEDCOM meeting.
 - Request that CEPAC/SOP/SOHP review the priorities of Peru, Hays proposal and Weddell Sea-paleoenvironmental and site survey data assessments for the 1986 legs.
- JOIDES Office - Arrange a PCOM Publications Subcommittee meeting.

INTRODUCTION AND OPENING REMARKS

R. Larson, Planning Committee Chairman, convened the 25-27 June 1985 meeting held at the Bundesanstalt fur Geowissenschaften und Rohstoffe (Federal Institute for Geosciences and Natural Resources) in Hannover. Meeting participants were welcomed to the Federal Republic of Germany by H. Beiersdorf (FRG-PCOM representative) and by Professor Rexhauser, the Vice-President of the BGR, who delivered an opening address reviewing the FRG participation during the IPOD phase of DSDP and the continued involvement in ocean drilling during the ODP.

Dr. D. Hussong was welcomed as the University of Hawaii representative to the Planning Committee. He replaced Dr. R. Moberley whose term of the PCOM had expired. The Chairman also welcomed members of the EXCOM Budget Subcommittee, visitors from the Federal Republic of Germany and others specially invited to the meeting.

ADOPTION OF MEETING AGENDA

The proposed agenda was amended by removing the issue of GPS navigation for Leg 106 from Short-range Planning and placing it in the Science Operator Report and by moving the report of the co-chief for Leg 103 from behind the JOI Databank Review Panel Report to immediately following the Science Operator Report.

S. Gartner moved (seconded by Buffler) that the Committee adopt the amended agenda.

Vote: for 13, against 0, abstain 0.

MINUTES OF THE NORFOLK PLANNING COMMITTEE MEETING

H. Schrader moved that the minutes of the Norfolk PCOM meeting be adopted.

Vote: for 13, against 0, abstain 0.

JOIDES EXECUTIVE COMMITTEE REPORT

R. Larson (PCOM liaison) reported that the 5-6 June 1985 EXCOM meeting was divided into a joint session with the ODP Council during the first day and a regularly scheduled meeting on the second day. The joint session which was co-chaired by JOIDES and NSF included the signing of a Memorandum of Understanding (MOU) by Japan. Japan's membership in the ODP will begin on 1 October 1985.

Membership

Larson also reported that the ESF/Australian membership situation remains unchanged from the Norfolk meeting. The ESF has signed an extended candidate member MOU with the NSF which expires at the end of September 1985. Presently, the ESF has \$1.5 million for the purchase of 60% of a full membership and Australia is aiming for 40% of a full membership. The decision on Australian participation in the ODP is dependent on a cabinet decision that will probably be made no earlier than mid-August 1985. It was the consensus of EXCOM that if an ESF/Australian full membership is achieved and if each provides a delegate and an alternate for meetings (to ensure that full information is available to both parties) then they both may attend EXCOM and PCOM meetings. However, the alternate will attend these meetings as a non-participating, non-voting guest.

The U.K. membership issue remains unchanged. Additional funds have been requested in FY 86-87 but there has been no response to that request. At this time the U.K. has signed an extended candidate member MOU that expires at the end of September 1985.

The EXCOM also passed a resolution concerning the participation of the Soviet Union in the ODP. This resolution recognized the many contributions made by scientists in the USSR to the IPOD phase of DSDP and their significant presence in the world geoscience community. The resolution further asks the NSF to pursue a course of action which will lead to the early re-establishment of an MOU with the Soviet Union. The NSF acknowledged this expression of encouragement and indicated that there are no problems perceived in carrying out the request. It was suggested that representatives from the USSR be invited as guests to the September 1985 EXCOM meeting in Bonn, FRG.

Status of Panels

Larson informed the EXCOM that vacancies on the panels, which are all 2 members short, will be kept open until 30 September 1985. It was his intention to review panel membership next at the annual meeting of the PCOM and the Panel Chairmen.

Data Publication

The EXCOM has asked the PCOM to create a subcommittee to investigate alternate methods for the presentation of data to the community. This subcommittee will work with R. Merrill (TAMU) to create options.

Budget Situation

EXCOM had held a major debate on the budgetary problems facing ODP in FY86 and had taken note of the recommendations and assessment of the PCOM Budget Subcommittee. EXCOM had established its own Budget Subcommittee which would listen to PCOM views, and would then meet to take into account information from JOI, NSF and the major subcontractors and would report immediately to the EXCOM Chairman and JOI.

NATIONAL SCIENCE FOUNDATION REPORT

G. Brass (NSF) reported that the reorganization of the Ocean Sciences Section, as presented at the Norfolk meeting, has been completed.

BUDGET

The NSF Budget for FY 86 presently is under consideration by the U.S. Congress and all expenditures are frozen at FY 85 levels until the budget is acted upon. Further, the state of the ODP Budget, which was scheduled for an increase of \$ 1.25 M, will not be fully known until the total NSF appropriation is passed.

The requested NSF/ODP Budget appropriation for FY 86 is \$ 28.85 M, which is independent of the international membership situation in ODP.

Changes to the NSF budget since March 1985:

	March 1985	June 1985
ODP	\$19.00M	\$ 20.00M
DSDP	2.50M	2.00M *
US Science	7.35M	6.85M *
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	\$ 28.85 M	\$ 28.85 M

* approximate figures

Changes in the ODP Budget since March 1985:

	March 1985	June 1985
U.S. contribution	\$19.00M	\$20.00M
5 member contri.	\$12.50M	\$12.50M
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	\$31.50M	\$32.50M

Discussion:

Schrader (OSU): Would NSF care to comment on the tapping of funds from U.S. Science activities?

Brass: This is not the appropriate forum to discuss U.S. Science activities.

Larson (URI): Are there any potential personnel changes at the NSF?

Brass: On 1 October 1985, S. Toye will leave OCFS to become the Comptroller of the NSF. At this time, her replacement has not yet been determined.

Von Herzen (WHOI): Is the head of OCFS in charge of the ODP budget?

Brass: The head of OCFS commands the ODP budget as it is 60 % of the OCFS Budget.

JOINT OCEANOGRAPHIC INSTITUTIONS REPORT

J. Clotworthy reported.

JOI, Inc. has developed a list, as prescribed in the minutes of the Norfolk meeting, which describes those items which ODP is contractually bound by leasing or other arrangements. Copies of this listing was circulated among meeting attendees.

The appointing of members to the Performance Evaluation Committee is nearly completed. Presently, the committee consist of W. Hay (Chairman), C. Drake (Dartmouth Col.), J. Maxwell (Univ. of Texas) , J. Creager (Univ. of Washington), K.Klitgord (USGS), and P. Vail (EXXON). Letters of invitation have been sent to K. Hinz (Federal of Germany) and J. Aubouin (France).

The ODP Databank Review and the Draft Program Plan for FY 86 have also been completed. The Draft Program Plan has been distributed to both PCOM and EXCOM members.

FY 86 PROGRAM PLAN

Clotworthy commented on the philosophy used in the formulation of the Program Plan. Using \$32.5M as the upper bound for monies available to the ODP, the funding for each of the participants was scaled down proportionately from their original requests and the end product was that under the present budgetary constraints, many of the objectives set forth by the PCOM will not be achieved at this time. However, JOI is confident that there are many options available that will enable the budgetary burden to be spread throughout the program with a minimum of program disruption. One option was to apply an across the board reduction to all facets of the program in order that the "pain" be equally distributed. JOI has applied this option to its original budget as well as the proposed budgets of TAMU and L-DGO with a constant reduction along the order of 12-13%. However, TAMU has taken steps to save the operating "core" of the program and the product of that core rather than spreading the "pain" across the entire element of the program. The result of the philosophy is that the operation of the ship (with the inclusion of science staffing and onboard personnel) and preservation of the data that would result from drilling operations are the main priorities. Therefore the emphasis is on the proper operation of the ship, from the standpoint of maintaining the laboratories at full strength and at maximum capabilities and the preservation of results and their interpretation in their "raw" form. It was proposed that the publication of these results could come at a later time. Therefore from this philosophy there would be a lesser emphasis on technical publications and in future engineering development aspects of the TAMU operations.

Furthermore, there are number of "addbacks" to the program if additional funds become available and these should be prioritized.

Clotworthy emphasized that the JOI, TAMU and L-DGO budgets have been scrutinized in great detail and that JOI is confident that the minimum acceptable levels of operations have been reached for the 1 yr. period.

