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Observer Countries

United Kingdom
European Science Foundation

Budget Priorities (FY 86)

Minutes of Previous Meeting

Planning Committee Report

Short Range Planning
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Long Range Planning

Additional Internat. Participation in ODP

Third World Participation

Future Meetings

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<td>EXCOM members</td>
<td>Investigate at the various JOIDES institutions the availability and the possibility of borrowing a 9 track, 1600 b.p.i. tape reader for the Wireline Services Operator.</td>
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<td>EXCOM Chairman</td>
<td>Invite representatives from the USSR to attend the September meeting in Bonn, FRG.</td>
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<td>JOIDES Office</td>
<td>Discuss further with A. Bally the possibility of third world participation in the ODP and particularly the possibility that the oil industry could sponsor individual scientists.</td>
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# ERRATA SHEET

## JOIDES EXCOM MEETING

4-5 June 1985

Washington, DC

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JOIDES EXECUTIVE COMMITTEE MEETING
American Institute of Architects
Washington, D.C.
June 4-5, 1985

MINUTES

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

Observers:
J. Bowman - Natural Environment Research Council (United Kingdom)
J. Stel - European Science Foundation

Liaisons:
R. Larson - University of Rhode Island/POCM Liaison
P. Rabinowitz - TAMU/Science Operator Liaison
S. Toye - National Science Foundation Liaison
R. Anderson - LDGO/Wireline Logging Services

Guests:
J-L. Almazan - European Science Foundation (Spain)
W. Cockburn - Embassy of Canada
W. Erb - U.S. Dept. of State
Y. Hasegawa - Min. of Education, Science & Research (Japan)
W. Hay - University of Colorado
K. Ikeda - Embassy of Japan
D. Maronde - Deutsche Forschungsgemeinschaft
W. Menden - Germany
B. Munsch - European Science Foundation
A. Shimotori - Embassy of Japan
G. Veis - European Science Foundation (Greece)

National Science Foundation
A. Borg
G. Brass
A. Bridgewater
W. Bruning
G. Gross
R. Hardy
D. Heinrichs
J. McMillan
A. Milsap
C. Owens
L. Redecke
A. Sutherland
R. West

Joint Oceanographic Institutions Inc.
J. Baker
J. Clotworthy
D. Hunt
S. Matelski
D. Rucker
P. Rust
J. Stanford

JOIDES Office
D. Keith
A. Mayer
J. Knauss (EXCOM Chairman) convened the 5-6 June 1985 meeting of the JOIDES Executive Committee held at the American Institute of Architects in Washington, D.C.

325 CALL TO ORDER AND SIGNING OF THE JAPANESE MEMORANDUM OF UNDERSTANDING

The meeting was divided into 2 sessions, a joint session with the ODP Council which was held on 5 June and a regularly scheduled session on 6 June. The joint session was co-chaired by J. Knauss and S. Toye (NSF) and included the signing of a Memorandum of Understanding by the Japanese members of ODP.

During the signing ceremony, which was presided over by A. Bridgewater (NSF), A. Hattori and Y. Hasegawa (Japan) expressed the enthusiasm of the Japanese geoscience community over its membership in the ODP and their appreciation to NSF and Monbusho (Ministry of Research, Science and Education), the members of ODP and the governments of both countries for the effort that it took in order to realize the membership.

The signing ceremony was concluded with J. Knauss formally welcoming Japan into the ODP and with the presentation of gifts from Japan to the NSF and JOIDES.

ADOPTION OF THE AGENDA

The agenda as presented to the membership was amended with the addition of a Budget Priorities section.

1. JOINT SESSION WITH THE ODP COUNCIL (5 JUNE 1985)

326 NATIONAL SCIENCE FOUNDATION REPORT

G. Gross (NSF) reported that the budget request from the National Science Foundation for FY 1986 is $1.5 billion which is an increase of 4% over the FY 1985 budget. Within that amount the request for ODP is $28.8 million, which is an increase of $1.2 million over the FY 1985 level of $27.6 million.

Gross further reported that during the International Phase of Ocean Drilling (IPOD), Environmental Impact Statements were prepared in 1975 in accordance with U.S. law. With the beginning of the Ocean Drilling Program, a new statement had to be prepared because of the high latitude drilling capabilities and the riser drilling capabilities of the JOIDES RESOLUTION. This statement has been prepared and will be released in the U.S. on or about 1 July 1985. Copies of this statement will also be presented in the fall in Brussels at the 13th meeting of the 16 signatories to the Antarctic Treaty. Copies will also be distributed to all members of EXCOM and the ODP Council.
MEMBERSHIP

The Canadian delegation, led by the Secretary of State for Mines of Canada, signed a Memorandum of Understanding (MOU) with the NSF on 15 April 1985 at ceremonies at the NSF. At the signing, the membership of the ODP consisted of the Federal Republic of Germany, France and the U.S.

The European Science Foundation (ESF) and the UK have both signed extended candidate member MOUs with the NSF which expire at the end of September 1985.

G. Gross concluded the report by stating that the NSF is pleased with the smooth operation of the RESOLUTION and urged that those who have not visited the ship do so when possible.

Discussion:

Biju-Duval (France): What is the status of discussions on the participation of the USSR in the ODP?

Toye (NSF): The issue is still open and the status unchanged from the March EXCOM meeting.

327 JOINT OCEANOGRAPHIC INSTITUTIONS REPORT

J. Baker (JOI), in reviewing activities, reported that the ship continues to operate well, the logging program is producing excellent results and JOIDES planning is moving forward at a comfortable speed, however, Indian Ocean priorities need to be established in the near future.

In its management role, JOI has scheduled 2 performance reviews to be conducted during 1985. The first of these has occurred and was an evaluation of the ODP Databank following the October 1984 decision of EXCOM to place the Databank under co-mingled funding. The review committee, chaired by K. Klitgord (United States Geological Survey), wrote a favorable report and the final document will be reviewed at the PCOM meeting in Hannover on 25-27 June 1985 and results made available at a later date to the EXCOM. The second review will be a bi-annual review of the subcontractors, the science operator and logging operator. This review will occur in mid-November 1985 with results in January 1986. The review will be carried out by a committee, to be chaired by W. Hay (Univ. of Colorado) and which will also include 2 non-U.S. members. This Performance Evaluation Committee will meet in mid-November 1985 and will report to EXCOM in January 1986.

JOI has examined the various budgets for ODP and has prepared a detailed memo for FY 86 and beyond (APPENDIX A). Discussions of this memo are needed and scheduled under the BUDGET PRIORITIES section of the agenda. Finally, JOI has examined the number and location of JOIDES committee meetings during the period from May 1984-April 1985 and has
found that of the 38 ODP meetings, during that period 32% were outside the U.S. (7 in France, 4 in the UK and 1 in Switzerland).

328 SCIENCE OPERATOR REPORT

P. Rabinowitz (ODP/TAMU) began the report by summarizing the objectives and results of Leg 102, the objectives and preliminary results of Leg 103 and updating the EXCOM on the status of Legs 104, 105 and 106 and other future legs.

Leg 104 and Leg 105

Leg 104 has been modified from its originally proposed 47 operating day schedule and Leg 105 from its 70 day operating schedule. These modifications came about with the insertion of Leg 104B. Since the initial 8-9 days of Leg 105 are transit, there was scheduled a transitleg (Leg 104B) which will depart from Stavanger to a point either in Greenland or eastern Canada. Afterwhich, Leg 105 scientists will embark. The result is that the length of Leg 105 will be reduced by 8-10 days but science is unaffected on both 104 and 105. Decisions have yet to be made concerning the location to begin Leg 105 but a number of locations are under consideration (e.g. Frobisher Bay; ports in Greenland; St. John's, Canada). Further, the co-chief scientists for the Legs have been notified of these changes.

Leg 106

Staffing for Leg 106 has begun with J. Honnorez and R. Detrick as co-chiefs and the Sea Marc I site survey has just been completed.

Future Legs

Staffing for Leg 109 is beginning and co-chiefs have been selected through Leg 110.

