

**JOINT MEETING OF THE
JOIDES OPERATIONS AND SCIENCE COMMITTEES
AT THE
ALBERT-LUDWIGS-UNIVERSITY
FREIBURG in BREISGAU, GERMANY**

DRAFT MINUTES

MARCH 25, 1999

Operations and Science Committees – OPCOM/SCICOM

Science Committee – SCICOM

| | |
|------------------------|---|
| John Bender (alt.) | University of North Carolina, Durham, NC, USA |
| Gerard C. Bond | Lamont-Doherty Earth Observatory, Columbia University, Palisades, NY, USA |
| Kevin Brown | Scripps Institution of Oceanography, University of California at San Diego, La Jolla, CA, USA |
| Mike Coffin | Institute for Geophysics, University of Texas at Austin, TX, USA |
| William W. Hay (Chair) | JOIDES Office, GEOMAR, Christian-Albrechts University, Kiel, Germany |
| David A. Hodell | University of Florida, Gainesville, FL, USA |
| Nils Holm | Stockholm University, Sweden (ECOD Consortium for Ocean Drilling) |
| Susan Humphris | Woods Hole Oceanographic Institution, USA |
| Kenneth G. Miller | Rutgers University, Newark, NJ, USA |
| J. Casey Moore | University of California at Santa Cruz, USA |
| Larry Peterson (alt.) | Rosenstiel School of Marine and Atmospheric Sciences, University of Miami, FL, USA |
| Maureen Raymo | Massachusetts Institute of Technology, Cambridge, MA, USA |
| Alastair Robertson | Edinburgh University, Edinburgh, Scotland, United Kingdom |
| Stephen D. Scott | University of Toronto, Ontario, Canada (Australia-Canada-Chinese Taipei-Korea Consortium) |
| Kensaku Tamaki | Ocean Research Institute, University of Tokyo, Japan |
| Doug A. Wiens | Washington University (St. Louis, MO), USA |

Associate Member Observer

| | |
|-------------|---------------------|
| John Ludden | CNRS, Nancy, France |
|-------------|---------------------|

SCICOM Liaisons

| | |
|----------------|---|
| Jack Baldauf | Science Operator (ODP-TAMU) |
| David Goldberg | Wireline Logging Services (ODP-LDEO) |
| Bruce Malfait | National Science Foundation (United States) |
| Kate Moran | Joint Oceanographic Institutions, Inc. |

JOIDES Office

| | |
|------------------|--------------------------|
| Warner Brückmann | Science Coordinator |
| Jeff Schuffert | U.S. Liaison |
| Bettina Rohr | Administrative Assistant |
| Emanuel Söding | Science Assistant |

Guests and Observers

| | |
|---------------------|--|
| Keir Becker | Rosenstiel School of Marine and Atmospheric Sciences, University of Miami, FL, USA |
| Pamela Baker-Masson | Joint Oceanographic Institutions, Inc. |
| Georg Claypool | Lakewood, CO (Chair of PPSP) |
| Paul Dauphin | National Science Foundation (United States) |
| David A. Feary | Australian Geological Survey, Canberra, Australia |
| Jeff Fox | Science Operator (ODP-TAMU) |
| Tom Janecek | Antarctic Research Facility, Florida State University, FL, USA |
| Jock Keene | University of Sydney, Australia |
| Eiichi Kikawa | JAMSTEC, Japan |
| Frank Rack | Joint Oceanographic Institutions, Inc. |
| Mary Reagan | Wireline Logging Services (ODP-LDEO) |
| Ted C. Moore | University of Michigan, Ann Arbor, MI, USA (Chair of ESSEP) |
| Alister Skinner | Natural Environment Research Council, UK (Chair of TEDCOM) |
| Shiri Srivastava | Dalhousie University, NS, Canada |
| Shinichi Takagawa | JAMSTEC, Japan |
| John A. Tarduno | University of Rochester, NY, USA (Chair of ISSEP) |

DRAFT MOTIONS AND CONCENSUS ITEMS

SCICOM Motion 99-1-1

SCICOM approves the minutes of the September '98 SCICOM Meeting in Durham, UK.

Proposed by Scott, seconded by Humphris, 13 in favor, 2 absent (Brown, Wiens)

SCICOM Motion 99-1-2

SCICOM approves the FY'00 budget for forwarding to EXCOM.

Proposed by Brown, seconded by Miller, 14 in favor, 1 abstain (Scott).

SCICOM Consensus 99-1-3

SCICOM accepts the final report of the Long-Term Observatories Program Planning Group, thanks Keir Becker and Kiyoshi Suyehiro for their service as co-chairs, and disbands this PPG.

Proposed by Brown.

SCICOM Motion 99-1-4

SCICOM applauds the inclusion of microbiological studies and contamination tests on Leg 185 and thanks all those who have worked to achieve this important step. After reviewing the progress of the Deep Biosphere PPG, SCICOM believes that future planning requires that microbiologists participate in the activities of the other PPGs. Hence, SCICOM requests that the Deep Biosphere PPG hold one more meeting to evaluate the results of Leg 185 and prepare their final written report in time for the November SSEPs meeting. On advice from the SSEPs, SCICOM envisages that it will disband the Deep Biosphere PPG upon acceptance of their report, and microbiologists will integrate into other appropriate PPGs.

Proposed by Humphris, seconded by Robertson, 15 in favor.

SCICOM Motion 99-1-5*

SCICOM establishes a Program Planning Group to promote the study of hydrogeologic processes in marine subsurface environments through the use of boreholes and other relevant methodologies.

Overall Goal

To define and prioritize the main problems in submarine hydrogeology in terms of their overall global significance. This PPG should summarize our current understanding of the processes and effects of fluid flow in different submarine hydrogeologic environments, and explain how studies of these environments will relate to those of analogous subaerial formations.

Mandate

1. Identify the most cost-effective field and modeling strategies for studying submarine fluid flow and its effects on physical, chemical, and biological systems.
2. Develop strategies for handling critical issues such as the influence of geological heterogeneity on heat and solute transport.
3. Assess the requirements for site surveying, pre- and post-drilling hydrogeologic studies, and the use of long-term observatories.
4. Identify future needs for either novel approaches or new adaptations of land-based methods to seafloor environments, and promote the development of these methods by PPG members and other interested parties.
5. Encourage involvement of the continental hydrogeologic community, with the dual purpose of broadening the interest in submarine hydrogeologic processes and increasing the human resources and skill base needed for scientific advance.
6. Encourage and nurture the development of drilling proposals.

Timeline

This PPG will submit a status report of its findings and recommendations prior to August 2000, and it will present a final written and oral report at the spring meeting of SCICOM in 2001.

Proposed by Brown, seconded by Humphris; 12 in favor, 3 absent (Bender, Raymo, Wiens).

*Approved by e-mail vote after the meeting.

SCICOM Motion 99-1-6*

SCICOM establishes a Program Planning Group for assessing the role of the Arctic in global change, particularly with respect to Earth's climate, through scientific drilling.

Overall Goal

To develop a mature science plan concerning those aspects of Arctic drilling that bear on global problems, particularly with respect to the climate system on times scales from decades to millions of years. This PPG will build on the existing Implementation Plan of the Nansen Arctic Drilling (NAD) program and will consist partly of NAD scientists.

Mandate

1. Design a scientific drilling strategy to investigate the role of the Arctic in influencing the global climate system. Besides climatic and paleoceanographic studies, this strategy may also address those aspects of the Arctic's tectonic development and magmatic history that may have significantly impacted global climate or that may otherwise relate to globally important problems.
2. Summarize the technical needs, opportunities, and limitations of drilling in the Arctic.
3. Encourage and nurture the development of drilling proposals.

Timeline

This PPG will exist for 1 year and will be evaluated by SCICOM at the end of that year.

Proposed by Bond, seconded by Miller; 11 in favor, 1 against (Humphris), 3 absent (Bender, Raymo, Wiens).

*Approved by e-mail vote after the meeting.

SCICOM Motion 99-1-7

SCICOM requests EXCOM to amend the Terms of Reference for Program Planning Groups as follows:

- 6.2 **Mandate.** PPGs will advise upon drilling/technology strategies and proposals for major scientific objectives that are not adequately covered by existing drilling strategies or proposals. Drilling proposals arising from PPG meetings must be submitted to the JOIDES Office by individual proponents or groups of proponents. PPGs will also foster communication between the ODP and other major geoscience initiatives. PPGs will report to the appropriate panel in the JOIDES Advisory Structure as directed by SCICOM SSEP.
- 6.3 **Meetings.** These will be on an as-required basis occur as necessary, as determined by SCICOM the SSEPs and approved by the SCICOM Chair, who will also approve dates, locations and agendas.
- 6.5 **Liaison.** SCICOM establishes liaison with the PPGs by the appointment of non-voting liaisons. A liaison from the appropriate SSEP may also be established. The PPG Chairs will attend one meeting of the SSEPs per year, as requested by the SSEPs Chairs.