Clotworthy presented the ODP FY 1986 budget with the originally proposed figures based on operational experience (on the left) and the results after the budgetary reductions were made (on the right):

FY 86 JOI REQUEST ----- \$ 36.4M	FY 86 NSF TARGET ----- \$ 32.5M
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JOI'S APPORTIONMENT

JOI	\$ 1.60M*	\$ 1.42M*
L-DGO	2.80M	2.50M
TAMU	32.00M	28.58M
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\$ 36.40M	\$ 32.50M	

*includes Databank and the JOIDES Office

Discussion:

Schrader: The NSF Target budget figures assume 5 members which is not the reality of the situation. How can it be that the budget is based on five members when there presently are only 4 members? It seems a though we are \$ 2.5m (or 1 membership) short in all the figures.

Brass (NSF): NSF has always planned for 5 members and the provisions for overcoming the deficit in and only for FY 86 are explained in the NSF Report.

Honnorez (Miami): The EXCOM should make alternate decisions for the budget. Further, the PCOM and the EXCOM should face the budgetary reality and note their responsibilities in this regard. The present budgetary situation strongly suggests that COSOD objectives cannot be achieved at this time.

Clotworthy: JOI disagrees that the present budget leads to an abandonment of COSOD objectives as the bare rock engineering test (Leg 106) will occur and high latitude drilling (Legs 104 and 105) is on schedule. Also, there is nothing in the mandate that states all COSOD objectives have to filled in 1986.

SCIENCE OPERATOR REPORT

Leg 104

L. Garrison reported that Leg 104 departed Bremerhaven on 24 June with the following operations changes.

The co-chiefs requested approval to replace VOR-2A and VOR-2B by drilling at Site VOR-1. The Pollution Prevention and Safety Panel, which had previously stated that VOR-2A should be drilled first, agreed to this substitution on the condition that the site was moved 0-5 nautical miles downdip to a new site, VOR-1A and drilled to maximum depth of 1450 meters.

The co-chiefs have been asked to spend 30 days on VOR-1A in an attempt to sample reflector K and to devote the remaining time to sites VOR-4 and VOR-5.

The PCOM agreed to the above change in operations.

Garrison indicated that Vertical Seismic Profiling (VSP) work that was initially approved on Leg 101 but not conducted will be conducted on Leg 104. However, the inclusion of this add-on program has created a number of problems, including its appropriateness for the leg, that need to be resolved by the PCOM. The co-chiefs for Leg 104 have agreed to the 2 days needed to conduct the experiment and TAMU also has no problem with its conduct, with the exception of its logistical organization.

TAMU also noted that on Leg 102, a program was eliminated and now discussions are occurring with the Leg 105 co-chiefs for its inclusion into the Baffin Bay/Labrador Sea program. TAMU requested that in the future, add-on programs be first approved by PCOM and then detailed plans concerning its operation be sent to the Science Operator.

The principle of add-on programs was discussed by PCOM and several members suggested that a policy was needed to prevent a situation from occurring where a program approved for one leg but that is not done for some reason is later inserted into another leg and therefore comprises the objectives of the latter.

The following motion was proposed by Von Herzen and seconded by Beiersdorf:

Motion: The PCOM reminds the various components (including the science and wireline logging operators, proposal proponents and co-chief scientists) of ODP that non-routine experiments may not be scheduled without its prior approval. For Leg 104, PCOM reiterates the scientific importance of reaching horizon K on at least one hole and supports the VSP experiment being planned for that leg as long as it is consistent with the horizon K objective.

Vote: for 14, against 0, abstain 0

The Science Operator noted that in order to balance a number of financing and ship operations arrangements, 8.5 days has been added to Leg 104B and that same amount subtracted from Leg 105. The result of this process is that a transit leg (Leg 104B) was created which will depart from Stavanger, Norway on 16 August and arrive in St. John's, Newfoundland on 24 August. This schedule permits for an open ship while in Stavanger, a crew change while in St. John's and 61 operating days for Leg 105.

Leg 105

After discussions with Canadian Gas and Oil Lands Administration (COGLA), TAMU has hired an ice observer from an ice management program, purchased survival suits and leased a picket boat during the program in the Baffin Bay/Labrador Sea area. The picket boat will be 6-15 miles upcurrent from the RESOLUTION while in Baffin Bay and will report to the ice observer onboard the ship. The observer will then plot iceberg trajectories on computer. This procedure will give the ship the needed 3-6 hrs warning time that it needs to pull out of the hole and relocate its position relative to the ice. Its predicted that for the 25-30 days that the RESOLUTION is in Baffin Bay, the ship may relocate approx. 3-4 times.

The latest observations indicate that the ice pack presently completely covers Baffin Bay. However, observations indicate that the ice in the far northern reaches of Baffin Bay has begun to break up. Based on this observation and from past experiences, predictions are that the ice will leave the drill site by the end of August. The Science Operator envisages drilling site BB-3B, releasing the picket boat and the ice observer and thereby saving the program thousands of dollars.

The Science Operator also suspects that within the Baffin Bay area clathrates may be sampled due to the bottom temperatures and other characteristics.

TAMU has applied to Denmark for a permit to drill at Site LA 5 near Greenland and there are no problems expected with the application at this time.

In closing the report on Leg 105, Garrison noted that the Leg 105 cruise prospectus is available and that all berths are filled.

Discussion:

Kastner (SIO): Is there a PCOM policy for the collection of clathrates?

Winterer (SIO): Past PCOMs have been lobbied by the geochemical community to collect clathrates.

Garrison: If clathrate collection becomes as assigned part of the program, then in the future we will be prepared to collect them but there is no funding for pressure core barrel development at this time.

Schrader: Would you comment on the development of orientated cores?

Garrison: Presently, we are capable of taking orientated cores using a device leased by TAMU. The original budget proposal was to purchase such a device.

Leg 106- Bare Rock Drilling Schedule

The program is on schedule and will commence in October 1985. The coring motor, which is an altered version of a standard drilling motor, is scheduled for delivery by October and the purchase order for the drilling guidebases are out and delivery is expected in August. A model of the coring motor (a Navidrill-Mach 1) will be tested on Leg 104 but the coring motor itself will not be tested. Garrison commented that since there is no time for a testing program there is the possibility of failure. However, TAMU is confident that the system will work.

The SeaMARC site survey for Leg 106 was very successful as 3 sites were determined within the site requirement guidelines and 3 beacons set.

TAMU has also purchased a Magnavox 1107 Dual Channel Satellite Navigator GPS system. The system is scheduled to go onboard the RESOLUTION previous to the Leg 105, during the Stavanger portcall. It was noted that navigation data will be reported directly to the Geophysics Laboratory rather than to the bridge.

Discussion:

Cadet (France): What is the best estimate for the timing of the program?

Garrison: Since this is the first time, we have no idea for the time needed. However, several experts estimate 2-3 weeks are needed.

Winterer: What is the fallback plan if the rubble zone extends to a depth of 1 km?

Garrison: The only way to know to what the extent the rubble occurs is to drill several meters, stop and then decide if there will be a need for casing.

Engineering

On Leg 102B, the Mesotech system was tested for 10-12 hrs near the FAMOUS area. Videotapes were brought back to College Station and are in the process of being edited. Preliminary examination shows the device to have been successful although the scan rate used was too fast and the scan angle was such that the system was unable to resolve obstacles in front of it.

Staffing

Leg 105 is mostly staffed and staffing for Leg 106 is not yet completed.

Co-chief Scientists for subsequent legs are:

Leg 106 Honnorez/Detrick
107 Mascle/Kastens
108 Sarnheim/Ruddiman
109 Bryan/Juteau
110 Mascle/Moore
111 To Be Announced

Indian Ocean Operations:

TAMU has prepared an analysis of weather and sea state conditions in the Indian Ocean to assist in planning. This could be carried out for other planning in other oceans should this be required.

REPORT FROM CO-CHIEF OF LEG 103

J. Winterer, Co-chief Leg 103, reported that a substantial amount of information (multichannel seismics, dredging and Seabeam data) led to well documented site surveys which in turn resulted in a much better understanding of the geometry of the reflectors that underlie Galicia Bank. Because of the success of the cruise, a follow-up program of geophysical and submersible work is presently being scheduled for the area in order to resolve those locations that were unresolvable using the drillship.

The objectives of the cruise were to sample pre-rift, syn-rift and post-rift rocks, develop a scenario for the opening of the Atlantic based on these samples and to sample an unconformity created during the faulting and rifting process. Although the cruise objectives were initially well defined, variations in the underlying geology were found that forced a change in the original sampling tactics (e.g. drilling operations at several were terminated due to bad hole conditions that were created by coarse-grained clastic sediments).