Budget

Rabinowitz presented the revised FY 84/85 budget. The original program plan as submitted in 1984 was for $46.0 million. After costs for the ship conversion were received in early fall 1984, the budget was revised upward by $1.8 million to a total of $47.8 million. In Feb/March of 1985, the science operator was asked to revise the budget downward by $2.04 million to $45.8 million. Rabinowitz stated that even with this request the combined FY 84/85 budget is $200 K less than the original program plan. These figures were attained without any additional deferments to the original plan.

Publicity

Open Days were held at portcalls in Miami, Fla. in March and Norfolk, Va. in April. An open day is scheduled soon to be conducted in Bremerhaven, FRG. The ODP brochure has undergone translation into German and will soon be translated into French. The science operator has also produced and distributed to EXCOM members a slide set that highlights many aspects of the JOIDES RESOLUTION. Press releases from
ODP/TAMU are presently being modified to emphasize to local press sources the participation in ODP of scientists in their communities.

A groundbreaking ceremony was held during late March in TAMU on the site of the proposed ODP Building. At that time Dr. J. Linstadt-Siva presented to TAMU the Meritorious Public Service Award.

Rabinowitz concluded the Science Operator report with the distribution to EXCOM members of an information packet that contained slides of the facilities onboard the RESOLUTION, Geotimes articles on Legs 100 and 101, a GSA abstract with preliminary results of Leg 103 and press releases concerning Legs 102 and 103.

329 WIRELINE LOGGING SERVICES OPERATOR REPORT

R. Anderson (LDGO) reported that Wireline Logging Services is pleased with the performance of logging activities on the RESOLUTION and is especially pleased with results from the Gamma Spectroscopy Tool (GST).

Leg 102

Wireline Logging Services reported the logging results during Leg 102 were of very good quality and emphasized that they are comparable to standards presently found in the oil industry.

Leg 103

As of this meeting, 2 holes were successfully logged with the 12 channel sonic log and the suite of Schlumberger logging tools.

New Improvements

The wireline heave compensator will be added to the drillship at its portcall in Stavanger, Norway at the beginning of Leg 104. If not at this time then the compensator will be added in St. John's at the end of Leg 105. Presently, 90% of the parts have been delivered and the assembly is 40% completed. Engineering analysis of the mechanism indicate that 75-90% of the ship's motion will be suppressed.

Future Projects

System analysis and illustrations of the Stanford Univ./West German WBK Mining Inst. borehole televiwer will be presented at the Downhole Measurements Panel (DMP) at its June meeting in Halifax, N.S. and at the June Planning Committee meeting. LDGO has also made arrangements for a scientist from IFREMER to spend one year with the Wireline Logging Services Group.

Logging analysis software has been deferred for FY 1986. However, LDGO has managed to obtain from the Univ. of Kansas a log analysis package to fill this void. In order to operate the software package, LDGO needs a 9 track, 1600 bpi tape reader. Anderson asked EXCOM to
Due to a lack of funding during FY 1986, wireline packer development will be deferred. However, negotiations will continue with AMOCO for use of its prototype.

Publicity

The JOIDES RESOLUTION is shown on the cover of the Quarterly Report issued by Schlumberger. The DMP is playing a major role in the development at Los Alamos of a workshop to be held in November on high temperature drilling technology. Finally, Volume 2 of the Logging Manual will be distributed in September/October 1985.

Discussion:

Durbaum (FRG): What is the status of the high resolution temperature log?

Anderson: The tool is onboard the RESOLUTION but its resolution is not as high as needed.

Durbaum: The BGR has a high resolution temperature logging tool on the shelf and is willing to present it during a suitable leg onboard the drillship.

Biju-Duval: Is another kind of wireline packer available for use in the logging program?

Anderson: There are alternatives such as the Lynes Packer used on DSDP Hole 504B. Also, the TAM packer will be on the ship but it is not so easy to control and its resolution is not as good as the wireline packer.

Biju-Duval: On Leg 101, there was discussion among the co-chiefs on the amount of time needed to conduct logging activities. Has this issue been resolved?

Anderson: On Leg 101, many of the specialty tools were not used due to problems with time or the condition of the drill hole. LDGO has prepared a set of graphs for time estimation which should solve the problem of time in the borehole.

M. Peterson (SIO) reported that DSDP is working within a program plan that will continue until April 1987. DSDP is conducting its final closeouts with Global Marine with final audits having been completed and negotiations continuing. Much of the DSDP property (primarily shipboard equipment) has been transferred to the ODP and only that which is necessary for the phasedown operation is being kept at DSDP headquarters. Presently there have been successful closings of the logistics and engineering departments.
Plans presently call for the reprinting of the engineering Technical Reports with distribution as a complete set to all JOIDES institutions. Distribution has now been turned over to the National Technical Information Service. With regard to the Initial Reports (IR), there are 11 volumes remaining and 2 should be issued at the end of June 1985. Under the present schedule, all volumes will be distributed by April 1987. Reports for the IRs are coming in on schedule. Minor problems are projected for the Leg 93 and 95 combined volumes while work on Leg 96 is ahead of schedule. Further all Technical Reports were re-printed and re-distributed. DSDP has entered into an agreement with a professional indexing service to produce what may be the world's largest comprehensive index. The index will be available in both a printed form and as a database which will be accessible by computer.

Work on the DSDP Database continues on schedule with cores successfully transferred to TAMU and leasing agreements signed with the Univ. of California for ODP storage/office space.

A form of severance pay will be provided by DSDP to those who will continue to the end of the program. This procedure is being carried out in order to insure that experienced personnel will be available during the phasedown period.

The CHALLENGER presently resides in Brownsville, Texas having been sold as surplus. Attempts were made to set her up as a floating museum but negotiations were unsuccessful. Salvage operations for equipment have been conducted and selected items have been placed with the Smithsonian Inst. in Washington, D.C.

Discussion:

SteL (ESF): What are the plans for the European distribution of the Initial Reports during the phasedown period?

Peterson: DSDP is planning to send a container with partial sets to a central distribution point in Europe. Distribution will occur from that location to individual institutions.

Veis (ESF): Where will the distribution point be located?

Peterson: The location has not been determined at this time, however, Rotterdam appears to be the most probable site.

331 MEMBER COUNTRY REPORTS

Federal Republic of Germany

D. Maronde reported that the German scientific community is very excited over its involvement in the ODP and the ODP has the status of a
priority program within the DFG with 2 million Deutsch marks earmarked for allocation to both ODP and DSDP German science activities. Coordination will be informally provided by a group headed by H. Beiersdorf. Funding for the ODP membership comes 50% from the BMFT (Fed. Min. Tech.) and 50% from the DFG (German Research Society). Maronde also reported that in May of this year the FRG supported a workshop on black shales that attracted attendees from the FRG, UK, Netherlands and US.

H. Durbaum reported that FRG has established 2 groups for magnetics studies: one group will investigate the sources of sedimentary magnetism and the other will perform detailed analyses of deep sea sediments using a cryogenic magnetometer. Two groups have also been formed which focus on petrologic studies of volcaniclastic sediments of the South Atlantic and modelling of alteration processes in DSDP Hole 504B. A third group has also been formed which will conduct a paleoenvironmental synthesis of data from 150 DSDP holes.

The FRG is preparing for a POLARSTERN cruise to be conducted from mid-December 1985-late February 1986 in the Weddell Sea. The purpose of this cruise is to conduct 45 days of multichannel seismic and other geophysical work for site survey information before Leg 114. A synthesis of the geophysical data will be conducted by K. Hinz with participants from LDGO and IFP (France). Proposals are in preparation to study the Pre-Messinian geology of the Mediterranean Sea and to study the S.W. Pacific. The FRG has recently completed a SONNE cruise (with Australia) to the So. Tasman Plateau to study its earlier connection to Antarctica.

A new research group has been established in Kiel, headed by J. Thiede, to study the sediments in the North Atlantic.

Maronde and Durbaum concluded the FRG Report by expressing their anticipation for the Bremerhaven portcall. Also in closing, they noted that the FRG is attempting to maintain a strong and balanced connection between the ODP and continental drilling activities.