Proposed by Holm, seconded by Bender, 11 in favor, 4 absent (Miller, Raymo, Scott, Brown).

SCICOM Motion 99-1-8

SCICOM approves SciMP Recommendations 99-1-1 through 99-1-20, as forwarded from OPCOM.

Proposed by Moore, seconded by Peterson, 15 in favor.

SCICOM Motion 99-1-9

SCICOM approves TEDCOM Recommendations 98-1-1 through 98-1-5, as forwarded from OPCOM.

Proposed by Humphris, seconded by Holm, 14 in favor, 1 abstained (Scott).

SCICOM Motion 99-1-10

SCICOM regards a process of continuing review as a necessity for all multi-leg drilling programs. When ranking the proposals of such programs, SCICOM will decide upon the nature of continuing review and appoint an *ad hoc* committee of the JOIDES panel chairs or their delegates to perform this review.

Proposed by Miller, seconded by Wiens, 15 in favor.

SCICOM Motion 99-1-11

SCICOM requests that the proponents of existing multi-leg drilling programs submit to the JOIDES Office by 15 May a two-page document that addresses the following points:

1. Proponents should review their proposals and design a program that will fit within a standard-length leg, considering input from ODP-TAMU.
2. If necessary, proponents should explain what goals they likely could not accomplish on a single leg and estimate how much additional time they would need to accomplish these goals.

Proposed by Robertson, seconded by Brown, 15 in favor.

SCICOM Motion 99-1-12

SCICOM recognizes the importance of leg syntheses in drawing together the results of ODP activities and the obligation of Co-Chief scientists to complete such documents. SCICOM reminds the Co-Chiefs that they or their designates are required to complete a full leg synthesis, or at minimum an overview, to accompany the Scientific Results Volume. Ideally they should also publish the synthesis in the outside literature.

Proposed by Moore, seconded by Scott, 14 in favor, 1 against (Bond)

SCICOM Motion 99-1-13

In line with EXCOM Motion 99-1-9, SCICOM supports the principle of industrial involvement in ODP science within the following guidelines:

1. Collaboration should concern scientific research or technology that addresses ODP scientific themes.
2. Collaboration should be as open as possible, typically involving industrial consortia.
3. The details of collaboration will be determined on a case-by-case basis.

Proposed by Robertson, seconded by Miller, 15 in favor.

SCICOM Motion 99-1-14

SCICOM recognizes the intent of JOI to provide funds for partial LWD on Leg 192 to the Manus Basin and thus believes that EXCOM's query regarding this leg has been addressed. SCICOM encourages continuing efforts to secure funding for a full suite of LWD measurements for Leg 192.

Proposed by Moore, seconded by Wiens, 14 in favor, 1 abstained (Scott).

SCICOM Consensus 99-1-15

SCICOM sincerely appreciates the efforts of Jan Behrmann in hosting the meetings of the JOIDES Science Committee, Operations Committee, and Panel Chairs at Albert-Ludwigs-Universität Freiburg. We will take home memories of Freiburg's charming ambience, pedestrian-friendly cobblestone streets, warm Baden hospitality, and fine Weinstuben, all of which we regret not being able to share with our indisposed host. SCICOM wishes Jan a quick return to full health.

Proposed by Coffin.

SCICOM Consensus 99-1-16

SCICOM bids a fond farewell to Maureen (Mo) Raymo. We shall sorely miss her perspective on global climate change and its relationship to tectonics, her persistent pursuit of environmental objectives within SCICOM, and her role as a pacemaker of Milankovitch and suborbital time scale climate variability within ODP. We hope her future orbits intersect ours.

Proposed by Bond.

SCICOM Consensus 99-1-17

SCICOM thanks Steve Scott for his long service to PCOM and SCICOM. Steve has enthusiastically represented the PACRIM consortium and has brought a much-needed perspective on mineral deposits and the interests of the mining industry to SCICOM deliberations. Steve will now have more time for trans-Atlantic trips between his Canadian and French homes, during which he will have time to reflect on ODP and its future scientific directions. We wish him well, and look forward to his continued participation in ODP and IODP.

Proposed by Tamaki.

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DRAFT MINUTES

A. Welcome and Introductions

The meeting was called to order at 08:35. Bill Hay welcomed the participants and thanked the host, Jan Behrmann, Chair of the Department of Geological Sciences at the Albrecht-Ludwigs-University in Freiburg for hosting the meeting. Behrmann was ill and unable to welcome the participants in person. The attendees introduced themselves.

B. Logistics of Meeting

Bill Hay explained meeting logistics on behalf of Jan Behrmann, the local host.

Hay inquired which participants plan to attend EUG10 meeting in Strasbourg following the SCICOM meetings in Freiburg. He noted that a “town meeting” regarding post-2003 drilling is planned for Tuesday evening there.

C. Approval of Agenda and Minutes

Hay asked for approval of agenda. There were no objections or additions at this time. Scott requested a correction to the minutes of the SCICOM meeting of 17-19 August 1998. On page 10 of the minutes the last sentence of section B1 should read: “Scott commented on a discussion within the PacRim Consortium on their efforts to come up to a additional 1/12 of participation to full membership.”

SCICOM Motion 99-1-1

SCICOM approves the minutes of the September ‘98 SCICOM Meeting in Durham, UK.

Proposed by Scott, seconded by Humphris, 13 in favor, 2 absent (Brown, Wiens)

D. Discussion: The relevance of ODP to Geo- (and other) science.

Members and Associate Member Observer of SCICOM were asked to present short summaries of a recent scientific paper they had found particularly interesting. The following topics were presented and discussed:

K. Tamaki: African rifts, tectonics, and human evolution as related to climate change.

A. Robertson: Evolution and structure of passive margins (eg Iberia).

L. Peterson: Presented a group of papers dealing with a variety of topics such as carbonate cements, seawater chemistry, evolution of foraminiferal DNA, etc.

N. Holm: Hydrothermal generation of organic compounds from seawater interaction with ultramafic rocks on Mid Atlantic Ridge.

J. Bender: Volcanic eruption volumes on ocean ridges are inversely correlated with spreading rate.

M. Coffin: Correlation of asymmetric spreading at midocean ridges with the occurrence of hot spots.

J. Ludden: Mantle geodynamics deduced from imaging the core-mantle boundary.

W. Hay: The “Snowball Earth” hypothesis.

G. Bond: Discussed the “Snowball Earth” hypothesis, putting it into broader context, focusing on extreme climate – tectonics link, and emphasizing links to ODP and LIP studies

D. Wiens: MELT Experiment at East Pacific Rise, study of Forsyth surface wave spreading

K. Miller: “Tropical paradise at Cretaceous poles”, which deals with interpretations of isotopic evidence.

C. Moore: Relocation traces of small earthquakes in the San Andreas Fault resembling slickenlines

M. Raymo: Northern Hemisphere mean temperature records.

S. Humphris: Evolution of MOR magmas: evidence for seawater influence.

S. Scott: Episodicity of hydrothermal events.

D. Hodell: El Nino evidence on Holocene lake sediments of Ecuador, 15KY alluvial record showing ENSO erosional events

E. Reports

E.1. NSF

Malfait outlined the FY'99 operations budget (48.5M\$; +1.1M\$) and other related issues. NSF has asked JOI for a risk analysis for Leg 188 (Prydz Bay) to assess the scientific and operational impact for Leg 178 without a support ship. An audit of JOI and ODP expenditures in 1994-1998 is being completed.

Membership and Resources: Full international members of JOIDES are the UK, Germany and Japan. The People's Republic of China is an Associate Member. The PACRIM Consortium is currently at the 11/12 Membership level, the ESF Consortium is currently at the 97 % Membership level. France is at the 2/3 membership level. NSF is providing a total of 65 % of the 1999 costs.

Malfait updated SCICOM about the status of post-2003 IODP planning. Malfait congratulated Japanese colleagues for positive first steps in IODP planning. NSF intends to issue an RFP for a future program in early 2002. Malfait outlined the NSF budget for this year and next year and identified several U.S. science activities of interest to the ocean drilling community (Information Technology initiative, Biocomplexity studies). Other initiatives that are being sponsored include: MARGINS, Multipacker wireline CORK deployment (Becker & Spiess). OSN-1 data analysis has been funded. USSAC funding is being evaluated.

