

**MEETING OF THE  
JOIDES EXECUTIVE COMMITTEE  
AT  
DEUTSCHE FORSCHUNGSGEMEINSCHAFT (DFG)  
BONN, GERMANY**

**JUNE 23 -24, 1998**

<b>D R A F T   M I N U T E S</b>
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**Executive Committee - EXCOM**

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Helmut Beiersdorf	Bundesanstalt für Geowissenschaften und Rohstoffe, Hannover, Germany
James Briden	Environmental Change Unit, Oxford University, United Kingdom
Chris Harrison	Rosenstiel School of Marine and Atmospheric Sciences, University of Miami
Nick Piasias	College of Oceanic & Atmospheric Sciences, Oregon State University
Robert Detrick (Chair)	Woods Hole Oceanographic Institution
Olav Eldholm	University of Oslo, European Science Foundation (Consortium for Ocean Drilling)
David Feary	Australian Geological Survey Organisation, Australia - Canada-Chinese Taipei - Korea Consortium
Margaret Leinen	Graduate School of Oceanography, University of Rhode Island
Catherine Mével	Université Pierre et Marie Curie, Paris
John Mutter	Lamont-Doherty Earth Observatory, Columbia University
John Orcutt	Scripps Institution of Oceanography, University of California
David Prior	College of Geosciences & Maritime Studies, Texas A&M University
Barry Raleigh	School of Ocean and Earth Science and Technology, University of Hawaii
Paul Stoffa	Institute for Geophysics, University of Texas at Austin
Asahiko Taira	Ocean Research Institute, University of Tokyo, Japan

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**EXCOM Liaisons**

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Kate Moran	Joint Oceanographic Institutions, Inc.
Jeff Fox	Science Operator (ODP-TAMU)
David Goldberg	Wireline Logging Services (ODP-LDEO)
Donald Heinrichs	National Science Foundation (United States)
Susan Humphris	SCICOM Chair, JOIDES Office, WHOI

## **Guests and Observers**

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Jamie Allan	National Science Foundation (United States)
Warner Brückmann	GEOMAR, Keil, Germany
Paul Dauphin	National Science Foundation (United States)
John Farrell	Joint Oceanographic Institutions, Inc.
Masaya Fukuhama	Ocean and Earth Division, STA (Japan)
Bill Hay	GEOMAR, Keil, Germany
Shizuo Hoshiba	Ocean and Earth Division, STA (Japan)
Charles Kennel	Scripps Institution of Oceanography, University of California
Hajimu Kinoshita	JAMSTEC (Japan)
Kazuhiro Kitazawa	JAMSTEC (Japan)
Bruce Malfait	US National Science Foundation
Dietrich Maronde	Deutsche Forschungsgemeinschaft, Bonn, Germany
Tsuyoshi Maruyama	Ocean and Earth Division, STA (Japan)
Chris Pigram	Australian Geological Survey Organisation, Sydney, Australia
Michael Purdy	National Science Foundation (United States)
Toshio Shimoda	JAMSTEC (Japan)
Pierre Vidal	CNRS, Paris, France

## **JOIDES Office**

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Kathy Ellins	Science Coordinator
Christina Chondrogianni	International Liaison

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## **Apologies**

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Brent Dalrymple	College of Oceanic & Atmospheric Sciences, Oregon State
Arthur Nowell	School of Oceanography, University of Washington

# **JOIDES EXECUTIVE COMMITTEE MEETING**

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## **DRAFT MOTIONS**

### **EXCOM Motion 98-2-1**

**EXCOM approves the Agenda for the June 1998 EXCOM Meeting.**

Proposed by Orcutt; seconded by Beiersdorf.  
15 in favor; one absent (Nowell).

### **EXCOM Motion 98-2-2**

**EXCOM approves the January 1998 EXCOM Meeting Minutes.**

Proposed by Raleigh; seconded by Feary  
15 in favor; one absent (Nowell).

### **EXCOM Motion 98-2-3**

**EXCOM welcomes China to ODP and congratulates all those whose efforts contributed to this achievement. EXCOM looks forward to active and growing involvement of scientists from the People's Republic of China in all aspects of the Program, and the scientific excitement and advances that their involvement will stimulate.**

Proposed by Briden; seconded by Leinen.  
15 in favor; one absent (Nowell)

### **EXCOM Motion 98-2-4**

**It is with great pride and admiration that EXCOM congratulates our colleague, Sir Nicholas Shackleton, on his knighthood. He is the latest Shackleton to be honored for his voyages of discovery. Like his ancestors, Nick Shackleton has mapped new territories: his contributions to the CLIMAP, COHMAP and SPECMAP provided guides for countless geoscientists who followed him along paths of knowledge of the Pleistocene and Holocene. Never to be constrained to "PC" (piston core) subjects, he is truly a man for the ages (including pre-Pleistocene ages, as well as the PAGES and IMAGES). Shackleton has shown his mastery of the nuances of tone and harmony whether the frequencies are in sound or climate. He does his work in a true spirit of generosity, collegiality, and of modesty - he has more clarinets than shoes. We thank him for sharing his wisdom and his wit with us and send our very best wishes for the future.**

Proposed by Leinen; seconded by Raleigh  
15 in favor; one absent (Nowell).

EXCOM Motion 98-2-5

EXCOM approves the FY 1999 Program Plan.

Proposed by Raleigh; seconded by Stoffa  
13 in favor; 2 abstentions (Feary and Piasis - conflicted); one absent (Nowell).