France

B. Biju-Duval reported that the ODP is the major geoscience program in the country and is seen as a new program with new goals that seek to expand scientific horizons. An ODP program has been approved but problems exist due to the unfavorable monetary exchange rate. The French government has not yet decided on the total contribution for 1986 and results will not be known until August. In the meantime, IFREMER has communicated with the other partners (universities, IFP, BRGM, CNRS and petroleum) to insure a high level of participation. The ODP budget for 1985 consists of FFr 5 million and an increase is hoped for in 1986.

The JEAN CHARCOT is in the Pacific conducting site surveys with current planning calling for site surveys in the W. Pacific, S.W. Pacific and the EPR for geochemical and geophysical studies in SE Pacific.

2000 km of multichannel seismic (MCS) data was collected in late March of this year from the Mediterranean Sea and will be available to the Atlantic Regional Panel (ARP) and the Mediterranean Working Group in June. In the near
Regional Panel (ARP) and the Mediterranean Working Group in June. In the near future, the same will be available from the Red Sea and for proposed sites in the Indian Ocean.

A meeting will be held concerning the use of the M. DUFRESNE as a supply ship for the JOIDES RESOLUTION. France also is seeking increased participation in the area of downhole logging by sending a scientist to work with R. Anderson at LDGO and by the development of a logging services group in Brest. A system for fly-in re-entry is being developed for the end of 1985. A major meeting on ocean science research is being planned for December 1985.

Discussion:

Durbaum (FRG): How will the French scientist at LDGO be financially supported?

Biju-Duval: The costs will be covered by a special in-house fund along with support from LDGO.

Canada

W. Cockburn reported that the Department of Energy, Mines and Resources will delegate the membership in the ODP Council to a Canadian ODP committee convened by the Canadian Geosciences Council. These arrangements become effective as of 1 July 1985. P. Robinson (Dalhousie Univ.) will be Director of the Canadian ODP Secretariat and will sit on the POOM.

The Canadian geoscience community looks forward to its participation in the program and especially to involvement on Leg 105.

Japan

A. Hattori stated that Japan is pleased to join the ODP as a full member. The Japanese geoscience community is very excited and expects to participate fully in the ODP. This enthusiasm is expressed as 30 proposals for the NW Pacific, Sea of Japan, Bonin Sea, Nankai Trough, the Indian Ocean and Antarctica will be submitted to the JOIDES Office. Additional proposals are expected for the Mariana Arc area. Japan plans to accomplish site surveys in the W and NW Pacific in 1986 using Japanese research vessels to conduct MCS and Ocean Bottom Seismometer (OBS) studies of proposed areas. In the summer of 1987 site surveys will be conducted along the Bonin Arc in preparation for ODP drilling in 1989. Japan has also instituted construction and use of downhole instrumentation (high temperature downhole magnetometer and flow meters for the EPR sites) in selected Atlantic and E. Pacific sites. This program will be reported at the DMP meeting.

Hattori also requested that due to limited travel funds, it is important to give Japan as much advance notice as possible to locations of panel meetings and cruise participants.

Observer Countries

United Kingdom
J. Bowman reported that the financial situation of the UK remains unchanged. Presently, this means that the UK can afford 1/2 of a full membership. Additional funds have been requested in FY 86-87 but no response has been received to that request.

The RRS DISCOVERY cruise to the Weddell Sea was very successful and substantial amounts of data was collected. Another cruise to that area has been discussed for the austral summer of 1986-87 using either the DISCOVERY or the DARWIN. An Indian Ocean cruise on the DARWIN will occur in 1986 and requests have been submitted for a Pacific cruise in 1987. Bowman concluded his report by stating that cruise information on UK research ships available for site surveys has been submitted to the JOIDES Office.

European Science Foundation

J. Stel reported that the ESF recently held a workshop on the ODP in Gothenburg, Sweden. At the workshop, Australia presented objectives and possible strategies for a combined membership.

Presently, the level of contribution from the 9 countries in FY 86 is $1.3 million for 3-5 years. Presently 2 ESF organizations are uncommitted, if a commitment occurs (which is likely) then the level of contribution will increase to $1.5 million which allows for the purchase of 60% of a full membership.

Australia is presently aiming for 40% of a full membership but their participation is dependent on a cabinet decision that will be made no earlier than September.

B. Munsch reported that a proposal for a management structure has been drafted, reviewed and accepted in principle by the ESF Board. The draft will now be developed into a comprehensive proposal and circulated among the membership. The final draft based on an ESF/Australian consortium should be ready by September and presented to the ESF Executive Council in October and the ESF General Assembly in November.

Discussions with Australia indicate that several moves could help speed up the decision-making process in the Australian Cabinet. It had been suggested that the ESF President send a letter to his Australian counterpart stressing the scientific value of involvement in the ODP. This suggestion has been acted upon. At this time, S. Toye noted that the Director of NSF, E. Bloch, has also written to the Australia and seems to have stimulated the interest.

If an ESF/Australian full membership is achieved, the consortium needs to insure that full information is available to both parties. It was the consensus of EXCOM that in the case of an ESF/Australian consortium in which each party provides a delegate and an alternate, they both may attend EXCOM and PCOM meetings, however, the alternate will attend as a non-participating, non-voting guest.

332 BUDGET PRIORITIES (FY 86)
J. Baker (JOI) reviewed the history of the budget process for FY 86 and outlined the current situation.

For a review of the FY 1986 financial situation, please refer to APPENDIX A which is a copy of a memorandum sent from J. Baker (JOI) to EXCOM and PCOM members.

A budgetary meeting that included representatives from JOI, TAMU, LDGO and the PCOM was held at JOI, Inc. on 2 May 1985. Two of the three members of the PCOM Budget Subcommittee were in attendance. Discussions with the third member had been conducted via telephone.

A draft Program Plan for FY 86 (distributed to EXCOM members at this meeting) had to be submitted to NSF by 1 June. This includes the priorities of the sub-contractors, as presented by them to JOI, in order to meet the NSF guidelines of a $32.5 million FY 86 budget.

The draft Program Plan will be reviewed on 8 July and the complete Plan will be referred to the National Science Board in September 1985.

R. Larson (PCOM Chairman) reported on the analysis of the program budget and presented the ideas and recommendations of the PCOM subcommittee. These analyses include a prioritization of eliminated budget items, potential programmatic losses to science planning and the proposed operations program, general program losses, recommendations for a minimum acceptable budget, a minimum reasonable budget and an optimum budget and potential solutions. These are found in APPENDICES B-E.

Discussion:

It was noted during discussion that the PCOM listing of essential and controversial items although similar to the TAMU priorities had a different order of priorities with the major emphasis of PCOM being on bare rock drilling. This similarity prompted several EXCOM members to ask if the ODP budget of $32.5 million was acceptable to PCOM Budget Subcommittee? If this budget was acceptable, how would the PCOM itemize its budget to come to the same number or if not acceptable, what budget would PCOM present as an alternative? The PCOM subcommittee response was that the proposed program cuts would not achieve the original COSOD objectives (which were the basis of the original proposal to NSF) and the minimum acceptable budget needed to operate the program would be $34.448 million. JOI, Inc., on the other hand, stated that they believe the program can operate within the $32.5 million budget and still execute a scientific program significantly superior to that which would have been possible with CHALLENGER.

The PCOM subcommittee proposed 3 potential solutions for the budget situation:

1. Reduce the long term goals of the ODP to a DSDP/CHALLENGER-type program on a larger ship with better laboratories.
2. Refinance the program by either maintaining the present agency contribution with a total of 6 international partners or increase all agency contributions by a constant percentage depending on the number of international partners being 4 or 5.