Robertson asked when we might know whether more than one ship would exist. Malfait replied not before mid-2001. Humphris asked if the RFP date could be moved up. Malfait said that this would be not be easy, probably we will see a hiatus in drilling starting in 2003. Ludden questioned whether a hiatus might be filled by alternate platforms? Malfait replied that services for an alternate ship/platform during the hiatus could be a problem, also there might not be enough money to outfit a new ship and use alternate platforms concurrently. Beiersdorf reminded SCICOM of the need for extensive site surveying prior to new drilling. This is an activity that could fill the gap.

E.2 JOIDES EXCOM

Beiersdorf reported on the last EXCOM meeting. The topics of discussion included:

- Budget constraints and programmatic activities
- The science plan for Legs 189-193
- Approval of the integrated sampling and publications policy
- Cooperation with industry and other programs
- Membership status
- Undergraduate student trainee program
- IODP planning
- IPSC

EXCOM was particularly pleased with the science plan and the prioritization scheme that SCICOM had developed at its meeting in Durham. EXCOM recognizes that the budget for SOEs is tight (e.g. for CORKs and gas hydrate drilling equipment).

With regard to the membership issue, EXCOM decided to review the status of member countries and consortia with reduced membership contributions (PacRim, ECOD) by 1 March, 1999.

E.3 IWG

The International Working Group (IWG) met on 22 March in Freiburg. The major topics of discussion included:

- The status of JOIDES planning for IODP
- The Chair of IPSC
- IWG member presentation on other IODP planning development
- ODP/OD21 joint technology activity.

It was noted in the IWG meeting that industry and academic representatives met on March 19 March 1999 at BP-Amoco headquarters near London to discuss future scientific ocean drilling. Both oil exploration and service companies were involved in the meeting. At this meeting Hay briefly discussed Technical and Operations Workshop held last November. He also outlined the scientific objectives for riser drilling identified at the CONCORD meeting in Tokyo in 1997, and noted that the scientific objectives for non-riser drilling would be developed at the forthcoming COMPLEX Conference in Vancouver. Ludden discussed and amplified on the scientific objectives.

The IWG also noted that on March 18, 1999 there had been a meeting between European IWG members and EU representatives in Brussels. In the course of the presentation to EU GD XII, it appeared that the EU has a very positive attitude towards funding of IODP.

In the ensuing discussion, C. Moore inquired about the industry attitude concerning plans for a riser drill ship. Beiersdorf replied they did not have an opinion yet. Ludden listed several specific science issues of interest to industry, particularly problems related to deep water sands and to hydrocarbon generation. Beiersdorf noted that the perception of IODP has become much more positive and visible. He also outlined the status of the OD21 financial plan.

Scott questioned whether budget numbers for the new ship were comparable to the costs of deep-water drilling in the Gulf of Mexico. Takagawa replied that this is the case. Beiersdorf presented a timetable for IODP planning. Fox noted that preparation for non-riser vessel in 2004 indicates that a drilling hiatus would last more than one year. Malfait replied that the hiatus will be at least one year.

Beiersdorf presented a schedule for IODP planning, which showed establishment of a support office for IWG and the requirement for a "letter of intent" from prospective supporters. A model letter is being developed for the 1 October 1999 deadline for submission of letters of intent. Hay remarked that the most important IWG business was the selection of an IPSC chair.

Ludden expressed concern that not enough attention was being given to alternate platforms and that there appeared to be no "multi" in COMPLEX. Beiersdorf noted that so far only two members, Japan and the U.S., have committed to the new program.

F. ODP Management and Operations

F.1 Co-Chief Review

Moran reported on the overall favorable program review by co-chiefs. She noted that they had made a request for greater flexibility in some areas, e.g. in the scientific shipboard party selection. New equipment requested included LWD, new XRF, and an X-Ray imager for cores. JOI will hold a similar review in 18 months and regularly thereafter.

Scott suggested that the job of balancing science party selection is very difficult especially among consortia. Feary agreed. Baldauf admitted that this has been a problem from the beginning, and ODP needs to work better with consortia offices. Robertson remarked that even the UK has trouble occasionally, especially on specialized legs where many people with same specialty apply, so balancing expertise is a problem. Tamaki observed that one way for country to get best candidates on board is to have a strong proposal submitted by those candidates and for co-chiefs to have strong voice in selection process. Baldauf explained briefly the existing procedure for staffing legs.

F.2 and F.3 Science and Logging Operations

Baldauf reported on operational problems encountered on Legs 181, 182, and 184 and those anticipated on Legs 185 and 186.

- 181 - completed; drilling at Site 1108 had to be shut down for safety reasons.
- 182 – completed; there were problems with unexpectedly high levels of H₂S in the cores.
- 183 – completed;
- 184 – in progress; the leg was successful in completing SCS-9 to 500 mbsf.
- 185 – scheduled; the microbiology van will be onboard for contamination testing; an additional site has been requested and contingency plans are being developed in case the drill string is lost.
- 186 – strain meter delivery may be delayed.

M. Reagan gave an update on logging issues related to these same legs.

S. Humphris asked about delay caused by strain meter issue on Leg 186. Would this require the JR to install it? Goldberg answered yes because it's cemented in the hole. Baldauf presented a draft operations schedule and directed attention to drydock and Leg 186E. T. Moore inquired whether the review of the need for an ice support vessel was specific to Prydz Bay? Baldauf replied that it was.

G FY'00 Planning

G.1 Leg Operations

Baldauf presented the list of co-chiefs that have been selected for Legs 187-193:

| | |
|---|------------------------------|
| Leg 187 Dave Christie and Rolf Pedersen | Leg 191 TBN |
| Leg 188 Phil O'Brien and TBN | Leg 192 Ray Binns and TBN |
| Leg 189 Neville Exon and Jim Kennett | Leg 193 John Mahoney and TBN |
| Leg 190 Greg Moore and Asahiko Taira | |

G.2 Budget/SOE proposed Ranking/Industry in FY00

Moran summarized the budget for FY00, including special operating expenses.

Special Operating Expenses

| | |
|------------------------------|---------|
| Microbiology Facility | 300,000 |
| Advanced Diamond Core Barrel | 75,000 |
| Downhole Memory Tools | 210,000 |
| Gas Hydrate Tools | 150,000 |
| LWD Lite (188 + 192) | 275,000 |
| Hard Rock Re-entry System | |
| Large Diameter Logging Tools | 10,000 |
| Dry dock (evaluate rank) | 325,000 |
| Advanced CORK evaluation | 100,000 |

Janecek asked why the budget includes a line for large diameter logging tools when SciMP has not yet identified a need for this based on science. Moran replied that fluid sampling may be very important in the future and that this is in anticipation of future needs. Goldberg clarified that these funds are just for a study of tool capability; the actual tools would cost a lot more. Miller inquired about the money for building the eighth level on the lab stack?

Moran stated that it is included in the microbiology lab. Janecek noted that SciMP has reviewed the eighth level and agrees with the plan in principle. However, it couldn't offer a formal recommendation until the results of Leg 185 are in. Scott expressed concern about Leg 192 and whether the advanced diamond core barrel will be ready in time. Moran replied that we will still have the diamond core barrel because this is an off-the-shelf bit that did well on Leg 167. Malfait suggested that the cost of the extra lab floor was originally much higher than indicated here. Fox replied that ODP had improved and simplified the design, and that market conditions have become more favorable. Raymo asked how this plan compares with our priority ranking at the August meeting, where only \$30K was budgeted for the microbiology lab? Moran replied that it is a new plan and not comparable with what had been proposed last year. Fox stated that money discussed last summer was for a temporary van for Leg 185, which we ultimately got for only \$14K. The \$300K includes the entire eighth level. Humphris asked whether the \$300K includes any equipment? Moran stated that it includes some but not all of the desired equipment.

Brown inquired whether the equipment included just a PCS tool for gas hydrates or something else? Moran replied that the equipment will make it possible to measure temperature and conductivity to determine hydrate content. Fox stated that it is a very good idea to have the extra conference room, and to have the problem of safety with loading resolved. The gas hydrate tool and microbiology facility is included in the 300K. Miller noted that this plan includes the two items that had received the highest rankings last August, the Microbiology and Downhole Measurements laboratories for 2/3 of the \$500K we had originally budgeted.

SCICOM Motion 99-1-2

SCICOM approves the FY'00 budget for forwarding to EXCOM.

Proposed by Brown, seconded by Miller, 14 in favor, 1 abstain (Scott)

H Drydock

H.1 Update on plans for drydock

Baldauf discussed the changes planned for the Downhole Measurements Lab. He showed floor plans for the 8th level. Emphasis has been on loading dock safety issues and better port call efficiency, so that loading of material and unloading of cores can be done synchronously.