On the whole the RESOLUTION worked well and the iron roughneck worked very well (at rates faster than the CHALLENGER), saving the program approximately 2 days. The science and logging technicians worked very hard but perhaps the science party was too large. Further, the logging program was poor due to the hole stability problems and there were problems with the deck electronics. The program did not attempt through the pipe logging because of problems with the insurance coverage and the science party suggests that L-DGO must provide funding for this program as TAMU will not use the drill pipe for L-DGO logging under bad hole conditions as were encountered on this cruise.

A summary of each of the drill sites is found below:

Site 637 (lherzolite ridge)

Drilling sampled 75 m of periodotite that had been mylonized in a dextral sense. Dips varied from from 30 degrees along shallow sections

of the hole to 70 degrees at depth. The material is interpreted to be Jurassic or Cretaceous oceanic crust or a slab of Hercynian ophiolite.

Sites 638-639,641

Results at these sites led to a reorganization of the seismic stratigraphy of the Galicia and American margins. Drilling yielded sandy flysch from clastic wedges in half grabens. The debris ranged in age from Jurassic to the E. Cretaceous. Interpretations of these samples suggest that they are related to crustal thinning during the rifting process. Although successful at sampling the clastic wedges at this location, the leg was unable to sample the top of a carbonate reflector (reflector 5) due to bad hole conditions.

Site 639, which was scheduled to sample a complete stratigraphic section including the flysch deposits and the carbonate break-up reflector, sampled the lower part of the flysch sequence then landed in severely fractured dolomite that created drilling problems. Therefore the cruise was unable to sample a complete section at a single location. Drilling at several locations sampled either limestone (Site 639D) or basement composed of rubbly material (basal conglomerate and rhyodacite) with dips between 15-40 degrees (Site 639E, F).

Site 640

Site 640 was located on a buried ridge where Neogene turbidities overlie a thick (2 sec) acoustic unit that rests upon a strong, laterally extensive reflector believed to represent the boundary between ductile and brittle crust with listric faulting at depth in the section. The results of drilling showed the reflector to be the top of the Upper Jurassic/Lowest Cretaceous carbonate platform or crystalline basement and is not a ductile/brittle boundary within the crust.

Generally, results suggest that the timing of rifting along the American margin is coincident with locations along the N. Atlantic basin and possibly could have been initiated earlier. Also, the results suggest that a re-evaluation of the Vail sea level curve for this area might be in order in light of new tectonic and sea level information (especially in the E. Cretaceous).

In closing, Winterer indicated that the total recovery for the leg was approximately 40 % and predicted that Leg 105 may encounter drilling problems similar to those of Leg 103 due to the possible presence of clastic wedges in the Baffin Bay/Labrador Sea area.

WIRELINE LOGGING SERVICES OPERATOR REPORT

D. Fornari reported that a full report on logging activities for Leg 103 will be available at the October 1985 meeting of the POOM.

In response to an Action Item from the Norfolk meeting which concerns investigating the placing of a log analysis system onboard

the RESOLUTION. Wireline Logging Services has held discussions with Energy Systems in Denver, Colorado about putting their logging software on the ship at a substantially reduced price. It should be noted that Energy Systems currently supplies the logging software for the shore-based logging computer. Discussions have also been conducted with Terra Sonics, Inc. for the use of their logging analysis program called Terralog. It is hoped that this package can operate through a modem data transfer system between the Cyber unit and the MASSCOMP. The software for this system, however, is not as sophisticated as the Energy Systems software but a newly issued software update should make it equivalent to the shorebased package. Meanwhile, the Terralog system has been hired and has been put on the ship now so that there is a capability for real-time analyses and with the software update should be equivalent to the shorebased software.

Discussion:

Von Herzen (WHOI): The Downhole Measurements Panel feels that the software at L-DGO should be placed on the ship for all to use. This replacement would be in lieu of the software that R. Anderson discussed at the last DMP meeting which was considered less adequate than the system at L-DGO.

Fornari: L-DGO is hopeful that the Terralog package with the update can adequately fulfill the request and investigations are occurring concerning placing the shorebased system on the ship by Leg 105.

Fornari also distributed a listing of the logging tools presently onboard the RESOLUTION and their cost per day (Appendix A).

Heave Compensator

Fornari distributed a report on the Heave Motion Compensator.

All components of the heave indicator system have been received and are being evaluated. The heave control panel is being assembled and tested. The software which is to be loaded into the controller is being developed and ready for evaluation at the end of June 1985. The hydraulic power package is about 40% complete and assembly is being slowed by delivery problems. L-DGO has been assured by the vendor involved that the problem will be solved and the package sent at the end of June.

Testing of the heave compensator will occur during the first week of July 1985. After tests are completed, the tool will be shipped at the end of July to Stavanger, Norway.

Digital Borehole Televier

Fornari distributed a report on the digital borehole televier system that had been prepared by M. Zoback and C. Barton of Stanford University.

Fornari emphasized that the development of the borehole televiewer has been a very important link between Stanford and the W. German Mining Institute and the development of the televiewer is an on-going part of the L-DGO logging program. L-DGO expects that in time the televiewer will become an important tool in the resolution of downhole stratigraphy.

Discussion:

Winterer: Wireline Logging must inform its technical people to the scientific importance of using the tool. At this time, it is clear it is good for observing pillow basalts in Hole 504B but it is not clear for what other purposes it is to be used. After that issue is cleared then it should be easier to sell to the science parties.

Fornari: I agree that the tool must be shown to have a specific scientific purpose that can address certain problems.

Honnorez: I think this again brings up the issue of having a logging-oriented scientist on the ship, who is not apart of L-DGO and who would be knowledgeable in using the logging tools.

Fornari: L-DGO is presently working with TAMU on the standardization of a logging format for publication.

Winterer: On Leg 103, the science party had great difficulty in getting the logs from the L-DGO shipboard logging representative whose position was that logging data does not go into the prime data file and could only be obtained from the shorebased logging operation. However, only after intense discussions did the science party get 6 copies of the logging data. *

The PCOM Chairman asked that JOI, Inc investigate this matter for a policy decision.

In closing this issue, Von Herzen stated that the Downhole Measurements Panel has requested that at least one copy of all primary geophysical data be left on the ship until the data is interpreted and published.

Fornari: L-DGO has revised and issued new logging time curves for insertion into the logging manual. L-DGO requested guidance from the PCOM on a decision not to place a logging technician on the ship for Leg 106. The issue was referred to Short-term Planning.

*FOOTNOTE: Fornari subsequently responded to the PCOM Chairman in writing on July 14, 1985 to the question of shipboard log copies. A portion of his response is quoted below:

"While it appears that there was some time delay in getting the logs to the scientific party after the first hole (Site 637) (about 5 days from the end of recording to the time copies were given to the Chief Scientist), considering that it was the first hole this is not an excessive delay. For all holes drilled after that and logged, the logs were distributed within 24-48 hours after the

final recording. This is well within the normal time frame for receiving the logging data.

In addition, Dr. Winterer indicated that there was great reluctance in turning over the logs to the shipboard scientists. This is absolutely not true. These data were turned over to all interested shipboard scientists in a timely fashion and more than the requisite 6 copies were distributed. It was also intimated that we had refused to hand over copies to the TAMU representative. This is also incorrect as a copy was given to Dr. A. Meyer of TAMU."

REPORT OF THE JOI DATABANK REVIEW PANEL

K. Klitgord, Chairman, reported that the Panel reviewed the work of the Databank and found that the Databank is seen as pivotal within the ODP in providing data to both the planning and operational parts of the Program and should be seen as a resource for the ODP community for site proposal planning, post-cruise studies and for regional syntheses. The panel further stated that the need for the Databank is enhanced as there is an important need for adequate geological and geophysical data in order to conduct drilling activities.

The panel suggested that the Site Survey Panel should play a key role in having oversight of the Databank and that requests for data searches should originate from the Site Survey Panel.

The Panel also made the following recommendations/suggestions:

- That a flowchart for proposals showing panel and Databank interaction be with support for regional and thematic panels identified and should be adhered to by the JOIDES community (adopted by PCOM at its Norfolk Meeting).

- The Databank should be a publicly accessible resource with links to other public databases that should not be used as an alternative to other geoscience databanks but rather as a complementary data source.

- That information at the Databank should include publicly available data, reserve data with restricted release and information about data available at other geoscience databanks (adopted by PCOM at Norfolk as part of the Guidelines for Submission of Proposals).