3. If 1 or 2 are unfeasible, then phase the program down to zero over FY 86 and FY 87.

Several EXCOM members were disturbed by solution 3 and stated that because of only 1 year of budgetary contraints it is unreasonable to phase the program out. It was pointed out that even though it is early in the operations stage, the ODP is now equal to if not better than the DSDP. However, it was stressed by the PCOM subcommittee that the program now proposed is very different from that originally proposed. It was the general feeling of the membership that, as indicated by PCOM and stated by some EXCOM members, the question is whether to reduce or not to reduce the number of COSOD objectives due to the budgetary problems. The EXCOM collectively asked the PCOM chairman what kind of program $32.5 million could buy and how many COSOD objectives achieved at that cost. Larson's reponse was that the program probably would be skewed in the direction of SOHP objectives because they are cheaper, resulting in less emphasis on the objectives of the other thematic panels. The largest impact would be on ocean lithosphere objectives with the loss of bare rock drilling on the East Pacific Rise. Tectonic themes would also be impacted with the loss of other advanced drilling and logging techniques. The PCOM chairman strongly stated that the program was built on the broad consent of the marine earth science community and this consensus is now jeopardized. Several members of EXCOM disagreed that an acceptance of the $32.5 million ODP budget would necessarily lead to the unbalancing of program objectives and suggested that options existed that do not alter these objectives. Some members considered that there were a number of alternate legs of high scientific quality for which financing is available and which could replace legs currently in the drilling plan.

It was pointed out that there will be a reduction in the output of the TAMU Publications Group due to budgetary constraints. It was emphasized that even at the original FY 86 request of $864 K, this is not a steady state cost for the Publications Group which is on the order of $2.0 - 2.5 million per year. At this level, the Publications Group, as presently conceived, represents a major commitment on funds.

Other options suggested as solutions could be the elimination of the bluebook series and replacement with another form in which data could be presented, perhaps a collected reprint series or the establishment of a data center at the ODP Databank. Some EXCOM members expressed reservations about the 2-part format, particularly Part B. It was further suggested that the publication of logging data and other raw data will be a very expensive portion of Part A and this idea should also be re-examined. Further, the EXCOM felt that different ways of making these data available should be explored.
Consensus: It was agreed that there was an urgent need to review the publications policy and its budget implications, taking into account both the needs of the Program and advances in information technology. PCOM was asked to establish a Publication Review Subcommittee involving both R. Merrill (TAMU) and JOI, Inc.

The need for six (rather than four or five) full international members was emphasized and the UK and ESF were both asked to continue their efforts to find the membership subscription. A sixth member would provide sufficient funds for PCOM priorities to be achieved.

In helping to resolve the current difficulties in matching the PCOM scientific objectives with the financial limits and the sub-contractors operational priorities, it was agreed to establish an EXCOM Budget subcommittee to review all of these items and make recommendations to JOI.

Consensus: It was agreed that PCOM should review the findings of the PCOM Budget Subcommittee and should consider its drilling program in light of the expected FY 86 budget ceiling. An EXCOM Budget Subcommittee should be established to consider these PCOM views, the draft Program Plan for FY 86 and the operational priorities proposed by the subcontractors. This latter subcommittee should report to JOI (through the EXCOM Chairman) by the end of June 1985.

During the meeting it was agreed that the EXCOM Budget Subcommittee would include H. Durbaum (Chairman) and B. Biju-Duval, subsequent to the meeting R. Heath and C. Helsley were added to the subcommittee by the EXCOM Chairman. It was the agreement of the EXCOM membership and the PCOM Chairman that the subcommittee would meet concurrently with the PCOM at its Hannover meeting on June 26-27, 1985.

2. EXCOM BUSINESS SESSION (6 June 1985)

333 MINUTES OF PREVIOUS MEETING

MOTION: Approve the Final Minutes of 18-19 March, 1985 meeting of the Executive Committee.

(moved by A. Berman, seconded by W. Merrell)

Vote: 14 for, 0 against, 0 abstain

334 PLANNING COMMITTEE REPORT

R. Larson (PCOM Chairman) reported on the short range (remainder of 1985), medium range (1986) and long range aspects (1987 and beyond) of planning.
Short Range Planning

Leg 104 (40 operational days):

1st priority objectives- resolve the nature of dipping reflectors on the Voring Plateau.

2nd priority objectives- conduct paleoenvironmental studies on the Voring Plateau and in deeper waters.

Leg 104B: Transit

Leg 105 (50 operational days):

1st priority objectives- Sample the Eocene-Miocene paleoenvironmental objectives in Baffin Bay.

2nd priority objectives- Sample similar objectives in the Labrador Sea.

The Leg 105 drilling program should terminate before the end of October.

Leg 106: (39 operational days)

1st priority: To deploy 1-2 guidebases in the neovolcanic zone of the MAR south of the Kane Fracture Zone.

The site survey has been completed with Seamarc I data from the rift floor and Seabeam data available from the rift valley floor and adjacent rift mountains. The PCOM has suggested that 30 days be used in attempting to spud into the bare rocks of the rift floor. If this plan is not successful then planning calls for drilling the nodal basin at the intersection of the MAR and the Kane Transform Fault.

Medium Range Planning

Leg 107: J. Mascle (France) and K. Kastens (LDGO)- co-chief scientists.

Priorities: To drill evaporitic sequences and tectonic/structural objectives in the Tyrrhenian Sea.

Analysis of MCS site survey is presently being conducted by the Mediterranean Working Group with results presented at the PCOM in Hannover.

Leg 108: M. Sarnthein (FRG) and W. Ruddiman (LDGO)- co-chief scientists

Priorities: To drill paleoenvironmental objectives as they relate to the desertification of the Saharan area during the Neogene.

Leg 109: T. Juteau (France) and W. Bryan (WHOI)- co-chief scientists.
Priorities: Drill and log as deeply as possible along the MAR.

Leg 110: C. Moore (UC) and A. Mascle (France) - co-chief scientists

Priorities: Drill through a decollement zone along the Barbados forearc. This is dependent on engineering developments for drill-in casing as well as the provision of an adequate packer to collect formation fluids.

Leg 111: A. Bougault (France) and K. Macdonald (UC) - co-chief scientists.

Priorities: To conduct bare rock drilling along the East Pacific Rise at 2 locations along the neovolcanic and 1 location off axis to observe hydrothermal circulation processes and products. The alternative is to return to DSDP Hole 504B to deepen the hole and conduct recovery and logging operations.

Leg 112: Peru Margin

Priorities: To study the tectonics of this accretionary margin in terms of the uplift and subsidence history of the hanging wall basins behind the subduction zone and drill to basement. To study paleoenvironmental problems related to regional upwelling at this location and to drill to basement.

Leg 113: Chile Triple Junction

The Chile TJ was eliminated from planning due to a lack of sufficient site survey information. The possibility of a short HPC leg is under review.

Leg 114: Weddell Sea

Priorities: To examine the climatic history of Antarctica with emphasis on the formation of Antarctic Bottom Water (ABW) and to examine the break-up history of Gondwanaland.

Presently, the leg is scheduled to last 70 days however more time in the area may occur with 2 shorter legs.

Long Range Planning

Since no prioritized objectives for the Indian Ocean presently exist, a listing of proposed panel objectives are listed in APPENDIX G.

Discussion:

Knauss: Is it correct to say the panels are presently unbalanced in terms of the expertise following the withdrawal of UK and ESF members and should vacancies be filled at this time?

Larson: The panel vacancies will be kept open until 30 September and there is no rush to make appointments at this time.
However the vacancies should be filled before the end of the calendar year. It should noted that vacancies in panel chairmanships have been filled with J. Leggett (UK- Tectonics Panel) replaced by D. Cowan (Univ. of Washington) and J. Jones (UK- Site Survey Panel) replaced with J. Pierce (Canada). The role of the TEDCOM and whether its existence is necessary needs further review.

Durbaum: What is the status of the Site Survey Panel and its relation to the ODP Databank, since it had been proposed to turn over some of these responsibilities to the JOIDES Office?

Larson/Mayer: The coordination between the SSP and the ODP Databank has greatly improved since the time of that proposal. Further it is unlikely that the JOIDES Office could handle the responsibilities of the ODP Databank. One major problem that contributed to the deterioration of coordination was the poor attendance of SSP panel members to meetings. Attendance has now greatly improved and the evidence suggests that the Panel is presently working well.

Knauss: What is the status of proposals?