H.2 Options for Downhole Measurements Lab

Reagan presented BRG / LDEO plans for drydock:

- Maxis unit will be replaced with new MCM unit
- Cabling for DHML (=Downhole Measurements Lab) will be done
- Money for DHML will be needed

H.3 Update on Microbiology Lab

Baldauf showed plans for the Microbiology Lab. Hay inquired if it will include facilities for radioisotopes.

Baldauf replied that radioisotopes would not be used in the lab. Malfait asked if the plan is to outfit the space or just build it? Baldauf plans to emphasize building the space for now. Janecek asked if access to the microbiolab is through the downhole lab? Yes, it is. Moran stated that the current plan is only for bid purposes. SciMP will approve the final plan. Dauphin asked about plans for laminar flow hoods. Jack Baldauf replied that there would be none.

I. Panel Reports and Action Items

I.1 ISSEP

Tarduno presented a preview of proposals headed toward SCICOM, including several on gas hydrates and a wide range of others.

I.2 ESSEP

T. Moore gave an update on a number of previous proposals and those received for the 15 March deadline.

Robertson asked about the quality of the proposal review process. Tarduno and Moore responded that the system is working quite well. Ludden said that he had heard that an automatic two-year residence time exists for proposals in the SSEPs. Tarduno insisted that this not the case.

Brown asked for the SSEPs chairs opinion on the prospect of completing any goals in Long Range Plan before the end of the program. Tarduno said that the quality of proposals in the system means that the panels face difficult choices.

J. PPGs and DPG

J.1 Review of progress of PPGs

J.1.a Long Term Observatories: Final Report

Keir Becker summarized the report of the Long Term Observatories PPG, available in the Agenda Book. The Report includes an Executive Summary, introduction, mandate, comments on the mandate and scope of the report, an overall plan for ODP observatories, suggestions for mechanisms to ensure oversight of legacy holes, recommendations for the JOIDES advisory process, and an appendix concerning future observatories. Becker noted that some of the problems posed in the mandate could not be answered. Members of the group did not believe that extension of the PPG timeline would allow the unmet goals to be accomplished.

C. Moore reported that he had heard that the development of advanced CORKs might not be finished in time for Leg 186 nor in time for the second Nankai leg. Becker provided an update on the advanced CORKs workshop. There is a link to the workshop on the LTO-PPG website. He also gave an encouraging update on the status of advanced CORK development.

Topics of discussion included how to maximize accessibility, enhance the fluid sampling capability, develop enhanced hydrological testing capabilities, and develop instrumented multiple packer systems. Two deployment methods (using an underreamer and using existing casing) are being explored. Engineering will require 6 man months (= 100K\$), according to Brian Jonasson (ODP/TAMU). One advanced CORK is to be supplied by the Japanese community.

Scott asked about “ownership” of ODP drill holes. Becker replied that no one owns the hole. Humphris inquired whether the group had looked at future methods of remote data retrieval. Becker responded that there are many ways to do this without a drillship, so this shouldn't be a problem. However, it would be most efficient if everyone converged on a single method. Beiersdorf inquired whether the LTO PPG had had any contact with the ICDP? Becker responded that they had not. Scott noted that SCICOM established PPGs in response to perceived needs and to generate proposal pressure. Becker responded that there has been considerable fallout: SEIZE proposals, Ridge Crest proposals, gas hydrate proposals, and microbiology studies. Brown inquired whether it will be possible to adapt the advanced CORK system to the deep holes and high temperatures expected to be drilled by OD21. Becker responded that there will be a need for modification of the seals and packers. The

problem is long term, high temperature sealing. Takagawa noted that OD21 does not plan to reach extreme temperatures. They expect temperatures possibly up to 300° C, but there is still a need to develop new tools.

Hay thanked Keir Becker for his presentation and his excellent service as Co-Chair of the Long Term Observatories PPG. Hay asked whether there was consensus to disband the PPG.

SCICOM Consensus 99-1-3

SCICOM accepts the final report of the Long-Term Observatories Program Planning Group, thanks Keir Becker and Kiyoshi Suyehiro for their service as co-chairs, and disbands this PPG.

Proposed by Brown.

J.1.b Architecture of the Oceanic Lithosphere PPG

Tarduno listed several themes that this PPG will address in their report. He reported that this PPG has done a good job of nurturing proposals (525, 535, 522, 532, 551-Pre). AOL's final report is to contain a section on "Mantle dynamics and melt extraction".

Humphris asked when the final report of this PPG would be available. Tarduno expects to see a draft of the final report before 22 May '99. Kikawa, as a member of PPG, said that they realize the necessity of producing a final report soon.

J.1.c Climate-Tectonics Links PPG

Tarduno listed two themes that this PPG will address in their report. There has been some question of how to address this topic within the scope of ocean drilling. Concern was expressed about the membership of the group and the breadth of the topic. Many important people are missing from this group.

T. Moore commented that they have come up with the innovative idea of looking at a smaller region like New Zealand and trying to tie in deep sea and local land records.

Tarduno noted that this PPG will have one more meeting before writing its final report.

J.1.d Deep Biosphere PPG

T. Moore reported that this is a group of scientists who mostly have not worked in the deep ocean before. There has been very poor communication with this PPG. SCICOM should reconsider the mandate before considering any extension of this group. There is to be another meeting soon, but there is no indication of progress on a report. Progress on the deep biosphere has been made more through individual than group effort. It was suggested that it would be better to integrate microbiologists into other PPGs. T. Moore suggested that if the group were to continue there should be a co-chair who is a member of one of the SSEPs. Fox commented that this is critical because a significant amount of money and resources has been put into this area. Ludden indicated that the only proposal that has been submitted was from someone already familiar with ODP. There may be a need to help the microbiologists along. T. Moore suggested that we focus on younger scientists eager to take off in new field or direction. Beiersdorf asked if it would be helpful to have a microbiologist on one of the SSEPs. After further discussion it became evident that there was a consensus to have the Deep Biosphere PPG have a final meeting at which they would evaluate the results of Leg 185 and assemble a report on their activities and recommendations.

SCICOM Motion 99-1-4

SCICOM applauds the inclusion of microbiological studies and contamination tests on Leg 185 and thanks all those who have worked to achieve this important step. After reviewing the progress of the Deep Biosphere PPG, SCICOM believes that future planning requires that microbiologists participate in the activities of the other PPGs. Hence, SCICOM requests that the Deep Biosphere PPG hold one more meeting to evaluate the results of Leg 185 and prepare their final written report in time for the November SSEPs meeting. On advice from the SSEPs, SCICOM envisages that it will disband the Deep Biosphere PPG upon acceptance of their report, and microbiologists will integrate into other appropriate PPGs.

Proposed by Humphris, seconded by Robertson, 15 in favor.

J.1.e Extreme Climates PPG

T. Moore noted that this PPG has met once and will be meeting again this week. The mandate has almost been met and a report is in progress. Six proposals in the system relate to this topic (486, 503, 533, 534, 559, 562). The PPG has not yet outlined a grand strategy for characterizing the basic characteristics of extreme warm climates.

Tarduno suggested that the PPG had followed its mandate perhaps too closely, and that some fundamental questions may not have been addressed. Miller noted that we can't expect them to solve past 100 million years in two meetings. The generation of two new proposals seems likely.

J.1.f Gas Hydrates PPG

T. Moore reported that the PPG had decided to look at end-member environments. The objectives of the mandate have almost been met. There is to be one more meeting, and the report in progress. This has been a very active PPG. Five proposals are in the system (355-Full, 546-Full, 553, 554, 557). The PPG has succeeded in presenting a global view of their science. Their approach is primarily exploratory, without specific process hypotheses to test. They have looked at accretionary margins, passive margins and petroleum-rich areas.

C. Moore reported that he, as liaison, has also been impressed by this PPG. The first thing they did was write prescription for submitting gas hydrate proposals. Tarduno noted that a final report will be important for making decisions concerning future drilling at SCICOM's meeting this August.

J.1.g Shallow Water Systems PPG

T. Moore said mandate has almost been met. There will be one more meeting, and the report is in progress. Two proposals have been generated (519-Sea Level Rise, 541-Chilean Fjord Sediments). Technology is an important issue and needs to be summarized in the final report. Nearly all of the objectives of this PPG require alternative platforms to the *JOIDES Resolution*. SCICOM needs to provide some guidance to proponents how to proceed.