- That the Databank be one of the repositories for underway geophysical data obtained on the JOIDES RESOLUTION (as was the case during DSDP).

- Proponents of drilling be asked to identify supporting data and asked to deposit data with the Databank. (The Panel states that the primary responsibility for obtaining data must rest with proponents and the regulation requiring deposition of data should be enforced by the PCOM.)

- That support be made available for additional low-level personnel for record copying; this would create more time for the Curator to attend to Databank management and evaluation.

- A modest increase (up to 3 months) in the senior scientist time to the Databank. This increase in time would also result in a concurrent increase in financial cost (about \$14,000).

The PCOM in principle agreed with the recommendations of the Review Panel and suggested that the matter of costs needs to be reviewed. This report will be forwarded to the JOI Board of Governors.

REPORTS FROM PANELS AND WORKING GROUPS

Southern Oceans Panel

D. Hayes, PCOM liaison, reported on the April 22-24, 1985 meeting which was held in Gainesville, Florida. Highlights of the meeting are presented below.

Weddell Sea Leg: SOP provided a detailed cruise plan for Weddell Sea drilling that contained 2 options. The first option was a 65 day leg from Punta Arenas to Port Stanley and the second option was a 76 day leg from Punta Arenas to Capetown. It was noted by SOP that the first option would involve the loss of one major objective.

SOP emphasized the importance of planning a cruise track that would navigate in a clockwise direction about the Weddell Sea. Such a plan would enable the highest priority sites to be drilled first and would take advantage of the seasonal ice break-out schedule.

SOP also requested that the logging requirement be waived for the Weddell Sea program:

Sub-Antarctic Leg (Atlantic Ocean) : SOP provided a detailed cruise plan for a 48 day leg to begin in Port Stanley and end in Capetown. The Panel states that this leg is logistically linked to the Weddell Sea program because it provides a backup opportunity for the completion of South Orkney Plateau (W6-W8) objectives.

Kerguelen Plateau-East Antarctic Margin Legs: SOP proposed two options for this program due to the extremely long transit times to and from the region. The options are :

One 70 day leg with ~30 days transit + 40 days drilling
Two 60 day legs with ~34 days transit + 86 days drilling

Given the large number of high priority objectives for the region, SOP developed a scenario based on a two cruise plan. In this scenario a crew and scientist change at Kerguelen using the MARION DUFRESNE is

required. SOP also provided detailed cruise plans for an E. Antarctic-Southern Kerguelen leg and a Northern Kerguelen leg.

Well documented site surveys exist for the Northern Kerguelen region (although not all have been deposited at the Databank), based on French data, and the Australians and French are planning site surveys for the southern area.

Sub-Antarctic Objectives: SOP ranked the Sub-Antarctic Atlantic objectives higher than the Kerguelen-Broken Ridge Transect and issued a revised priority listing:

- 1) Sub-Antarctic Atlantic Ocean
- 2) Kerguelen-Broken Ridge Transect
- 3) Adelie Coast
- 4) Fracture Zone Drilling (SW Indian Ocean-Dick proposal)
- 5) Agulhas Plateau
- 6) Crozet Plateau
- 7) "Cold Spot" (Australian-Antarctic Discordance)

South Pacific Objectives: SOP will propose a workshop on South Pacific drilling for Spring, 1986.

Mediterranean Working Group

J. Mascle, Chairman, reported (on behalf of L. Montadert, Atlantic Regional Panel Chairman) on the results of the 10-11 June 1985 meeting which was held in Paris. The main focus of the meeting (which was attended by Cita, Rehault and Sartori) was to select and prioritize sites in the Tyrrhenian Sea basin based on 2000 km of multichannel seismic profiles that were recorded between March 9 and 29 by the LE SUROIT.

Mascle presented the scientific objectives of the area together with selected seismic profiles for each of the proposed sites. The following prioritized list was developed after a re-examination of the original site recommendations whose total cruise duration totaled 71.5 days of drilling and coring and 10.5 days of logging =81.5 day cruise duration.

Site	Objective	Time
1) TYR 2-	Recovery of complete Plio-Pleist. stratigraphic record.	5 days (drill) 0 days (log) ----- 5 days
2) TYR 1A- (with TYR 1B) area.	Determination of the rifting chronology in a basin developing within a collision area.	7 days (drill) 1 day (logging) ----- 8 days
3) TYR 3A-	Recovery of post, syn and upper pre-	11 days (drill)

rift sequences on a thin continental crust within a basin developing within a collision area.	2 days (log.) ----- 13 days
4) TYR 5B- Determination of oceanic crust mechanisms and nature.	11 days (drill) 2 days (log) ----- 13 days
5) TYR 5A- Study of the transition from continental-oceanic crust.	6 days (drill) 0.5 days (log) ----- 6.5 days

It was emphasized that there was an additional proposal for a VSP experiment (with a re-entry cone) and that the above figures did not include transit times. J. Mascle further emphasized that this re-ordering of priorities had not been discussed with the other Leg 107 Co-chief (K. Kastens).

Discussion:

Beiersdorf: Have the proposed sites been reviewed by the Pollution Prevention and Safety Panel?

Mascle: Due to the time limitations involved in the preliminary data processing, the proposed sites have not been reviewed. After the seismic data has been fully processed, the information will be sent to the PPSP for review.

During the discussion section, reservations were expressed concerning the geologic model used as the basis of the proposed drilling program and concern was voiced on the need for a fallback program if the proposed geologic model did not work.

SITE SURVEY PANEL REPORT

T. Mayer reported on the 18-19 June meeting which was held in Halifax, Nova Scotia (as neither of the PCOM liaisons had been able to attend).

After reviewing the results of the ODP Databank Review, the SSP made the following statements concerning the Databank. The SSP stated that it will assume the responsibility for site survey data assessment and that formal assessments will begin with Leg 110. The SSP will also regularly review restrictions placed on data in the Databank and will encourage that time limits be placed on such restrictions. The Panel recommends that the interpreted results from experimental data (e.g. oblique seismic experiments and vertical seismic profiling) should be placed in the Databank and requires that proponents deposit in the Databank all core and dredge descriptions and heat flow data used to support site proposals. Finally, the SSP unanimously agrees that the present level of Databank service cannot be maintained with the budgetary reductions proposed by JOI, Inc. for FY 86. A letter detailing

objections to the proposed cuts was sent to the PCOM and copies included in the minutes of the meeting.

The SSP prepared a summary statement of site survey status for Legs 105-114. A detailed assessment for Legs 110, 111, 112 and 114 will be prepared prior to the November SSP meeting. The Panel also prepared a summary statement of the higher priority Indian Ocean proposals.

The Panel noted that site surveys for the high priority Sub-Antarctic sites (SA-2,3,5,7 and 8) are not well documented and recommended that further site surveys are needed and that these must include large water gun digital SCS, 3.5 kHz data, piston cores in the immediate vicinity of each proposed site and magnetic and gravity information.

In closing, the SSP announced that the Japanese National Oil Company is planning to release, in the near future, more than 100 multichannel seismic regional lines from areas around Japan.

DOWNHOLE MEASUREMENTS PANEL REPORT

R. Von Herzen, PCOM liaison, reported on the 12-14 June 1985 meeting which was held at Dalhousie University.

After reviewing the ODP budgetary constraints for FY 86, the DMP stated that the proposed cuts in the TAMU engineering program are potentially the most damaging to the future of the ODP. The panel urged that top priority be given to restoring funds to those engineering activities (namely bare rock guidebases, drill-in casing, high temperature drilling, mud motor development, engineering on drill bits and orientated coring (hard rock)) which would allow new classes of sites and new kinds of science to be pursued.

The DMP requested that TAMU refurbish the pressure core barrel for use on Leg 110 (Barbados) and subsequent margin legs. The Panel endorsed the concept of a physical properties site and agreed that the active margin off Japan is well suited to a major interdisciplinary effort involving geotechnical studies, sedimentology and structural geology. The DMP encouraged the development of a German magnetic susceptibility tool and recommended that it be deployed on Leg 109. The Panel also endorsed the concept of a pore water sampler in the HPC cutting shoe and recommended that a pressure sensor be placed inside in order to measure in situ pressure. The Panel also recommended that the water sampler be run in conjunction with the Von Herzen HPC temperature probe.

The DMP also made the following program recommendations:

- 1) That the L-DGO budget be maintained at a level of at least \$2.5 M in FY 86, this includes the acquisition as soon as possible of a reduced size version of the TAM packer that is being modified by AMOCO. AMOCO has agreed to share this new technology with ODP. DMP also recommends that a high

priority be given to the restoring of funds for the Energy Systems log analysis software to be put on board the drill ship, the acquisition of a second digital Borehole Televiewer and a second 12 channel sonic tool.