Mayer: The PCOM chairman has written to both successful and unsuccessful Atlantic Ocean proponents. A proposals listing is now included in all EXCOM and PCOM meeting packages. There has been a great influx of Indian Ocean proposals which is now being succeeded by proposals for the Western Pacific. Updates of proposals received are regularly published in the JOIDES Journal with the initial full listing printed in the Feb. 1985 issue of The JOIDES Journal.

335 ADDITIONAL INTERNATIONAL PARTICIPATION IN ODP

There was further discussion of the possibility of USSR membership in ODP.

Discussion:

Knauss: Does an expression of encouragement to the USSR present any problems for NSF?

Toye: There are no problems perceived.

Hutchison (Canada): The Soviets are interested in participating in ODP. One possibility to encourage the USSR is to invite representatives to the EXCOM meeting in Bonn in September as guests to make a presentation on drilling activities.

Peterson: Perhaps the Soviets could speak on their attempts to initiate an Arctic drilling program.
Munsch: At the ESF, the European Geotraverse Project has approached the USSR with the help of the ESF President, and been promised direct though limited Soviet participation in one of the 1985 experiments. The ESF President has good contacts with the USSR and could make initial soundings with appropriate contacts in the USSR prior to the EXCOM Chairman issuing any invitations.

At the end of the discussion, H. Durbauam proposed the following motion that was seconded by W. Merrell.

Motion: The JOIDES Executive Committee, recognizing the many contributions of scientists from the USSR to the success of the International Phase of Ocean Drilling (IPOD) and their significant presence in the world community of marine geologists and geophysicists, urges the National Science Foundation to vigorously pursue a course of action leading to the early re-establishment of a Memorandum of Understanding providing for Soviet Union participation in the Ocean Drilling Program.

Vote: 13 for, 0 against, 1 abstain

336 THIRD WORLD PARTICIPATION

T. Mayer (JOIDES/URI) reported that over the last year approaches have been investigated which could allow for the inclusion of Third World scientists into the ODP. A. Bally (Atlantic Regional Panel) has also expressed an interest and has suggested that the World Bank be approached for suggestions. The World Bank was contacted and appropriate materials sent for their evaluation. The World Bank has stated that funding may be difficult to obtain and suggest that other avenues be approached such as attempts at forming consortia. K. Hsu has suggested that attempts be made to keep Third World scientists informed of the progress of the ODP through publications other than the JOIDES Journal. Hsu suggests publications such as the UNESCO newsletter, IUGS Episodes and other international publications.

Discussion:

Hutchison: What is the nature of the request to the World Bank; to provide scholarships or to contribute a membership subscription?

Mayer: We have not been specific at this stage. Approaches have been confined to establishing a dialogue with the World Bank.

Knauss: It is desirable to have a fund for Third World countries to sponsor membership.

Hutchison: Perhaps it would be useful if the oil industry could make donations in order to set up a fund for sponsoring individual scientists. Further discussion with Bally is needed.
The EXCOM also explored the possibility of approaching China for possible full member participation in the ODP. Toye responded that China has been contacted and there is interest. However, there are bureaucratic and financial difficulties that suggest a consortium arrangement is in order.

337 FUTURE MEETINGS

25-26 September 1985       Bonn, FRG
7-9 January 1986           Hawaii

338 OTHER BUSINESS

The EXCOM chairman expressed appreciation to JOI, Inc. for hosting the meeting.

It should be noted at this meeting that JOIDES presented to the Science Operator a pennant to be flown on the JOIDES RESOLUTION. The design was approved at the March EXCOM meeting.
May 24, 1985

MEMORANDUM

TO: EXCOM and PCOM

FROM: D. James Baker

SUBJECT: FY 1986 Budget for the Ocean Drilling Program

The purpose of this memorandum is to summarize the issues and options pertaining to the FY 1986 budget for the Ocean Drilling Program to be discussed by the EXCOM at the meeting on June 5 and 6 in Washington, DC. At this meeting spokesmen for each of the major operational organizations within the ODP will be present to answer questions and provide budgetary and technical details. JOI is in the process of preparing a draft Program Plan to submit to NSF with the objective of submitting the final plan before the contractual requirement date of August 1. The Planning Committee will meet late in June in Hannover, Germany, and at that time may recommend action on scientific priorities.

The original estimate to conduct the enhanced drilling program as specified by the scientific community and outlined in the COSOD document was calculated to be $29.7M in FY 84 and $30.9M in FY 85 (a total of $60.6M in 1983 dollars). These estimates included startup costs, and it was estimated that by the conclusion of the first two fiscal years steady state costs would be well established. In early discussions with representatives of NSF prior to submission of the ODP proposal, it was learned that funds available to NSF, including funds from prospective other country partners, would not cover the foregoing initial estimates. NSF stated that FY 1986 would be the first year to request funds for full operational and scientific requirements. In reviewing cost estimates associated with the engineering development, ship conversion, ship subcontract, insurance, start-up equipment, and logging services of the proposed Ocean Drilling Program, it was determined that viable but austere plans could be made that would allow a two year budget level of about $51M. With reasonable success in the market place, it was felt that a first class drilling program could be undertaken and that accomplishments of the COSOD objectives could be commenced.

A drillship subcontractor was selected within budget, and the ship was converted in accordance with design specifications approved by the scientific community. As we have reported, the conversion costs exceeded
original estimates. These costs and other claims are being processed by Texas A&M at the present time. The ship has gone to sea and has completed two scientific legs. All operational aspects of the program have been going well and COSOD objectives are being accomplished.

Before commenting upon and presenting the proposed budget for FY 1986, the following review of funding history may be helpful:

1. On July 10, 1984, JOI submitted its first ODP Program Plan for fiscal years 1984 and 1985 to NSF:

<table>
<thead>
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<th>Year</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 84</td>
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<tr>
<td>FY 85</td>
<td>$30.2M</td>
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<tr>
<td>Total</td>
<td>$52.2M</td>
</tr>
</tbody>
</table>

2. NSF approved the Program Plan on July 23, 1984 on a conditional basis until conversion costs and contributions from international memberships became better known.

3. JOI advised NSF on August 20, 1984 of the shipyard selected for the conversion of the drillship with an estimated cost of conversion of $4.9M. This exceeded the original budget estimate by $2.8M, principally because the scope of the laboratory design and laboratory equipment exceeded that which was originally envisaged. JOI requested from NSF an additional $2.8M for the FY 84 budget and also scheduled an Interface Working Group (IWG) meeting for the purpose of reviewing program priorities to accommodate the increased estimate for ship conversion.

4. An Interface Working Group meeting was held at Texas A&M on August 28, 1984 among representatives of NSF, JOI, TAMU, L-DGO, and the JOIDES Planning Committee. The following decisions resulted from the IWG review:
   a. Do not delay bare rock drilling
   b. Do not delay wireline logging
   c. TAMU and L-DGO to review equipment purchases and defer and economize where possible
   d. All organizations to review budgets and defer and economize where possible

After considering all additional costs involved in the conversion, long lead time items, shakedown, and equipment; estimated savings from organizational elements; and estimated reprogramming funds from NSF, the net estimated shortfall at that time amounted to $150K. All other things being equal, JOI would take steps to again analyze program elements and make a further reduction of $150K. NSF stated that there was a possibility of reprogramming $1.35M in FY 85 so that the new target budget for FY 85 would be increased from $30.2M to $31.55M.

5. NSF advised JOI on February 12, 1985 that the target budget for FY 85 would have to be revised downward by $2.2M from $31.55M to
$29.35M because of the failure to enroll five full members in the ODP and because of the overall uncertainty of other country financial participation.

6. On January 22, 1985, JOI requested a target funding figure of $36.4M for FY 86. The budget planning figure for FY 86 of $36.4M requested was revised downward to a target figure of $32.5M because of lack of funds. The Program Plan is therefore being prepared at the target figure of $32.5M.