J.2 Review of the progress of DPG

J.2.a Seismogenic Zone (SEIZE)

C. Moore presented a report on SEIZE activities and Brown provided additional insight. They noted that it could take several years to drill to the detachment zone.

J.3 New PPGs

J.3.a Hydrogeology PPG

T. Moore presented a draft mandate for a new hydrogeology PPG, subject to revision. C. Moore suggested a minor change to first item of mandate, adding "continental margins". Brown suggested that the mandate should mention "deep crustal hydrology". After further discussion it was decided that SCICOM would discuss this mandate further.

Ted Moore presented a draft mandate for a Hydrology PPG. After some discussion it was decided to refer the mandate to Brown to reword after the meeting and then submit it for an e-mail vote.

SCICOM Motion 99-1-5*

SCICOM establishes a Program Planning Group to promote the study of hydrogeologic processes in marine subsurface environments through the use of boreholes and other relevant methodologies.

Overall Goal

To define and prioritize the main problems in submarine hydrogeology in terms of their overall global significance. This PPG should summarize our current understanding of the processes and effects of fluid flow in different submarine hydrogeologic environments, and explain how studies of these environments will relate to those of analogous subaerial formations.

Mandate

1. Identify the most cost-effective field and modeling strategies for studying submarine fluid flow and its effects on physical, chemical, and biological systems.
2. Develop strategies for handling critical issues such as the influence of geological heterogeneity on heat and solute transport.
3. Assess the requirements for site surveying, pre- and post-drilling hydrogeologic studies, and the use of long-term observatories.
4. Identify future needs for either novel approaches or new adaptations of land-based methods to seafloor environments, and promote the development of these methods by PPG members and other interested parties.
5. Encourage involvement of the continental hydrogeologic community, with the dual purpose of broadening the interest in submarine hydrogeologic processes and increasing the human resources and skill base needed for scientific advance.
6. Encourage and nurture the development of drilling proposals.

Timeline

This PPG will submit a status report of its findings and recommendations prior to August 2000, and it will present a final written and oral report at the spring meeting of SCICOM in 2001.

Proposed by Brown, seconded by Humphris; 12 in favor, 3 absent (Bender, Raymo, Wiens).

*Approved by e-mail vote after the meeting.

J.3.b NAD request for an Arctic Ocean PPG

Bond presented a draft mandate for a new Arctic PPG. Scott objected that this represents a regional program and therefore doesn't justify a PPG. Raymo disagreed - it relates more to Earth's climate than to the region. Coffin inquired whether this is strictly a climate related group.

Miller stated that the purpose of a PPG is to generate proposals that fill a perceived gap in science knowledge. Bond noted that there is currently no mechanism for U.S. scientists to become involved with any Arctic drilling efforts. Humphris questioned the goals of such a PPG if the NAD implementation plan has already identified sites to drill? Miller noted that there is still no science outline or priority list that could be used to support an implementation plan. He argued that SCICOM has already identified Arctic science as a high priority, and that SCICOM will send a very strong contrary message if it doesn't establish this PPG. Hay called attention to the fact that EXCOM has asked SCICOM to establish some connection with NAD.

SCICOM Motion 99-1-6*

SCICOM establishes a Program Planning Group for assessing the role of the Arctic in global change, particularly with respect to Earth's climate, through scientific drilling.

Overall Goal

To develop a mature science plan concerning those aspects of Arctic drilling that bear on global problems, particularly with respect to the climate system on times scales from decades to millions of years. This PPG will build on the existing Implementation Plan of the Nansen Arctic Drilling (NAD) program and will consist partly of NAD scientists.

Mandate

1. Design a scientific drilling strategy to investigate the role of the Arctic in influencing the global climate system. Besides climatic and paleoceanographic studies, this strategy may also address those aspects of the Arctic's tectonic development and magmatic history that may have significantly impacted global climate or that may otherwise relate to globally important problems.
2. Summarize the technical needs, opportunities, and limitations of drilling in the Arctic.
3. Encourage and nurture the development of drilling proposals.

Timeline

This PPG will exist for 1 year and will be evaluated by SCICOM at the end of that year.

Proposed by Bond, seconded by Miller; 11 in favor, 1 against (Humphris), 3 absent (Bender, Raymo, Wiens).

*Approved by e-mail vote after the meeting.

J.4 Discussion on role of PPGs DPGs in Science Planning

Ted Moore presented proposed changes to PPG mandates intended to improve communication with SSEPs. Raymo inquired whether it is a conflict of interest if a SSEP member acts as PPG co-chair. Humphris noted that a problem arises with seeing proposals and then having an advantage in submitting proposals. Originally SCICOM decided that PPGs should remain divorced from the SSEPs. Raymo asked whether the SSEPs have liaisons to the PPGs? T. Moore responded that liaisons have not worked well because of travel constraints. Brown asked whether the PPGs aren't supposed to submit a report (minutes) after each meeting? T. Moore said that he would prefer that to liaisons.

SCICOM Motion 99-1-7

SCICOM requests EXCOM to amend the Terms of Reference for Program Planning Groups as follows:

- 6.2 **Mandate.** PPGs will advise upon drilling/technology strategies and proposals for major scientific objectives that are not adequately covered by existing drilling strategies or proposals. Drilling proposals arising from PPG meetings must be submitted to the JOIDES Office by individual proponents or groups of proponents. PPGs will also foster communication between the ODP and other major geoscience initiatives. PPGs will report to the appropriate panel in the JOIDES Advisory Structure as directed by SCICOM SSEP.
- 6.3 **Meetings.** These will ~~be on an as required basis~~ occur as necessary, as determined by SCICOM the SSEPs and approved by the SCICOM Chair, who will also approve dates, locations and agendas.
- 6.5 **Liaison.** SCICOM establishes liaison with the PPGs by the appointment of non-voting liaisons. ~~A liaison from the appropriate SSEP may also be established.~~ The PPG Chairs will attend one meeting of the SSEPs per year, as requested by the SSEPs Chairs.

Proposed by Holm, seconded by Bender, 11 in favor, 4 absent (Miller, Raymo, Scott, Brown)

Meeting adjourned

**MEETING OF THE
JOIDES SCIENCE COMMITTEE
AT
ALBRECHT-LUDWIGS UNIVERSITY
FREIBURG in BREISGAU, GERMANY**

DRAFT MINUTES

MARCH 26 + 27, 1999

Science Committee – SCICOM

Science Committee - SCICOM

| | |
|------------------------|---|
| John Bender (alt.) | University of North Carolina, Durham, NC, USA |
| Gerald C. Bond | Lamont-Doherty Earth Observatory, Columbia University, Palisades, NY, USA |
| Kevin Brown | Scripps Institution of Oceanography, University of California at San Diego, La Jolla, CA, USA |
| Mike Coffin | Institute for Geophysics, University of Texas at Austin, TX, USA |
| William W. Hay (Chair) | JOIDES Office, GEOMAR, Christian-Albrechts University, Kiel, Germany |
| Dan Hodell | University of Florida, Gainesville, FL, USA |
| Niels Holm | University of Stockholm, Sweden (European Consortium for Ocean Drilling) |
| Susan Humphris | Woods Hole Oceanographic Institution, USA |
| Kenneth G. Miller | Rutgers University, Newark, NJ, USA |
| J. Casey Moore | University of California at Santa Cruz, USA |
| Larry Peterson | Rosenstiel School of Marine and Atmospheric Sciences, University of Miami, FL, USA |
| Maureen Raymo | Massachusetts Institute of Technology, Cambridge, MA, USA |
| Alastair Robertson | Edinburgh University, Edinburgh, Scotland, United Kingdom |
| Stephen D. Scott | University of Toronto, Ontario, Canada (Australia-Canada-Chinese Taipei -Korea Consortium) |
| Kensaku Tamaki | Ocean Research Institute, University of Tokyo, Japan |
| Doug A. Wiens | Washington University (St. Louis, MO), USA |

Associate Member Observer

| | |
|-------------|---------------------|
| John Ludden | CNRS, Nancy, France |
|-------------|---------------------|

SCICOM Liaisons

| | |
|----------------|---|
| Jack Baldauf | Science Operator (ODP-TAMU) |
| David Goldberg | Wireline Logging Services (ODP-LDEO) |
| Bruce Malfait | National Science Foundation (United States) |
| Kate Moran | Joint Oceanographic Institutions, Inc. |

JOIDES Office

| | |
|------------------|--------------------------|
| Warner Brückmann | Science Coordinator |
| Bettina Rohr | Administrative Assistant |
| Jeff Schuffert | U.S. Liaison |
| Emanuel Söding | Science Assistant |