2) DMP recommends that the Downhole Bit Motion Indicator (DBMI) be refurbished so that it can be used to evaluate the wireline heave compensator on Legs 105 and 106 over a range of sea conditions and depths. This item is the #1 priority for the DMP and may require additional effort in FY 86 and beyond.

3) DMP recommends that edited logs, along with explanatory notes and a logging operations summary, be published in Part A of the Initial Reports and detailed analyses published in Part B.

4) DMP recommends archiving all raw downhole temperature data, edited thermal conductivity data and other routine borehole geophysical data along with explanatory notes and a summary of operating conditions. The Panel further recommends that one complete set of raw borehole geophysical data for independently funded investigators be archived for the purposes of data security but not for perpetuity. However, the Panel suggests archiving the final results and requiring that they be published in accordance with ODP policy.

5) The Panel recommended that if the McDuff/Barnes tool is funded then HPC water samples should be taken every 20 m for several holes. If warranted, DMP would then suggest that continued intensive studies leading to replacement of the IW chemistry program may be in order.

6) The DMP also recommended that if only 2 guidebases are available for bare rock drilling, then 1 be used in the Atlantic on Leg 106 and the other be used in the Pacific on Leg 110.

DMP Tool Recommendations on a Leg-by-Leg Basis: (See Appendix B)

Reports by member representatives on the DMP indicate that there is increasing interest and activity in downhole measurements. The FRG is emphasizing development of wireline techniques for measurements of high resolution temperatures and magnetism. France is developing a program for wireline reentry of existing ODP holes using a submersible and Canada has developed a system of low data rate acoustic transmission over the long term (several months to a year).

LONG RANGE PLANNING- INDIAN OCEAN PROGRAM

Review of Program Status and Examination of Panel Priority Summaries

Weddell Sea and Atlantic Sub-Antarctic

L. Garrison began the discussion with a logistical review for the Weddell Sea (Leg 114) program. With a 2 leg program as proposed by the Southern Oceans Panel, the ship could logistically stay 110-115 days at sea finishing at Capetown, if the second leg were to begin at Port Stanley in

the Falklands. A new airport with commercial connections to the U.K. has opened and the British government states that facilities are available for a portstop. If a 2 leg program is not adopted, then logistics become much more difficult as one 76 day leg would be needed. Garrison pointed out that this program would also terminate in Capetown.

Southern Indian Ocean

Representatives from the ODP met in Paris with TAAF, the operators of the MARION DUFRESNE to discuss its use as staging vessel for the JOIDES RESOLUTION during the Southern Indian Ocean (Kerguelen Plateau) drilling campaign. From these discussions it was noted that the DUFRESNE can carry 110 passengers, 10-20 tons of supplies and 750 cu. meters of diesel fuel to the drillship. The cost of this operation, to a first approximation, would be 110K FFr/day +60k FFr/day (fuel) + 70 FFr/person/day/meal. These figures add up to approximately \$18 K/day at present exchange rates.

A possible schedule would take 6 1/2 days from Reunion Is. to Kerguelen, 2 days for the crew change and resupply, 6 1/2 days back to Reunion Is. and 2 days to load and unload the DUFRESNE. These times add up to a 17 day round trip or a total of 17 X 18= \$306K.

It was pointed out that the Southern Oceans Panel has suggested that the campaign consist of 2 legs, with a 66 day first leg and a 53 day second leg, for a total of 119 total days. Garrison noted that for the optimum fuel budget of the drillship, the program should consist of two 51.5 day legs with a 3 day portcall in between. This would result in a maximum fuel budget of 106-107 days and also would give the ship a 5 day fuel cushion.

Arabian Sea

Examination of the weather patterns around the area indicate that there are two seasons, a fairweather season from November to March when the Equatorial Current flows west to east and the SW monsoon season from May to September when the Equatorial Current reverses with the development of a strong Somali current. The winds blow out of the southwest during the SW Monsoon season becoming their strongest during June-July and during August spawning 1-2 cyclones /yr. However, cyclones are less frequent in the Arabian Sea than in those areas to the south. The weather information indicates that during June the meansurface winds peak at 24-26 knts and the worst weather occurs along the Saudi Arabian coast and along the Horn of Africa. During this time period wave heights average 2.0-3.0 meters. In July, the surface winds increase to 30 knts and the mean wave height is 3.5 meters. During August, the winds begin to diminish but are still of storm intensity until September when the weather system decays to winds of 18 knts and wave heights of 1-1.5 meters. Garrison therefore advised the PCOM that a Red Sea cruise could be scheduled during the July-August time period to avoid the SW monsoon season and to accomplish other objectives for the region.

Kerguelen Area

Garrison pointed out that the period from December to February has the best weather window.

Timeframe for Indian Ocean Drilling

The PCOM originally proposed that 18 months of drilling would occur in and proximal to the Indian Ocean after the Weddell Sea drilling program. Some members of the PCOM expressed the view that the Indian Ocean program is an extension of those programs of DSDP and questioned if there is enough funding available due to the current budgetary situation to accomplish the proposed program. It suggested that an option may be to spend less time in the Indian Ocean and more time in other oceans. However, the general membership indicated that for scientific reasons (e.g. high latitude drilling) and the fact that a drillship has not been in the Indian Ocean for 13 years a science program should be developed. However, it was suggested that the time available be used wisely in view of the weather constraints and the PCOM agreed that time could be added or subtracted from the program as necessary.

The following schedule was developed by the PCOM for the Indian Ocean:

1987	JAN FEB	Weddell Sea
	MAR APR	Atlantic-SubAntarctic Transect
	MAY ? JUNE	Davie Ridge SW Indian Ridge Somali Basin Makran
	JULY AUG	Red Sea
	SEPT OCT	Neogene Package
	NOV DEC	Kerguelen 1
1988	JAN FEB	Kerguelen 2
	MAR APR	Broken Ridge/ S 90 E Ridge
	MAY JUNE	N 90 E Ridge/Intraplate Deformation-Bengal Fan
	JULY AUG	Argo/Exmouth

Note: This schedule assumes that it will be logistically and financially possible to re-supply at Port Stanley in March 1987 and at Kerguelen Island in January 1988. It also assumes that the RESOLUTION will proceed into the Indonesian Arc region in September 1988.

In completing this exercise, the PCOM agreed to fill the first priority items of the panels in the most favorable weather windows, thereby setting the boundaries of a schedule. These top priority legs were the Red Sea, Neogene Package, Kerguelen 1 and Kerguelen 2. The remaining time slots were then filled with lower priority programs or program combinations (as in the case of March-June, 1988). The PCOM will now ask the panels for recommendations on how each leg should be planned in detail. PCOM further stated that those panels scheduled to meet after the October PCOM meeting should send their suggestions via mail.

SHORT-RANGE PLANNING

FY 86 Budget Limitations and Priorities

The discussion on the impact to planning of the FY 86 budgetary constraints began with a brief review of the overall budgetary situation by NSF and the budgets proposed by JOI, Inc., TAMU and L-DGO.

National Science Foundation

For FY 86, the NSF informed JOI that its operations were budgeted for a \$32.5M. This budget was based on the U.S. contribution and 4 or 5 international members. The philosophy of the NSF in regard to a deferral or loss in the achievement of COSOD objectives was that nowhere is it mandated that all the proposed COSOD objectives have to be accomplished during the first 24 months of the program. NSF states that COSOD objectives are being met in a timely manner as there presently are two legs of bare rock drilling and another leg devoted to drilling in a high latitude area.

Wireline Services Operator

D. Fornari stated that the Wireline Services Operator is confident that all mandated items can be accomplished with some adjustments to the L-DGO budget. In examining the \$2.5 M L-DGO budget, Fornari noted that this budget is the minimal expression of the operations program and that it is not overloaded.

In summarizing the big ticket line items in the FY 86 program plan, Fornari stated that there are funds to Schlumberger to complete payment for the wireline heave compensator, to bolster continuing efforts and encourage the development, at AMOCO, of the wireline packer (approx. \$ 39K) and for general operations purposes. Fornari noted that within this operational heading there are areas where funding will not be totally expended but that there are no contingencies built into the budget. There is also built into the budget, funding to Stanford Univ. for the continued development of the borehole televiewer system (\$118K). Finally, a large portion (approximately \$1.3M) of the budget consists of the Schlumberger Offshore Services contract.