The following table shows the breakdown:

<table>
<thead>
<tr>
<th></th>
<th>FY 1986 JOI Request</th>
<th>FY 1986 NSF Target</th>
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<tbody>
<tr>
<td>JOI</td>
<td>$ 1.6M</td>
<td>$ 1.42M</td>
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<tr>
<td>L-DGO</td>
<td>2.8M</td>
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<tr>
<td>TAMU</td>
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<td>28.58M</td>
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<tr>
<td>TOTAL</td>
<td>$36.4M</td>
<td>$32.50M</td>
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(Because of additional requirements, including bare rock drilling in FY 1986 and renewing the request for deferred items such as shore based equipment and cost-of-living increases, and because the original budget was in FY 1984 dollars, etc., Texas A&M's revised request for FY 1986 was $35.8M in lieu of $32.0M.)

A summary of the JOI budget at $1.42M for FY 1986 is given in Enclosure I; a summary of the L-DGO budget at $2.5M for FY 1986 is given in Enclosure II; and a summary of the Texas A&M budget at $28.58M is given in Enclosure III.

A meeting was held at JOI headquarters on May 2, 1985 among representatives of JOI, TAMU, L-DGO, and the PCOM for the purpose of reviewing the proposed FY 1986 budget. Members of the PCOM Budget Subcommittee, Roger Larson and José Honnorez, were in attendance. The third member of the Subcommittee, Helmut Beiersdorf, could not attend but Roger Larson held discussions with him by phone concerning the FY 1986 budget. Jack Clotworthy of JOI, Philip Rabinowitz of Texas A&M, and Dan Fornari of Lamont-Doherty presented details, explanations and impacts of the proposed target figures for FY 1986.

After considerable discussion throughout the day, Roger Larson and José Honnorez segregated elements of the reductions in the Texas A&M budget into three categories: non-controversial; controversial; and essential for carrying out the COSOD objectives of the Ocean Drilling Program. Included in this last category, PCOM estimated that approximately $2.0M additional was needed for the Texas A&M budget. Without these funds, the PCOM's view was that the program would not be following through on COSOD objectives reflected in the FY 1986 science plan. In subsequent iterations, the following priorities were recommended by PCOM for a series of "add-backs", should any additional funds become available:
Priority A - $1M for reinstating bare rock drilling

Priority B - $218K for reinstating drilling inventory

Priority C - $200K for hiring sufficient editors to commence at a slow pace the publication of Initial Reports

Priority D - $600K for reinstating 11.2% of the personnel reduction

JOI, with the objective of achieving a reasonable balance between scientific priorities and operational considerations, proposes for EXCOM consideration the following set of priorities for add-backs:

Priority 1 - $200K for hiring sufficient editors to commence at a slow pace the publication of Initial Reports

Priority 2 - $300K for reinstating 6.5% of personnel reduction

Priority 3 - $476K for reinstating total effort for scientific publications

Priority 4 - $300K for reinstating a second 5.6% personnel reduction

Priority 5 - $218K for reinstating drilling inventory

Priority 6 - $0.5M for bare rock drilling (reduces number of bare rock holes)

The L-DGO logging services plan at $2.5M is consistent with the FY 1986 science plans and was accepted by the PCOM Subcommittee. However, it was recommended that the wireline packer development be deferred, reducing the budget from $2.5M to $2.46M. Should additional funds for logging become available, Dr. Anderson has identified a number of actions totaling $300K which were also endorsed by the PCOM group.

Copies to: R. Anderson, L-DGO
G. Brass, NSF
D. Fornari, L-DGO
L. Garrison, TAMU
P. Rabinowitz, TAMU
S. Toye, NSF
JOI FY 1986 BUDGET

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<td><strong>Subtotal</strong></td>
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<td><strong>TOTAL</strong></td>
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* Includes travel expenses for the Chairmen of EXCOM and PCOM, JOIDES and JOI staffs, and scientists from non-member countries who participate in JOIDES activities.
**LAMONT-DOHERTY GEOLOGICAL OBSERVATORY**  
**BOREHOLE RESEARCH GROUP**  
**FY 1986 BUDGET**  
**JOI - WIRELINE LOGGING SERVICES MAIN CONTRACT - ODP**  
**10/1/85 to 9/30/86**

A. **TOTAL SALARIES AND FRINGE BENEFITS** .................................. $ 361,002

B. **PERMANENT EQUIPMENT**

1. Energy Systems log analysis software updates for 12 months .............................................. $ 7,000  
2. Schlumberger Wireline Heave Compensator (2nd payment-final) ........................................ 81,000  
3. Start-up costs for wireline packer development ........................................................................... 39,335  
4. Borehole Research Group Office Xerox (2nd payment-final) ..................................................... 2,400  
5. Storage racks (shipboard and LOGO) for mag. tapes, video tapes, televiewer records, logging tools .......................................................... 9,000  

**TOTAL PERMANENT EQUIPMENT** ................................................................. $ 138,735

C. **TOTAL MATERIALS AND SUPPLIES** .................................................. $ 51,000

D. **TOTAL TRAVEL** ................................................................................... $ 56,770

E. **OTHER COSTS**

1. Printing services for duplication, archiving and preparation of logging documents and reports .......................................................... $ 15,000  
2. Repair and calibration of logging tools and modification of equipment ........................................ 15,000  
3. Logging truck expenses (supplies, fuel & upkeep) ..................................................................... 6,000  
4. Insurance ......................................................................................................................... 10,000  
5. Communications .............................................................................................................. 12,000  
6. Shipping (from LDGO and Schlumberger to and from ship) .................................................. 60,000  
7. Graphic arts reproduction services ........................................................................................... 7,000  

**TOTAL OTHER COSTS** .............................................................................. $ 125,000

F. **LDGO DIRECT COSTS TOTAL** ............................................................. $ 732,507

G. **LDGO INDIRECT COST BASE** ............................................................. $593,772

H. **LDGO GENERAL ADMINISTRATIVE COSTS (@23%)** ......................... $ 136,568

I. **LDGO OVERHEAD (@19%)** ........................................................................ $ 112,817

J. **LDGO BUDGET TOTAL** ........................................................................... $ 981,892

K. **MASSCOMP SUBCONTRACT** (service contracts for 3 computers plus spare parts) ................ $ 49,086

L. **STANFORD UNIVERSITY SUBCONTRACT** ........................................... $ 118,122

M. **SCHLUMBERGER SUBCONTRACT** ......................................................... $ 1,350,900

N. **TOTAL LDGO WIRELINE LOGGING SUBCONTRACT** ......................... $ 2,500,000

*PCOM Budget Subcommittee recommended wireline packer development be deferred ........ $ - 39,335

**RECOMMENDED LDGO LOGGING SERVICES FOR FY 1986** .................. $ 2,460,665
ADDENDUM BUDGET

THIS BUDGET IS SUBMITTED IN THE EVENT THAT FUNDS BECOME AVAILABLE TO BRING THE FY1986 BUDGET LEVEL UP TO THE ORIGINAL TARGET FIGURE OF $2.8 MILLION

PERMANENT EQUIPMENT

1. One (1) BHTV system to be converter to digital plus spare surface electronics panel $ 65,000.

2. One (1) 12 channel sonic tool and uphole electronics $ 90,000.

3. Two (2) MASSCOMP computer terminal conversions to color graphics (@$7,000) $ 14,000.


5. Wireline Packer development funds $ 76,000

6. Computer programming for continental margin backstripping analysis package based on logging data $ 15,000.

TOTAL FUNDS REQUESTED IN FY1986 ADDENDUM $300,000.