Guests and Observers

| | |
|---------------------|---|
| Hans Amman | Technical University Berlin, Germany (HYACE) |
| Keir Becker | Rosenstiel School of Marine and Atmospheric Sciences, University of Miami, FL, USA (Co-Chair of Long Term Observatories PPG) |
| Pamela Baker-Masson | Joint Oceanographic Institutions, Inc. |
| Georg Claypool | Lakewood, CO (Chair of PPSP) |
| Paul Dauphin | National Science Foundation (United States) |
| David A. Feary | Australian Geological Survey, Canberra, Australia |
| Juliana Fenner | Bundesanstalt für Geowissenschaften und Rohstoffe, Hannover, Germany (Leg 181) |
| Jeff Fox | Science Operator (ODP-TAMU) |
| Ulrich Harms | Continental Scientific Drilling Program, Potsdam, Germany |
| Tom Janecek | Antarctic Research Facility, Florida State University, FL, USA |
| Jock Keene | University of Sydney, Australia |
| Eiichi Kikawa | JAMSTEC, Japan |
| Ted C. Moore | University of Michigan, Ann Arbor, MI, USA (Chair of ESSEP) |
| Frank Rack | Joint Oceanographic Institutions, Inc. |
| Mary Reagan | Wireline Logging Services (ODP-LDEO) |
| Shiri Srivastava | Dalhousie University, NS, Canada |
| Shinichi Takagawa | JAMSTEC, Japan |
| John A. Tarduno | University of Rochester, NY, USA (Chair of ISSEP) |

**MEETING OF THE
JOIDES SCIENCE COMMITTEE
AT
ALBRECHT-LUDWIGS UNIVERSITY
FREIBURG in BREISGAU, GERMANY**

MARCH 26-27, 1999

DRAFT MINUTES

A. Introduction

Hay welcomed the members to the SCICOM meeting and participants introduced themselves.

B. Update: Items from August 1998 SCICOM Meeting

B.1 Prioritization Document

Humphris gave an update on the prioritization document and described the mechanism for generating this document (mostly for the benefit of new members). She thanked the SSEPs and SciMP, which had provided much help in developing the scheme to prioritize future drilling schedule decisions.

C. Items forwarded from OPCOM

C.1.1 SciMP Recommendations

The SciMP recommendations discussed at the OPCOM meeting were offered to SCICOM for approval.

SCICOM Motion 99-1-8

SCICOM approves SciMP Recommendations 99-1-1 through 99-1-20, as forwarded from OPCOM.

Proposed by Moore, seconded by Peterson, 15 in favor.

C.1.2 TEDCOM Recommendations

The TEDCOM recommendations discussed at the OPCOM meeting were offered to SCICOM for approval.

SCICOM Motion 99-1-9

SCICOM approves TEDCOM Recommendations 98-1-1 through 98-1-5, as forwarded from OPCOM.

Proposed by Humphris, seconded by Holm, 14 in favor

C.1.3 Multi-Leg Projects

T. Moore stated that the SSEPs feel that for multi-leg projects the review process should continue after the proposals have been forwarded to SCICOM. Miller agreed that this is a good idea because we need a mechanism for evaluating them on a case by case basis. Wiens found this to be a good idea from the ISSEP perspective because most proposals contain some fat and keep the panel guessing about what is essential.

SCICOM Motion 99-1-10

SCICOM regards a process of continuing review as a necessity for all multi-leg drilling programs. When ranking the proposals of such programs, SCICOM will decide upon the nature of continuing review and appoint an *ad hoc* committee of the JOIDES panel chairs or their delegates to perform this review.

Proposed by Miller, seconded by Wiens, 15 in favor.

SCICOM Motion 99-1-11

SCICOM requests that the proponents of existing multi-leg drilling programs submit to the JOIDES Office by 15 May a two-page document that addresses the following points:

1. Proponents should review their proposals and design a program that will fit within a standard-length leg, considering input from ODP-TAMU.
2. If necessary, proponents should explain what goals they likely could not accomplish on a single leg and estimate how much additional time they would need to accomplish these goals.

Proposed by Robertson, seconded by Brown, 15 in favor.

C.1.4 Synthesis papers

Janecek briefly reviewed the problem with leg synthesis papers due for a few legs. Robertson stated that this is an important issue. Brown asked about the nature of resistance from co-chief scientists. Baldauf replied that it is mostly because of time constraints and probably also the uncertainty of policy review. C. Moore noted that the obligation part of the contractual agreement with USSSP.

Miller observed that the synthesis is an important paper, but that time is a limiting factor. This is especially true for certain types of Legs, like those for paleoceanography, where the results of a cruise become apparent only 4 years after the end of the cruise. Maybe the JOIDES Journal could provide a good venue for these reports four years down the line. Raymo was not sure this would work because co-chiefs would rather publish in the outside literature. Robertson noted that the author(s) of a synthesis doesn't have to be the co-chiefs.

Scott inquired why we need a motion on this issue when this is already policy? Janecek replied that we need something for the SR booklet.

Bond asked what exactly is a "synthesis" and how does it differ from a normal outside publication? There is a big difference between an overview and a synthesis. Younger co-chiefs will not want to publish true synthesis papers in the SR CD-ROM because it's gray literature. Beiersdorf noted that, as with any project, you need some visible proof of achievements. Miller stated that we need to acknowledge failures as well as successes.

C. Moore presented a draft Motion. Brown suggested wording changes.

SCICOM Motion 99-1-12

SCICOM recognizes the importance of leg syntheses in drawing together the results of ODP activities and the obligation of Co-Chief scientists to complete such documents. SCICOM reminds the Co-Chiefs that they or their designates are required to complete a full leg synthesis, or at minimum an overview, to accompany the Scientific Results Volume. Ideally they should also publish the synthesis in the outside literature.

Proposed by Moore, seconded by Scott, 14 in favor, 1 against (Bond)

C.1.5 Industry Partners and Support

Moran summarized the discussion in the OPCOM meeting. Moran proposed a model for pursuing industry collaboration. The model requires two exceptions from current policy for an industry participant on an ODP cruise: 1) Industry would choose its representative, and 2) the representative would be exempt from normal data/publication obligation.

Hay observed that the most difficult part of such an agreement would be activities in territorial waters or commercially leased areas. Scott said that in the Leg 192 case Papua-New Guinea will decide this issue, not ODP. Robertson stated that in the past the UK had gotten the message from the US that potential conflicts of interest pose serious problems to involvement with industry.

Moran stated that EXCOM has recommended that we pursue this, but if we find among us too many roadblocks we need to take it back to EXCOM.

Miller inquired about the role that an industry person would play on board. Would they be there just an observer or as working member of science party. Moran replied they would participate as much as possible and provide a report to an industry consortium. Miller asked Moran to define report. Moran replied that it would be a proprietary report for at least one year. Miller stated that we must ensure that the report becomes public at some point. Moran stated that we wouldn't want to put that requirement forward. Robertson observed that we must be flexible and sensitive to industry needs and policies. Dauphin noted that examples so far have had minimal financial impact on the program. Moran stated that this would not be a huge resource overall, but establishing links now would help with supporting future program.

Beiersdorf stated that he would prefer general statement encouraging industry cooperation and evaluate each opportunity on case by case basis. He argued against putting too many requirements in writing. Ludden agreed with Beiersdorf. Humphris stated that a proponent going to industry needs some guidelines on what is permitted. It was noted that industry representatives would leave the ship with shipboard data the same as anyone else, so a proprietary report wouldn't be great loss. Coffin noted that we have had industry representatives on board before; how did we handle it then? Baldauf stated that in the past they have been members of the science party. Baldauf noted that clearances could be issue on an individual basis.

SCICOM Motion 99-1-13

In line with EXCOM Motion 99-1-9, SCICOM supports the principle of industrial involvement in ODP science within the following guidelines:

1. Collaboration should concern scientific research or technology that addresses ODP scientific themes.
2. Collaboration should be as open as possible, typically involving industrial consortia.
3. The details of collaboration will be determined on a case-by-case basis.

Proposed by Robertson, seconded by Miller, 15 in favor.

SCICOM Motion 99-1-14

SCICOM recognizes the intent of JOI to provide funds for partial LWD on Leg 192 to the Manus Basin and thus believes that EXCOM's query regarding this leg has been addressed. SCICOM encourages continuing efforts to secure funding for a full suite of LWD measurements for Leg 192.

Proposed by Moore, seconded by Wiens, 14 in favor, 1 abstained (Scott)

D. Reports on Scientific Results of Recent Legs

D.1 Leg 180 - Woodlark Basin

Alistair Robertson reported on this leg and responded to questions from C. Moore, Scott, Malfait, Hay, Wiens, and Diebold.