However, in this budget there was no funding for a log analysis package for the ship but there is a line item for this package in the amended budget. Also in the amended budget there are funds for further wireline packer development, an additional 12 channel seismic tool and a borehole televiewer.

Wireline Services strongly suggested that funding for the wireline packer not be deferred and should be included in FY 86 to begin its development. The importance of placing a log analysis package on the drillship was noted by L-DGO and this may occur through either a leasing or purchase arrangement. Also, in view of the present constraints it is unlikely that L-DGO will be able to purchase a second 12 channel borehole televiewer (BHTV).

Discussion:

Von Herzen: I am disappointed with the deferments of new developments (e.g. the establishment of a logging research program using co-mingled funds) and the cuts in permanent equipment.

Buffler (UT): Why does the Stanford subcontract have such a high priority?

Fornari: The \$40K in the subcontract is the final payment to Stanford Univ. and to WBK Mining Inst. for the technology of the BHTV and it is opinion of Wireline Services that the BHTV development is more important than development of other items (e.g. the wireline packer).

Several members of PCOM expressed concern over placing the wireline packer development second in line to that of the borehole televiewer. This concern was voiced as members recalled that PCOM had already placed it as a high priority item and proposed the following motions:

(proposed by Von Herzen, seconded by Beiersdorf)

Motion: The Planning Committee considers the development of the wireline packer to be of higher priority than the digital BHTV and that this constitutes formal advise to the Wireline Services Contractor.

Amendment: (proposed by Buffler and properly seconded)

(To add): Further, the PCOM considers placing the existing logging software on the JOIDES RESOLUTION as the next priority behind the development of the Wireline Packer.

Vote on the amendment: for 7, against 4, abstain 2

The amended motion was then considered:

Vote: for 10, against 1, abstain 2

Science Operator

L. Garrison stated that for FY 86, the drillship will be able to deliver more drilling/time/dollars spent due to its speed, the addition of 50,000 ft of drillpipe, its stability and high latitude capabilities. With the present funding this should result in 10% more drilling than had been previously done. The onboard laboratories can process and generate better data sets than in previous history with its equipment and due to the highly trained, dedicated group of technicians on the ship. It is the feeling of the Science Operator that the COSOD objectives have been and are being met through the modification and operations of the drillship, the operations scheduled and engineering developments including the construction of 2 bare rock drilling guidebases.

The Engineering staff is very active with projects that can be accomplished or deferred but none have to be abandoned. Design work for the orientated core and the pressure core barrel can be completed within the present budget and monies will be available to develop or improve other coring methods up to the point of fabrication. Since drill-in casing development is very important to ODP, the design of this system can be funded in FY 86 and during this time the Navidrill will be tested.

Presently there are no funds available to hire additional personnel needed to develop a fully operational publications group. The present group is composed of 2 drafts-people, 1 supervisor and a site coordinator. This staff can presently review manuscripts but cannot edit or typeset them. Under this present staffing situation, it is predicted that publications will become overwhelmed as manuscripts are produced from past, present and future cruises. This scenario suggests that publications will never achieve a timely schedule for publishing and issuing the Part B reports.

The PCOM chairman noted, at the end of this report, that the EXCOM had requested that a PCOM sub-committee be formed to examine other possibilities for an alternative publication scheme. The PCOM considered this request and appointed S. Gartner (TAMU) to chair a Publications Review Group consisting of T. Mayer (JOIDES Office), J. Holoviak (AGU), R. Merrill (TAMU/ODP) and W. Rose (TAMU/ODP). The group will look into alternative ways (and less expensive) of producing Part A of the Reports and will also re-assess the scientific purposes of the Part B volume and optional techniques to produce them. The form of printing and format will be investigated from the scientific user viewpoint. The Group should also consider the effects of new information technology on the publication process.

Discussion:

Von Herzen: For FY 86, how many people are employed in the ODP and how does this number compare with DSDP?

Garrison: There are 120 full-time employees in the ODP/TAMU and DSDP averaged about 100 employees

Hayes (L-DGO): Will the 11% reduction result in a deferral in the future hiring plan (e.g. publications staffing) or a firing of present employees?

Rabinowitz (TAMU): The plan will call for the firing of present employees.

Schrader: What will it cost to publish Part A of the Proceedings?

Mayer (JOIDES Office): Information from R. Merrill at TAMU indicates that \$388K will be needed before printing occurs.

Joint Oceanographic Institutions, Inc.

J. Clotworthy referred the membership to a handout of the FY 86 Program Plan for JOI, Inc./ JOIDES. In this, the JOI budget was reduced by 13% however there was an increase salaries due to the contract structure at JOI. Clotworthy pointed out that a number of the costs at the JOI headquarters are costs that JOI has taken over to prevent them from being burdened by the subcontractors (e.g. the publication costs of the JOIDES Journal). The Databank budget was reduced by 12-13% and it was noted that there will be some curtailing of services because of this reduction. Furthermore, the JOI Office staff has been reduced by 13% in accordance with the across the board reduction philosophy.

Discussion:

Hayes: Examining the budget for FY 85 indicates that over time the JOI Office budget has grown by 20% since last year. For FY 86, the projected increase would have been about 30-35% prior to the 13% reduction. What accounts for this increase?

Clotworthy: These increases to the program are the result of JOI, Inc's administrative role as the prime contractor to the ODP.

Hayes: Could JOI present a breakdown of general administrative activities for the \$ 561K budgeted for the office and have there been an increase in contracts ?

Clotworthy: In the conduct of the subcontracts (particularly at TAMU), there several levels of review and approval that are necessary for the procurement of items necessary for the program. Further there are a host of standard operating procedures that must be developed and are part of the package under our role as the prime contractor.

The PCOM expressed concern over the 20% budgetary increase at the JOI office and suggested that the budget be re-examined. This concern was expressed in the following motion which was proposed by M. Kastner and seconded by D. Hayes:

Motion: The Planning Committee believes that any increase in the total direct costs by JOI headquarters for FY 1986 does not seem to be consistent with the present austerity budget and the overall scientific objectives.

Vote: for 9, against 0, abstain 4

Potential Program Losses

After reviewing the operational losses to the program, the PCOM considered potential losses to the scientific quality of the program.

Leg 106 -Mid Atlantic Ridge:

From the standpoint of the Science Operator the FY 86 budget does not impact on MAR drilling activities as everything is paid for for Leg 106. The bare rock system may cost less than the \$250K that was originally estimated for fabrication, cement and drilling mud and the costs might be reduced in the future as alternative methods of development are found. It was stated that if the Navidrill tests are successful, funds will be available for further development but not for the purchase of that system. Further, all items proposed for Leg 106 will be on the ship.

Leg 110- Barbados:

There will be no wireline packer available for Leg 110. The design work has been done to redesign the latching mechanism and to increase the efficiencies for drill-in casing development. However, the new equipment cannot be tested or deployed without an additional \$120-130K. It was further stated that drill in-casing development will be stopped if Barbados is dropped from the drilling schedule.

Leg 111-East Pacific Rise:

It was the consensus of PCOM that in view of the budgetary constraints in FY 86, there will be no guide base systems available for the East Pacific Rise. It was proposed to replace the East Pacific Rise drilling by drilling on DSDP 504B in 1986.

The Science Operator stated that Hole 504B can be deepened if the Navidrill works well on Leg 104 and that funds for renting are available in the present operating budget. It was noted that the LITHP Chairman had informally indicated his preference for 504B drilling rather than EPR drilling with only one guidebase.

Discussion:

Cadet (France): I am very disappointed with the loss of EPR drilling from the cruise schedule as it presents an opportunity to conduct new and exciting science.

Larson: The budget indicates that ODP can only afford 2 guidebases for both the Atlantic and Eastern Pacific drilling. It is the consensus of the PCOM membership that both be used for Atlantic drilling.

Malpas (Canada): 504B is a high priority leg as it is one of the original COSOD natural laboratories.

Hayes: Also there was the lack of technologically advanced high temperature equipment that forced the PCOM away from the EPR.

In closing the discussion, several PCOM members indicated that the elimination of the EPR program was more guidebase dependent than technologically dependent. D. Fornari indicated that Wireline Services will investigate using the Schlumberger pore fluid package as a sampling tool for any future EPR activities.

Leg 112- Peru Margin

It was the consensus of PCOM that program objectives for this leg are not wholly compromised if there is no drill-incasing. It was further agreed that it a mistake to go to the area without drill-in casing due to the possibility of cobble-sized dolomite breccia that may jam the drillstring.