7. Start-up costs for wireline packer development (deferred by PCOM Budget Committee) $ 39,335

$339,335
### OCEAN DRILLING PROGRAM
### BUDGET SUMMARY FOR FY 86

#### DEPARTMENTS

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<th>Departments</th>
<th>Option I (X $1000)</th>
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<tr>
<td>Less 11.2% reduction*</td>
<td>$35,808</td>
<td>$29,180</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$35,808</td>
<td>$28,580</td>
</tr>
</tbody>
</table>

*Total salaries for all cost centers is $5,353; $600 represents a reduction of 11.2% in cost center personnel costs.
### BUDGET OPTIONS

*(Figures X $1000)*

<table>
<thead>
<tr>
<th>Option II</th>
<th>$28,580</th>
<th>$29,180</th>
<th>$30,787</th>
<th>$31,397</th>
<th>$31,791</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Change = -600)</td>
<td>(Change = -937)</td>
<td>(Change = -1,020)</td>
<td>(Change = -654)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reinstall $600 for cost center reduction of 11.2% of personnel costs</td>
<td>Reinstall publications group ($576,000) and Reinstall staff scientist position ($43,000)</td>
<td>Reinstall bare-rock drilling (4 holes and technological development)</td>
<td>Reinstall all Engineering activities (exclusive of bare rock drilling)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>$32,386</th>
<th>$34,261</th>
<th>$34,660</th>
<th>$35,160</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Change = -595)</td>
<td>(Change = -1,875)</td>
<td>(Change = -399)</td>
<td>(Change = -500)</td>
</tr>
<tr>
<td>Shorebased Masscomp ($130,000) and Ship/Shore core Imaging system ($465,000)</td>
<td>Shorebased science equipment ($1,850,000 to $1,900,000)</td>
<td>Maintenance of repositories ($279,000) and Project specialist ($57,000) and GCR Technician ($33,000)</td>
<td>Drill String Loss</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>$35,685</th>
<th>$35,838</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Change = -525)</td>
<td>(Change = -123)</td>
</tr>
<tr>
<td>Reinstall 4% day rate contingency</td>
<td>Other much smaller contingencies spread through all cost centers</td>
</tr>
</tbody>
</table>
Budget Explanation (FY86)

Option I gives the dollar amounts necessary to provide the services to the Ocean Drilling Program as given in the original JOI proposal and directed by the JOIDES advisory panels. The total cost is $35.7 million.

Option II gives the dollar amounts to provide services to the Ocean Drilling Program with a bottom line target figure of $28.58 million as directed by JOI, Inc.

Listed below are the major reproductions and/or deferrals necessary to reduce Option I by approximately $6.6 million to meet the Option II target figure (the reductions are not listed in order of priority).

A) **Current Staff**

Reduce current staff by 11.2%. At the present time we have yet to decide which of our present staff positions will be eliminated. As far as the day-to-day operations of the program are involved, we believe this to be the singular most important category to be reinstated if more funds become available. The impact of this reduction is difficult to assess. In levels of production, the impact would be equivalent to eliminating an entire Engineering Development department. There is a strong possibility, however, that the impact for the remainder of the program can be crippling, if not devastating. A program that allows for mass layoffs soon after its commencement, and soon after its employees are congratulated for their dedicated efforts, will most probably see an exodus of its key personnel.

(Deferral or savings: $600,000).

B) **1801B - Headquarters**

Eliminate or defer the position of International Project Specialist.

(Deferral or savings: $87,000).

C) **Science Services**

1) **Publications** - Eliminate or defer hiring of publications staff. This action would eliminate or delay all formal ODP publications. It would also adversely affect all post-cruise meetings, starting with Leg 101. There is an important time constraint with this action. In order to meet the deadlines for the post-cruise activities, the commencement of hiring of these positions must be immediate (May/June 1985). At the request of JOI, Inc., we have presently called a halt to our recruitment...
efforts for the publication group. (Deferral or savings: $676,000).

ii) East Coast Repository - Defer or eliminate the continuation of the much needed maintenance program for DSDP cores previously collected in the Atlantic Ocean. (Deferral or savings: $93,000).

iii) West Coast Repository - Defer or eliminate the continuation of the maintenance program for DSDP cores previously collected in the Indian and Pacific Oceans. (Deferral or savings: $186,000).

iv) Gulf Coast Repository - Deferr the hiring of one Gulf Coast curatorial technician. (Savings of $33,000).

v) Computer Services

   a. Deferral of purchase of shorebased Masscomp computer necessary for upgrading of shipboard software, training of personnel and backup. (Deferral: approximately $130,000).

   b. Deferral of purchase of shipboard/shorebased imaging system necessary for archival imaging presently handled with photographs and "cutting edge" research into textures and structure of cores for igneous and sedimentary petrology. (Deferral: approximately $465,000 with one additional FTE).

D) Engineering and Drilling

1) Drilling

   a. Eliminate drill string loss replacement funds. If drilling events go unusually smooth over the next 18 months, with little or no loss, we would obviously not require these funds. However, losses do occur, and the replacement of the losses and maintaining a reasonable inventory of drill pipe is essential for the planning and operation of the scientific program. (Savings or deferral: $500,000).

   b. Reduce inventory of drilling supplies - bits, coring equipment, core tube liners, beacons, etc. - such that the vessel ends the fiscal year with no inventory of drilling supplies. Once again, unexpected losses do occur and maintaining a reasonable inventory of supplies is essential for proper scientific operations. (Deferral or savings: $218,000).

ii) Engineering

   Eliminate many of the engineering development activities. This includes development work on core orientation, core bit development, extended core barrel, navi-drill core barrel, core barrel pressure instrumentation, drill-in casing, high temperature drilling, engineering test facility, explosive bit release, etc. (Savings or deferral: $654,000).
E) Science Operations

1) Deferral once again, of all shorebased scientific equipment and supplies. Cores are arriving at repositories and shorebased studies can commence as soon as the scientific equipment is purchased. (Deferral: approximately $1,806,000).

ii) Defer the hiring of one staff scientist. (Savings: $43,000).

F) Drilling Operations

Ship Subcontract - A 4% escalator for the day rate was taken out of the budget. The Producer Price Index for supplies did not move 2% during calendar year 1984. Whether it will move upward between January 1985 (last published report) and June 1986 (last time that move will effect FY86 budget) is speculative. If it does, we will not have the funds. [A major concern in this category is the estimation of fuel prices. Our estimated average is $1 per gallon, which may be highly unlikely in non-U.S. ports with the present escalation of fuel prices.] (Savings: $525,000).
**1806B: DRILLING OPERATIONS**  
**BUDGET SUMMARY**  
**FY 86**

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>6410 Fuel</td>
<td>$2,920,000.00</td>
</tr>
<tr>
<td>(365 days @ $8,000)</td>
<td></td>
</tr>
<tr>
<td>6520 Insurance</td>
<td>1,000,000.00</td>
</tr>
<tr>
<td>6530 Shore Support (Port Calls)</td>
<td>700,000.00</td>
</tr>
<tr>
<td>(7 x $100,000)</td>
<td></td>
</tr>
<tr>
<td>6820 Day Rates - Riserless</td>
<td>12,301,955.00</td>
</tr>
<tr>
<td>$34,167 (R.D.) x 231 = $8,228,913</td>
<td></td>
</tr>
<tr>
<td>$23,167 (R.C.) x 99 = $3,423,717</td>
<td></td>
</tr>
<tr>
<td>$32,167 (S.B.) x 35 = $1,174,095</td>
<td></td>
</tr>
<tr>
<td>7580 Travel To/From Port Calls</td>
<td>630,000.00</td>
</tr>
<tr>
<td>(SEDCO Travel)</td>
<td></td>
</tr>
<tr>
<td>7880 Per Diem</td>
<td>383,250.00</td>
</tr>
<tr>
<td>(365 days x $21 x 50)</td>
<td></td>
</tr>
<tr>
<td>9400 Special Restricted Reserve</td>
<td>0</td>
</tr>
<tr>
<td>(Escalation factor for fuel, per diem, day rates)</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL 1806B**  
$17,935,205.00
### Prioritization of Eliminated Budget Items, FY 86