D.2 Leg 181 - SW Pacific Chatham Rise

Juliana Fenner reported on this leg and responded to questions from Bond.

D.3 Leg 182 - Great Australian Bight

Dave Feary reported on this leg and responded to questions from T. Moore, Claypool, Miller, and Robertson.

D.4 Leg 183 - Kerguelen Plateau

Mike Coffin reported on this leg and responded to questions from T. Moore, C. Moore, Miller, Raymo, Wiens, Robertson, and Ludden.

E. IODP Planning Subcommittee (IPSC)

E.1 Review of procedure for formation of IPSC

E.2 Review of search for IPSC Chair

E.3 IPSC Mandate and duties

Beiersdorf reported on the above items as discussed at the January 1999 EXCOM meeting and explained the makeup of the IWG.

Hay introduced Ted Moore as new the IPSC Chair.

Scott asked about how it was decided to designate IPSC as a subcommittee. Hay explained that this avoids the rules for national representation, allowing for a small group. He also explained that reporting "through" not "to" SCICOM means that SCICOM will be able to comment on IPSC recommendations, but that IPSC is not obliged to accept those comments and has the right to send its recommendations on to EXCOM and the IWG.

Fox asked whether the IWG includes all countries and consortia that are now part of ODP. Malfait replied that all but China, Chinese Taipei, and South Korea are members of the IWG.

Hay explained that IPSC membership should consist of a majority of scientists (at least 4 of 7) and should reflect the balance of anticipated financial contributions from international partners. Srivastava inquired about what level of commitment to IWG is necessary for inclusion in IPSC? Beiersdorf said that there must be at least a letter of interest on file.

The attendees developed a list of about 40 potential members of IPSC, leaving the selection to be made on the next day of the meeting.

F. Reports from SCICOM liaisons to other international programs

F.1 InterRidge

Holm reported that he had attended the MOMAR meeting (Long-Term Monitoring of the Mid-Atlantic Ridge - Lisbon University, Portugal October 28-31, 1998) and explained that a draft report should come out soon.

F.2 Margins

C. Moore reported on five topical emphases under the Margins umbrella (The Low-Strength Paradox of Lithospheric Deformation / Strain Partitioning During Deformation. Magma Genesis and Recycling / Stratigraphic Preservation of Geological Events / Fluid Fluxes). Brückmann gave an update on the status of the InterMARGINS initiative. Robertson and Ludden commented on European Margins initiatives.

F.3 Nansen Arctic Drilling (NAD)

Bond reported on planning of joint ODP-NAD activities.

F.4 Large Igneous Provinces (LIPS)

Coffin reported briefly on the potential LIPS Initiative. Scott inquired what this group wants from ODP? The discussion turned to prioritization of LIPS objectives. T. Moore inquired whether we should ignore all LIP proposals now before the SSEPs? It is difficult for us to respond without a definitive statement of priorities from the LIP group.

Coffin noted that the strategy proposed in the 1996 IAVCEI/InterRidge/ODP/JOI/USSSP workshop report, "The Ocean Lithosphere and Scientific Drilling into the 21st Century" (Dick & Mével, eds.) supports drilling Kerguelen/Broken Ridge, Ontong Java, one older (>122 Ma), and one younger (<90 Ma) LIP before the end of the program. Wiens inquired whether the LIPs group will be considering involvement with NASA. Coffin responded that the LIP program might be a new initiative through NSF. Tamaki inquired whether the LIP group includes the continental flood basalt community? Coffin replied affirmatively, and noted that ODP had taken three of them on Leg 183 to the Kerguelen Plateau/Broken Ridge Ludden stated that the link should lie with planetary volcanism.

F.5 Global Earth Reference Model (GERM)

Hay gave a website address for more detailed information on GERM (<http://www-ep.es.llnl.gov/germ/>).

F.6 International Continental Drilling Program (ICDP)

Miller reported on activities and proposals of ICDP concerning four regions. This issue will be covered later in the agenda.

G. Report on Public Affairs

Baker-Masson reported on recent and upcoming public affairs activities, particularly port calls and science meetings such as AGU and EUG. Press releases and promotional materials must target several different audiences. Jock Keene was very successful in getting journalists onboard whenever possible.

Baker-Masson requested help and guidance from SCICOM to improve PR activities.

T. Moore expressed thanks for the good job PR has done recently. Robertson suggested that it would be good to have better international distribution of PR materials. Scott inquired to whom does JOI send press releases? Baker replied that releases go to both internal and external parties. Hay mentioned that German National Television will broadcast a program on ODP this Monday.

It was noted that JOI and TAMU have extensive video collections available from internal and external sources.

Baker-Masson sought volunteers for a PR subcommittee: Nils Holm, Mike Coffin and Shiri Srivastava volunteered.

H. JOIDES Journal

Each SCICOM member was asked for their critique of the JOIDES Journal by going around the table:

- Raymo: make it more newsy, short-clipsy.
- Peterson: agreed.
- Bond: I disagree I find it very useful, but could add something more newsy.
- Robertson: expects it doesn't reach far outside community.
- Wiens: could maybe use color
- Bond: maintains that JJ is good as it is
- Coffin: shorten leg summaries and make it thinner.
- Holm: could serve as guide for broader content on web, so it should be shorter.
- Tamaki: content very good, but design is old fashioned, uninteresting, and unattractive. Showed example of Japanese newsletter with color cover.
- Scott Canadian newsletter is published as a short 2-4-page brochure with color, but used to be boring too.
- Ludden: can a report be submitted yearly to EOS?
- Srivastava: likes the format now but would prefer separation of news and info.
- Claypool: it provides an outlet for publishing reports not suitable for anywhere else; mentioned his gas hydrate paper in the current issue.
- Tamaki: would like to see something more like EOS or GSA Today.
- Raymo: more newsworthy, say with items on awards received by members of ODP community, maybe add information about people.

I. Scientific Visibility

I.1 Special Sessions at Meetings

Peterson noted that the deadline for fall AGU special session ideas is around the time of COMPLEX. AGU won't accept and approve all session ideas this time because the meeting has gotten so large. Moran noted that the JOIDES EXCOM will meet before the AAAS meeting in Washington D.C. next February. She has submitted a request for a special session on high-resolution climate records. Hay remarked that we could significantly increase our visibility to the broader scientific audience by presenting papers in as many sessions as possible.

I.2 Special Issues of Journals, Review Papers

Srivastava wondered whether it would be possible to start a new journal for ODP results. Ludden disagreed, he felt that it would end up as mediocre journal with broad focus and not as effective as getting papers into the best journals. We should also consider the new web-only journal which we should consider. Fox noted that the paleontology community sponsored an electronic journal a few years ago and it now enjoys tremendous success. It demonstrates what can be achieved beyond the traditional two-dimensional format.

J. Phase III Scientific Planning

J.1 Review of Proposal Status - Active Proposals

Brückmann reported that 33 new proposals had been received by (or shortly after) the March 15, 1999 deadline. Ludden stated that it would help to receive a list of active proposals as early as possible.

J.2 Developing a Strategy to maximize the scientific impact of ODP.

Hay regretted that time was running out and suggested that we discuss this at our next meeting. In the meantime SCICOM members are urged to think about how we can achieve the maximum impact by the end of the program in 2003.

Meeting adjourned for the day.

Saturday, March 27, 1999

The meeting reconvened at 08:30

K. Planning for Post 2003

K.1 Report on Technical and Operations Workshop.

Humphris reported on recommendations and action items from the Technical and Operations Workshop in Houston. Participants had been organized into four working groups addressing: 1) drilling options, 2) downhole measurements and sampling, 3) operations and logistics, and 4) science and engineering services.

Brown asked if there had been any discussion of high-temperature logging tools. Goldberg replied that he didn't recall any. Brown inquired about capabilities up to 250°C. Goldberg replied that there are some but not everything will work. Claypool inquired about the future of industry cooperation. Humphris replied that there are no firm plans yet. Peterson noted that industry gave the impression that riser drilling at depths >2500 m is all but impossible. Humphris stated that CONOCO is currently building a vessel equipped with a 3000 m riser.

K.2 OD-21

Tamaki gave an update on the status of OD-21. He stressed that JAMSTEC needs more input and the continued cooperation of the international community. Tamaki explained that MONBUSHO and STA have had a common minister (A. Arima) since January 1999. There are now two new subcommittees in the OD-21 advisory structure below the OD-21 advisory committee (I. Kushiro): 1) Science Promotion -- Y. Tatsumi, Chair, and 2) Operations and Technology -- K. Tamaki, Chair.