Leg 113- Weddell Sea

It was the consensus of PCOM that if core orientation can continue to be developed, then there are no major program losses.

Prioritization of Eliminated Budget Items for FY 86

After reviewing potential program losses, the PCOM considered a listing of add-backs to the program that were developed by the PCOM Budget Subcommittee should additional funding become available. This listing suggests that for additional \$1.95M, the program should buy four barerock guidebases, increase the drilling inventory, increase the size of the Publications Group and reinstate the personnel laid off by the 11.2% reduction at TAMU. This listing with essential and program recommendations is found in Appendix C. It was noted in discussion that the JOI priorities differed significantly from the PCOM Budget Subcommittee's recommendations and that TAMU found JOI's priorities to be unacceptable. Discussion among the members also pointed out that 6 international members were needed to make the program financially sound.

The following motion was then moved by Larson and seconded by Kastner:

Motion: The Planning Committee commends TAMU and L-DGO for the design, construction and initial operation of drilling, logging and analysis systems that provide the opportunity to study the marine earth sciences at a significantly advanced level relative to DSDP.

We note with dismay that a significant percentage of the COSOD objectives originally scheduled for 1986 will not be met dur primarily to financial

constraints. With those constraints in mind we propose the following program revisions.

Mid-Atlantic Ridge - Both guidebases should be deployed on this objective unless there is an engineering problem on the first guidebase. In this case, the second guidebase will be re-engineered for deployment on Leg 109.

Barbados - This leg remains in the schedule essentially as planned. TAMU is urged to find funds in FY 86 to develop and fabricate "drill-in" casing for Leg 110 (Barbados N) and Leg 112 (Peru Margin). It is noted that the wireline TAM packer will not be available for pore fluid sampling. However, other available packers will be deployed for measurement of physical properties.

East Pacific Rise - In view of the budgetary constraints in FY 86 there will be no guide base systems available for the East Pacific Rise. PCOM agrees to the replacement of the East Pacific Rise drilling by drilling on 504B in 1986. EPR Drilling remains at the highest priority for future Pacific drilling when it is expected that guide bases will be available and that high temperature logging and sampling systems will have been developed.

We further note that the continuation of this fiscal shortfall into future years threatens the long term viability of the program. Therefore, we urge the JOIDES Executive Committee and the National Science Foundation to pursue with utmost priority the enrollment of a minimum total of six full international members in the Ocean Drilling Program.

Vote: for 10, against 0, abstain 2

"Watchdog" Reports for Legs 106-110

At the Norfolk meeting, it was the consensus of the PCOM that a "watchdog" system be put in place to aid in planning. Under this system, a PCOM member would be assigned to compile a short document which summarized the proposed program and would act as a proponent for that particular leg.

At this meeting the "watchdog" reports for Legs 106, 107, 108, 109 and 110 were presented and the following are summary highlights of the discussions.

Legs 106 and 109

J. Honnorez, Co-chief for Leg 106, emphasized the importance of building flexibility into the program plans so that much of the initiative remains with the co-chiefs, especially in the area of the allocation of drilling time. Honnorez proposed 3 scenarios (see watch dog report for Legs 106 and 109) for the allocation of the time scheduled in attempting to spud-in and drill into zero age crust and also requested that the co-chief scientists have veto power over engineering decisions that may exceed the allotment. The Science Operator agreed to the proposed program with the exception of the 24 day time limit proposed in the third scenario and strongly suggested that the program be amended to give the engineers an even vote in the determination of the allocation of drilling time. It was the consensus of the PCOM that after 24

days of drilling, if there is no consensus onboard on how to continue to proceed, that the co-chief scientists should refer back to the PCOM Chairman and the Science Operator for a final decision on the operations issue. The PCOM also suggested that the scientific objectives proposed for the Kane Fracture Zone be pursued.

Concerning Leg 109 recommendations, if Leg 106 fails, the PCOM suggested that 109 drill the Kane Fracture Zone and conduct logging activities at DSDP Hole 395. PCOM also recommended that the Lithosphere Panel be asked to develop a back-up plan.

Leg 107

There was little discussion of the Leg 107 "watchdog" report in view of the thorough presentation by J. Mascle. However, it was noted that some of the PCOM membership is concerned with the potential time/cost of leaving a drill cone at site TYR 5B for future VSP work. Any additional requests for drilling time would require further justification.

Leg 108

The PCOM was in agreement with the proposed program and agreed that all holes deeper than 400 m should be logged although not necessarily with a full suite of tools.

Leg 110

The PCOM discussed and agreed to the amending of the proposed program to include a logging reference hole, drilled during DSDP, in an undisturbed section of ocean floor near the subduction zone. This reference hole would be used to compare normal physical parameters with those parameters in the deformation area of the subduction zone. The PCOM further recommended that the Atlantic Regional Panel, Tectonics Panel and the Downhole Measurements Panel be consulted in terms of developing a logging program for this hole. It was also agreed to ask TECP and ARP to consider an alternate back-up program should drill-in casing fail.

Drilling Schedule for Legs 107-112

Leg	Transit	Drill	Dates	Total Days at sea
107 (Tyrr. Sea) Portcall= 5 days	5	40	1 Jan-14 Feb 1986	45
108 (NW Africa) Portcall= 5 days	22	38	19 Feb-20 Apr	60
109 (MARC II) Portcall= 5 days	10	47	25 Apr-21 June	57
110 (Barbados)	8	52	26 June-25 Aug	60

Portcall= 5 days

111 (504B)	4	47	30 Aug-20 Oct	54
Portcall= 5 days				
112 (Peru margin)	11	51	25 Oct-26 Dec	62
Portcall= 5 days				

-1 Jan 1987 (from Punta Arenas to Weddell Sea)-

30	60	275
Total	Total	Total
Portcall	Transit	Drilling
Days	Days	Days

The PCOM agreed that the SOHP and SOP should compare and prioritize SOHP objectives at the "piggyback" sites proposed off southern Chile (7 days drilling, 3 holes between the Peru margin and the Weddell Sea) vs. SOHP and SOP objectives in the latter areas. CEPAC will also be asked to consider the Hays proposal. At this time, R. Buffler proposed the following motion that was seconded by S. Gartner:

Motion: Move that Chile margin drilling be removed at this time from the drilling schedule.

Vote: 1 for, 12 against, 0 abstain

Co-Chief Nominations for Leg 111

It was agreed that the co-chief nominations for the new Leg 111 (504B) should be referred back to the Lithosphere and Central & Eastern Pacific Panel for their recommendations.

Co-Chief Recommendations for Leg 112

SOHP	CEPAC	PCOM
Suess	Hussong Suess	Aubouin Coulbourn Uyeda von Huene

The primary PCOM recommendations for Co-chief scientists on Leg 112 were Suess and Hussong.

PANEL MEMBERSHIP

Future of the Technical and Engineering Development Committee (TEDCOM)

At the Norfolk meeting, the PCOM Chairman requested that nominations for the chairmanship post of the TEDCOM be made as soon as possible and that at this meeting there would be discussion on whether TEDCOM should continue to exist as appears that many of its duties have been assumed by the Downhole Measurements Panel.

Several PCOM members, particularly the international members, expressed support for the continued existence of the TEDCOM since the advice from the committee members on items of immediate interest such as increased core recovery and coring technology in sands could very useful to the ODP. However, it was suggested that the TEDCOM is top heavy with expertise in riser drilling and this particular item is not of the immediate concern of the ODP. In response to the suggestion, it was the feeling of the membership that the importance of riser drilling to ODP warrants that the composition remain unchanged. However, the make-up of the committee could be altered if the new chairman sees fit to do so in light of the present program objectives.

PCOM invited Jean Jarry (France) to fill the TEDCOM chairmanship. Japan will be nominating a member to the TEDCOM.

APPOINTMENT OF PLANNING COMMITTEE LIAISONS

The PCOM agreed to the following changes:

D. Hussong (HIG) to Tectonics Panel and Central and Eastern Pacific Panel

P. Robinson (Canada) to Site Survey Panel

M. Kastner (SIO) to Sediments and Ocean History Panel

It was noted at this time that R. Buffler (UT) would be leaving the University of Texas for the National Science Foundation. Although his location would change, Buffler will remain on PCOM as the NSF liaison after September 1985. It was further noted that S. Levi (OSU) will replace H. Schrader on the PCOM as of June 1985. The PCOM agreed to consider its Panel liaisons again at its October meeting.