<table>
<thead>
<tr>
<th>Category</th>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Essential Items</strong></td>
<td>Bare rock drilling guidebases</td>
<td>$0.930</td>
</tr>
<tr>
<td></td>
<td>Shipboard drilling inventory</td>
<td>$0.218</td>
</tr>
<tr>
<td></td>
<td>Minimum publications group</td>
<td>$0.200</td>
</tr>
<tr>
<td></td>
<td>11.2% personnel reduction</td>
<td>$0.600</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$1.948 m</strong></td>
</tr>
<tr>
<td><strong>Controversial Items</strong></td>
<td>Wireline packer development</td>
<td>$0.040</td>
</tr>
<tr>
<td></td>
<td>Engineering subcontracts</td>
<td>$0.654</td>
</tr>
<tr>
<td></td>
<td>Additional publications group</td>
<td>$0.476</td>
</tr>
<tr>
<td></td>
<td>TAMU HQ or other personnel</td>
<td>$0.100</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$1.270 m</strong></td>
</tr>
<tr>
<td><strong>Non-controversial Items</strong></td>
<td>Repository maintenance</td>
<td>$0.279</td>
</tr>
<tr>
<td></td>
<td>Staff scientist</td>
<td>$0.043</td>
</tr>
<tr>
<td></td>
<td>Shorebased masscomp</td>
<td>$0.130</td>
</tr>
<tr>
<td></td>
<td>Ship/shore core imaging</td>
<td>$0.465</td>
</tr>
<tr>
<td></td>
<td>Shorebased science equipment</td>
<td>$1.900</td>
</tr>
<tr>
<td></td>
<td>Project specialist</td>
<td>$0.087</td>
</tr>
<tr>
<td></td>
<td>Gulf Coast repository tech</td>
<td>$0.033</td>
</tr>
<tr>
<td></td>
<td>Spare drill string</td>
<td>$0.500</td>
</tr>
<tr>
<td></td>
<td>4% SEDCO day rate increase</td>
<td>$0.525</td>
</tr>
<tr>
<td></td>
<td>Misc. small items</td>
<td>$0.123</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$4.085 m</strong></td>
</tr>
</tbody>
</table>
POTENTIAL PROGRAM LOSSES - LEGS 109-111

*MID-ATLANTIC RIDGE

No core bit development will eliminate increased hard rock penetration rates.

*BARBADOS FOREARC

No drill-in casing makes it unlikely that the over-pressured thrust zone can be penetrated and sampled. Principal Objective

No wire-line packer development makes it unlikely that pore pressure can be measured in and near the thrust zone if it is penetrated. Principal Objective

*EAST PACIFIC RISE

No bare rock drilling guidebases make this program impossible. Principal and Only Objective

No core bit development and high temperature drilling engineering make significant penetration unlikely and logging impossible. Principal Objective
POTENTIAL PROGRAM LOSSES - LEGS 112-114

*DSDP 504B*

No core bit development eliminates increased hard rock penetration rates.

No high temperature drilling engineering makes additional drilling and logging problematic. (Ambient bottom hole temperature = 170°C.)

Principal Objective

*PERU MARGIN*

No drill-in casing or wire-line packer development will have the same impact as at Barbados if a similar over-pressured thrust zone is encountered.

*WEDDELL SEA*

No core orientation development eliminates objectives at the W6, W7, W8 transect to examine deep contour current interaction with Antarctic bottom water formation.

No extended core barrel development impacts this and future paleoenvironmental objectives.
1. Reducing shipboard drilling supplies inventory to zero in late 1986 will have a major impact on the technologically difficult legs planned for that period.

2. Reducing drill string reserve and eliminating the day-rate increase will leave us unprepared for the Indian Ocean in 1987 where fuel and all forms of re-supply will be expensive.

3. Publications. The ultimate products of the Program, viewed both internally and externally, are the Proceedings of the ODP (Parts A and B). To cripple production of these volumes at the beginning will have a long-term adverse effect on the Program.
Fig. 5

PCOM BUDGET SUBCOMMITTEE

TOTAL ODP BUDGET LEVELS, FY 86

*MINIMUM ACCEPTABLE BUDGET $34,448 m

$32.500 m NSF limit

1.948 m Essential items

1.270 m Controversial items

*MINIMUM REASONABLE BUDGET $35,718 m

$32.500 m NSF limit

1.948 m Essential items

1.270 m Controversial items

4.085 m Non-controversial items

*OPTIMUM BUDGET $39,803 m
### INDIAN OCEAN PROPOSALS - PRESENT RANKING BY PANELS

#### APPENDIX F

<table>
<thead>
<tr>
<th>Event</th>
<th>Score</th>
<th>Event</th>
<th>Score</th>
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</thead>
<tbody>
<tr>
<td><strong>TECP, Mar. 18-20, 1985</strong></td>
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<td><strong>IOP, Mar. 20-22, 1985</strong></td>
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</tr>
<tr>
<td>Makran</td>
<td>8.75</td>
<td>Kerguelen, One Leg</td>
<td>9.50</td>
</tr>
<tr>
<td>Intraplate Deformation</td>
<td>8.43</td>
<td>90⁰ East Ridge Hot Spot and</td>
<td>8.25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Paleoceanography</td>
<td></td>
</tr>
<tr>
<td>SW Indian Ridge Petrology</td>
<td></td>
<td>Neogene Package</td>
<td>8.00</td>
</tr>
<tr>
<td>Bengal-Indus Fans</td>
<td>7.00</td>
<td>Red Sea</td>
<td>7.63</td>
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<tr>
<td>90⁰ East Ridge-Broken Ridge</td>
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<td>SE Indian Ridge Transect</td>
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<tr>
<td>Hot Spot</td>
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<td>Broken Ridge, Uplift &amp; Rift</td>
<td>6.88</td>
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<tr>
<td>Broken Ridge, Uplift and Rifting</td>
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<td>Kerguelen, Second Leg</td>
<td>6.75</td>
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<tr>
<td>Chagos-Laccadive Hot Spot</td>
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<td>Exmouth-Argo Transect</td>
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<tr>
<td>N. Somali Basin Deep Hole</td>
<td>6.25</td>
<td>Intraplate Deformation</td>
<td>6.25</td>
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<tr>
<td>Kerguelen Basement</td>
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<td>Davie Ridge</td>
<td>5.00</td>
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<tr>
<td>Red Sea</td>
<td>6.20</td>
<td>SW Indian Ridge Petrology</td>
<td>4.88</td>
</tr>
<tr>
<td>S. Australia Quiet Zone</td>
<td>6.00</td>
<td>Chagos-Laccadive Hot Spot</td>
<td>4.63</td>
</tr>
<tr>
<td>Timor Collision</td>
<td>5.62</td>
<td>and Paleoceanography</td>
<td></td>
</tr>
<tr>
<td>S. Australia, Old Ocean Crust</td>
<td>5.50</td>
<td>Makran</td>
<td>4.50</td>
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<tr>
<td></td>
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<td><strong>SOHP, Feb. 21-23, 1985</strong></td>
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<tr>
<td>Kerguelen-Amery Transect</td>
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<td>Kerguelen-Amery Transect</td>
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<tr>
<td>Neogene Package</td>
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<td>Neogene Package</td>
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</tr>
<tr>
<td>N. Somali Basin Deep Hole</td>
<td></td>
<td>N. Somali Basin Deep Hole</td>
<td></td>
</tr>
<tr>
<td>Kerguelen-SE Indian Ridge Transect</td>
<td></td>
<td>Kerguelen-SE Indian Ridge Transect</td>
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<tr>
<td>Exmouth-Argo Transect</td>
<td></td>
<td>Exmouth-Argo Transect</td>
<td></td>
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<tr>
<td>Chagos-Laccadive Paleoceanography</td>
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<td>Chagos-Laccadive Paleoceanography</td>
<td></td>
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<tr>
<td>Subantarctic Transect</td>
<td></td>
<td>Subantarctic Transect</td>
<td></td>
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<tr>
<td><strong>SOP, Apr. 9, 1985 letter from Kennett</strong></td>
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<td><strong>LITHP, Feb. 26-27, 1985</strong></td>
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<tr>
<td>Kerguelen-Amery Transect</td>
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<td>Red Sea</td>
<td></td>
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<tr>
<td>Subantarctic Transect</td>
<td></td>
<td>(Hot Spot Trace)*</td>
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</tr>
<tr>
<td>Kerguelen-SE Indian Ridge Transect</td>
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<td>Cold Spot</td>
<td></td>
</tr>
<tr>
<td>Adelie Land Coast</td>
<td></td>
<td>SW Indian Ridge Petrology</td>
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<tr>
<td>Agulhas Plateau</td>
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<td>(Crozet Basin)**</td>
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<tr>
<td>Cold Spot</td>
<td></td>
<td>Carlsberg Ridge</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>*If a good program is formulated.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>**If technical problems are solved.</td>
<td></td>
</tr>
</tbody>
</table>