Planning of the OD21 science promotion system involves new OD21 core institutes and laboratory extensions, and a satellite laboratory network of universities and national institutes.

Kitazawa reported on budget planning for the riser drilling vessel. The Diet approved the budget on 17 March for Part 1 of riser vessel construction. They committed \$116M to the basic design and ship hull construction. The next phase will ask for \$230M starting in FY'00, followed by the final \$150M in FY'01.

OD21 is developing core sampling and long term monitoring systems in cooperation with ODP. It is hoped to have these ready for testing by ODP before completion of the riser ship. Tamaki stressed again that international cooperation is essential for the success of future drilling.

Scott asked whether testing of equipment by ODP would require a full engineering leg? (i.e. how much time will be needed?). Takagawa stated that they hope to test some equipment on Leg 186E and probably other legs but only for a few days on one or two legs per year. Hay inquired what information is needed from the international community? Tamaki responded that OD21 needs input on the science plan and survey of sites for a pilot hole.

Raymo asked if there are any plans for the exchange of graduate students or post-doctoral fellows. Kitazawa replied that they have started thinking about this. Malfait noted that NSF already has a good program in place for such exchanges with Japan, especially students (exchange program between NSF and JSPS).

Takagawa reported on the proposed construction schedule of the riser drill ship. Sea trials will begin in mid 2003 and the vessel expected to be fully operational by end of 2005. OD21 seeks international comment on the design and requirements, optimally by end of July 1999. JAMSTEC will not close the door to further comments after that, but the basic design will have begun and changes might be difficult.

Takagawa outlined the fundamental capabilities and principal specifications of the riser drillship, including the use of azimuth thrusters. The intent is to make the ship a floating institution. He presented a draft plan of shipboard lab facilities, data processing capabilities, and researcher accommodations.

Scott remarked that it looks like most of the science will be done onboard, judging from the projected number in the science party. Takagawa replied that this can certainly change depending on recommendations, but that it is much easier to reduce numbers after the fact rather than to increase them. Current plans are for a fully equipped floating laboratory.

Amman reported that CONOCO is now building a 3500 m riser vessel, which should be operational later this year. Takagawa responded that JAMSTEC is aware of this, and also of the efforts of Transocean. Coffin introduced an article from "Oil and Gas Journal" that describes the status of riser vessel activity and construction worldwide. Wiens inquired whether there will be year round operation in the Western Pacific or whether there will be trouble with typhoons. It was noted that year round operation may not be possible off Japan.

K.3 COMPLEX

Hay gave a brief update on plans for the COMPLEX Meeting. Robertson inquired how the results of the meeting will be assimilated or disseminated? T. Moore hopes that IPSC will receive a report from Pias immediately

after meeting. In any case, the results must soon go to IWG. Raymo suggested that the Japanese come to COMPLEX and give an update on the status of the riser drillship. T. Moore found this to be an excellent idea. Tamaki replied that it may be possible to do so, but he thinks that COMPLEX should be more concerned with non-riser drilling. T. Moore stated that he hopes to learn about science priorities and to evaluate the perceived demand for alternate platforms.

Coffin mentioned that he and Brown will attend the pre-conference meeting of session chairs on 6 April in San Francisco and can take this message.

L. IODP Planning Subcommittee

L.1 Selection of IPSC members and alternates for EXCOM consideration.

T. Moore described a procedure for choosing candidates for IPSC membership. SCICOM decided first to have further discussion in open session. SCICOM members then each voted for nine candidates from academia and four from industry. T. Moore compiled the results into a ranking and will contact the top candidates to see if they are willing to accept appointment to IPSC. Tamaki offers Japan as venue for the first IPSC meeting.

M. Panel Memberships, Liaisons

Schuffert is to compile a list of Panel members showing terms of service and designated liaisons.

N. The International Continental Scientific Drilling Program (ICDP)

U. Harms reported on the goals and structure of ICDP, outlined the proposal submission process, and described the criteria for selection of targets. The ICDP receives 10-20 proposals per year. Four sites have been drilled so far. Raymo inquired whether any of these were lake sites? Yes, and the number of paleoclimate proposals has surprised ICDP. Dauphin asked whether the numbers reflect resubmitted proposals. Harms replied yes, some of them are resubmittals.

Harms listed sites already drilled or funded for drilling in the near future and described each individually (Hawaii, Parkfield, Darbi-Sulu, Baikal, Unzen, Lake Titicaca).

Harms listed ICDP sponsored workshops. He also described the ICDP information network and educational courses, especially those offered to Chinese colleagues. In particular, ICDP will have a summer school in Hawaii this year and invite ODP participation.

Dauphin asked about the annual membership budget. Harms replied that G7 countries pay \$500K each for a total of about \$2M per year. Members include the U.S., Japan, Germany, and France.

Raymo noted that a lot of important science is being done in this project, and we shouldn't miss the opportunity for collaboration. This is a perfect chance for an alternate platform. Will ICDP be represented at COMPLEX? Robertson noted that there is a misconception among the ODP community that continental drilling involves only deep targets at crystalline basement, but this is obviously not true. Wiens suggested that we explore the summer school invitation. Moran stated that she has heard ICDP pays for students. Harms said this is true. Ludden inquired whether ICDP can archive data from various old continental drilling projects? Harms replied that they try but it takes a lot of manpower. Scott asked whether they track holes drilled by the mining industry? Harms replied not up to now- there has been no money or time for this.

O. HYACE Development Program

Hans Amman reported on the HYACE Development Program and passed around some parts of the core barrel under development. Scott inquired whether the HYACE consortium has communicated with the biochemistry or deep biosphere group? Amman replied that they have tried but not succeeded.

Moran asked about adapting the autoclave to the hammer drill or Fugro push corer. She also raised the question of the strength of the cutting shoe's auger design under conditions of variable weight on bit. Amman replied that for engineering and testing they have control of weight on cutting edge but not weight on total bit. Claypool asked whether the development of shipboard sampling devices proceeds on the same pace as the coring tool? Amman stated that there is some gap between the various partners. Completion can not be assured before Leg 191 but it should be possible by 2000.

Goldberg asked whether the flapper design of the core catcher can withstand the occurrence of large clasts in the sediment. Amman replied that they cannot exclude possibility that presence of clasts might interfere with recovery. Moran asked about the schedule for testing. Amman replied that they would see how it works after initial testing and improve on the design, ending the project in 2000. Moran asked whether the proposed test on Leg 191 would include the percussion corer. Amman responded yes, that it will include percussion, rotary, and piston corers. Fox inquired whether there are any hidden costs involved here, other than losing a tool? Amman replied that the basic design costs are covered, but improvements after testing may cost extra. Fox asked if the project is far enough along to estimate manufacturing costs? Amman replied that he had given an estimate before that proved quite wrong, so no estimate can be made just now. He noted that there will be no fee to ODP for use of this tool as it stands now, but it would be necessary to negotiate for use beyond that.

P. Other Items

SCICOM Consensus 99-1-15

SCICOM sincerely appreciates the efforts of Jan Behrmann in hosting the meetings of the JOIDES Science Committee, Operations Committee, and Panel Chairs at Albert-Ludwigs-Universität Freiburg. We will take home memories of Freiburg's charming ambience, pedestrian-friendly cobblestone streets, warm Baden hospitality, and fine Weinstuben, all of which we regret not being able to share with our indisposed host. SCICOM wishes Jan a quick return to full health.

Proposed by Coffin.

SCICOM Consensus 99-1-16

SCICOM bids a fond farewell to Maureen (Mo) Raymo. We shall sorely miss her perspective on global climate change and its relationship to tectonics, her persistent pursuit of environmental objectives within SCICOM, and her role as a pacemaker of Milankovitch and suborbital time scale climate variability within ODP. We hope her future orbits intersect ours.

Proposed by Bond.

SCICOM Consensus 99-1-17

SCICOM thanks Steve Scott for his long service to PCOM and SCICOM. Steve has enthusiastically represented the PACRIM consortium and has brought a much-needed perspective on mineral deposits and the interests of the mining industry to SCICOM deliberations. Steve will now have more time for trans-Atlantic trips between his Canadian and French homes, during which he will have time to reflect on ODP and its future scientific directions. We wish him well, and look forward to his continued participation in ODP and IODP.

Proposed by Tamaki.

Q. Review of Motions and Action Items.

Hay briefly reviewed the motions and assignments of action items.

R. Next Meeting

R.1 August 1999, University of California at Santa Cruz, California

Kevin Brown will host this meeting.

R.2 March 2000 Scripps Institution of Oceanography, La Jolla, California

Shiri Srivastava invited SCICOM to have its August 2000 Meeting in Halifax

Meetin adjourned