FUTURE MEETINGS SCHEDULE

8 - 10 October 1985 Alton Jones Campus of the University of Rhode Island

21-24 January 1986 La Jolla, California (Annual Meeting with Panel Chairmen)

The PCOM discussed a possible summer meeting in Halifax, N.S. or in Newfoundland with a field trip to the Newfoundland ophiolite complex.

EXCOM BUDGET SUBCOMMITTEE REPORT

At the June 1985 meeting of the Executive Committee, it was suggested that a budget subcommittee of 4 EXCOM members (H. Durbaum-Chairman, B. Biju-Duval, R. Heath and C. Helsley) meet with the PCOM at this meeting to examine the present financial situation and make recommendations for its resolution. For this meeting, C. Helsley was unable to attend.

Rabinowitz reported that the EXCOM Budget Subcommittee made the following recommendations to TAMU for coping with the present situation. The Subcommittee recommends that TAMU reinstate the personnel that potentially were to be laid off in the proposed TAMU budget. Furthermore, the subcommittee required the development of a core orientation device, drill-in casing, renting a Navidrill for Hole 504B to improve recovery rates and continued fabrication of the pressure core barrel. It was recommended that there should be no new major engineering developments which require external fabrication contracts. Finally, the committee recommended that the drilling inventory be kept above levels that would be considered ultraconservative and that TAMU/ODP in-house engineering projects should continue to be encouraged. The committee also approved an insurance policy of \$64K per year for the drill string.

In closing, the EXCOM Budget Subcommittee stated that these items should fall within the constraints of the proposed budget and are not to be considered as add-on items. This requires TAMU to meet these recommendations of approximately \$800K from within its FY86 budget ceiling.

ANY OTHER BUSINESS

The PCOM Chairman thanked the EXCOM Budget Subcommittee for attending this meeting and also thanked H. Schrader, R. Buffler and J. Malpas for their service to the PCOM.

In closing the meeting the PCOM Chairman also thanked H. Beiersdorf and the BGR for hosting the meeting.



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HOUSTON, TEXAS 77001, (713) 928-4000

PLEASE REPLY TO
GULF FREEWAY
HOUSTON, TEXAS 77001

April 24, 1985

Lamont Doherty Geo. Observatory
Palisades, New York 19864

Attention: Dr. R. N. Anderson
Dr. Dan Fornari

Re: ODP Long Term Pricing

Roger and Dan:

The current downhole logging equipment onboard the Sedco 471 includes: 2 Dual Inductions, 2 Gamma Rays, 2 CNT-G's, 2 Dual Laterlogs, 1 3½" LDT, 2 Temperature Tools, 2 Natural Gamma Ray Spectroscopy tools, 1 3½" Caliper, and 2 Long Spacing Sonic tools.

We are currently planning on placing one additional 3½" LDT and at least one GST tool on board in Bremerhaven, West Germany in June. The current charges for downhole logging tools of \$2150/day will remain in effect for the foreseeable future. If you have any other questions as to pricing or tool availability, please feel free to contact either of us.

Sincerely,
SCHLUMBERGER OFFSHORE

Jeff Skelly
General Field Engineer

JS/lwr

cc: Jeff West, HOOH
Dick Ghiselin

After reviewing the geologic setting and geophysical data for each of the following legs, the DMP recommended the following measurements at each site:

Leg 104 Norwegian Sea

VOR 2A	VSP	24 hrs.
	LSS Combination	4
	LDT Combination	4
	GST	11
	MCS	5
	HTV	12
		<u>2.5 d.</u>
VOR 4	LSS Combination	4 hrs.
	LDT Combination	6
	GST	13
	MCS	7
		<u>1.25 d.</u>
VOR 5	-	-

Leg 105 Baffin Bay/Labrador Sea

EB 3B	VSP	24 hrs.
	LSS Combination	5
	LDT Combination	8
	GST	23
		<u>2.5 d.</u>

(plus 13 hrs MCS if time available)

LA 5	LSS Combination	5 hrs.
	LDT Combination	6
	MCS	10
		<u>21 hrs.</u>

(plus 12 hrs. GST if time available)

LA 9	LSS Combination	4 hrs.
	LDT Combination	6
	MCS	7
		<u>17 hrs.</u>

(plus 5 hrs. BHTV and 9 hrs. GST if time available)

Leg 106 Mark I

Assuming the guide base is set without incident, we estimate 100-200 m of penetration on Leg 106 at the bare rock site. Since this interval is likely to be low temperature and disturbed by drilling, we propose to conduct a minimal borehole measurements program on 106, but one which will let us evaluate the requirements for 109.

Bare Rock Site	LSS Combination	4 hrs.
	LDT Combination	4
	HEL T	3
	PFS	4
		<u>15 hrs.</u>

Kane Fracture Backup	LSS Combination	6 hrs.
	LDT Combination	6
	HRT	4
		<u>16 hrs.</u>

Legs 107, 108 will be discussed next meeting.

Leg 109 Mark II

Lithosphere and DMP both recommend deepening of the bare rock hole and completion of downhole measurements at Site 395A on Leg 109.

Bare Rock Site	T/H ₂ O samples	12 hrs.
	German HRT	12
		<u>24 hrs.</u>

drill 200 m deeper

If 150°C < T < 300°C:	log with USGS high T suite	30 hrs.
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If T < 150°C:	Schlumberger suite	24 hrs.
	BHTV	12
	MCS	8
	Packer	12
	3 axis magnetometer	6
	Magnetic susceptibility	6

and z >400 m:

	VSP	24
	Large scale resistivity	8
		4 d 4 hr.
395A	T/H ² O sampler	12
	German HRT	12
	Schlumberger suite	37
	BHTV	11
	MCS	11
	Large scale resistivity	8
	3 axis magnetometer	15
	Magnetic susceptibility	8
	Packer	48
	VSP	24
395D	HPC-T	6
		8 d.

(plus 2 d gravimeter if available)

Alternate Leg 109

If only 2 bare rock guidebases are available or 106 encounters major technical problems, DMP strongly recommends deploying 2nd base on EPR and restructuring 109 as follows:

395A	Logging and experiments (see above)	8-10 d.
418A	Deepen hole into dikes	20
	Logging and experiments as at 395A	10

Transit: Las Palmas - 395A-418A - San Juan $\frac{12}{52}$ d.

This will accomplish 2 major objectives of the Lithosphere and DMP programs: the deepening of a major hole into the dikes in old crust along the bare rock/395A/418A flowline and the geophysical characterization of Layer 2 in young and old crust through borehole measurements (proposal to follow).

Leg 110 Barbados Thrust

If drill-in casing will be available for LAF-1 and a practical wireline technique is available to measure pore pressure vs depth (this requires that either the TAM packer be funded by JOI or that the Briaud/McClelland geotechnical engineering proposal be funded by NSF), then DMP recommends drilling LAF-1 and conducting a major borehole geophysics/hydrogeology program at the site as follows:

LAF-1	Schlumberger suite	36 hr.
	Flowmeter	4
	In situ pressure (straddle packer, TAM packer and/or geotechnical tool in various combinations)	5-6 d.
	Heat flow	6 hr.
	Fluid/pore water sampling	
	(PCB, Barnes tool or TAM packer)	12
	BHTV	8
	Oriental coring	4
	Borehole geotechnical studies	1-2 d.
		8-11 d.

Leg 111-112 (EPR/504B)

If only 2 guidebases are available to the program and both are used on Legs 106/109, DMP strongly recommends that 504B be deepened and studied as proposed by Becker.

In the event one guidebase is deployed on the EPR, a major high temperature borehole geophysics program is presently being designed using gear supplied by Sandia, Los Alamos, the USGS and Schlumberger.

PCOM BUDGET SUBCOMMITTEEPRIORITIZATION OF ELIMINATED BUDGET ITEMS, FY 86

<u>Essential Items</u>	<u>\$ m</u>
Bare rock drilling guidebases	.930
Shipboard drilling inventory	.218
Minimum publications group	.200
11.2% personnel reduction	.600
	<u>\$1.948 m</u>
<u>Controversial Items</u>	<u>\$ m</u>
Wireline packer development	.040
Engineering subcontracts	.654
Additional publications group	.476
TAMU HQ or other personnel	.100
	<u>\$1.270 m</u>
<u>Non-controversial Items</u>	<u>\$ m</u>
Repository maintenance	.279
Staff scientist	.043
Shorebased masscomp	.130
Ship/shore core imaging	.465
Shorebased science equipment	1.900
Project specialist	.087
Gulf Coast repository tech	.033
Spare drill string	.500
4% SEDCO day rate increase	.525
Misc. small items	.123
	<u>\$4.085 m</u>