EXCOM Consensus 98-2-6

EXCOM endorses the framework for future budgetary decisions based on a prioritization of themes of the Long Range Plan which was developed by SCICOM in response to EXCOM Motion 98-1-8. EXCOM looks forward to receiving a report from SCICOM upon completion of this task in September of 1998.

One absent (Nowell).

EXCOM Motion 98-2-7

EXCOM endorses the revised policy on Associate Membership levels with corresponding JOIDES panel representation as modified by EXCOM at this meeting, and recommends its adoption to ODP Council.

Proposed by Harrison; seconded by Leinen  
14 in favor; one abstention (Mével - France); one absent (Nowell).

## ASSOCIATE MEMBERSHIP

Although a policy of full and equal participation remains a goal of ODP, this document identifies degrees of participation in the JOIDES Advisory Structure at reduced membership levels. Membership levels will consist of Full Members and three levels of Associate Membership. Each level has defined degrees of participation in the JOIDES Advisory Structure. Countries and consortia at all levels have the right to observer status on all JOIDES panels and committees, and can participate in their discussions at the discretion of the chair.

**Only Full Members of ODP (whether individual countries or consortia) have voting rights in the policy- and scientific-decision making for ODP (i.e. on EXCOM and SCICOM).** All other levels of membership do not include representation on EXCOM and SCICOM.

For the purposes of defining the Associate Member levels, the standing Panels and Committees within the JOIDES Advisory Structure are divided into three groups:

Group I (Highest level of advice on ODP science and policy)

EXCOM  
SCICOM

Group II (Scientific advice)

ESSEP  
ISSEP

Group III (Technical and operational advice)

SCIMP  
SSP  
TEDCOM  
PPSP

**Privileges of Different Membership Levels**

**1. SHIPBOARD PARTICIPATION**

Shipboard participation will be directly proportional to the contribution.

**2. PARTICIPATION IN THE JOIDES ADVISORY STRUCTURE**

**Membership Level Contribution Privileges**

<b>Associate 3</b>	2/3	One member on all Panels of Groups II & III;
<b>Associate 2</b>	1/2	One member on one Panel from Group II; One member on two Panels from Group III;
<b>Associate 1</b>	1/6	One member on one Panel from Group II; One member on one Panel from Group III

**EXCOM Motion 98-2-8**

EXCOM urges the ODP Council to maintain the principle of full, equal international membership to the maximum extent. Recognizing that this has not always proved possible, the JOIDES Executive Committee agrees on the following rules for members that have been full contributors in the past, but who have reduced their contribution below the full subscription:

- (1) Shipboard participation will be in proportion to their contribution
- (2) Provided that they satisfy the following criteria, they will be permitted to retain their full privileges on committee and panel membership
  - (a) Contribution must be equal to or greater than 5/6 of a full membership
  - (b) They must make a firm commitment to work towards full membership

(c) They must make significant progress towards achieving full membership each year. The Executive Committee will review the situation annually.

(3) If these conditions are not met, then the member will be designated as an associate member of the appropriate category.

Proposed by Harrison; seconded by Prior.

14 in favor; one abstentions (Mével - France); one absent (Nowell).

#### EXCOM Motion 98-2-9

EXCOM approves the general Four Year Ship Track for the *JOIDES Resolution* set by SCICOM at their March 1998 Meeting (SCICOM Motion 98-1- 11)

Proposed by Feary; seconded by Raleigh.

10 in favor; four abstentions (Pisias, Orcutt, Taira, and Eldholm - conflicted); two absent (Nowell and Harrison).

#### EXCOM Consensus 98-2-10

The JOIDES Executive Committee welcomes Dr. Kate Moran to her new position as Director of the Ocean Drilling Program at JOI. The future holds great opportunities for ODP as it celebrates its 30th Anniversary and looks forward to new scientific and managerial challenges. Scientifically, the future for ODP has never been brighter with potential new opportunities in understanding the role of fluids in the ocean lithosphere, the extent of the geobiosphere, the long-term history of climate on Earth, and the exploitation of ODP's technology in making global and regional observations at all spatial and temporal scales. We wish Kate our best as she accepts these new responsibilities.

Proposed by Orcutt; seconded by Prior.

One absent (Nowell)

#### EXCOM Consensus 98-2-11

EXCOM endorses the charge to PEC V and recommends its adoption by JOI BoG.

One absent (Nowell)

#### EXCOM Consensus 98-2-12

EXCOM notes with satisfaction all efforts by Japanese authorities to advance the future of the Ocean Drilling Program, in particular by budgeting for related projects on the development of core sampling systems, development of long-term monitoring systems for legacy holes, and for the development of advanced site survey technology for characterizing the seismogenic zone near Japan.

EXCOM also welcomes the MOU between JOI and JAMSTEC for close cooperation in studying the most favorable manner for ocean drilling operations and in developing borehole measurements and bit technologies. We encourage both organizations to implement the terms of this MOU.

Proposed by Raleigh; seconded by Briden.

One absent (Nowell)

**EXCOM Consensus 98-2-13**

The JOIDES Executive Committee thanks Professor Nick Pias for his extraordinary and selfless service to the Ocean Drilling Program. Over the past six months, Nick has provided a steady hand at the helm, instituted a refreshing openness and spirit of team leadership that helped the Program successfully navigate this transitional period. We appreciate the personal sacrifice he made in undertaking this job, which has entailed numerous transcontinental flights, and long periods away from home and soccer games. We wish Nick great success and happiness in his return to Oregon State University and his research, and welcome his future leadership in ODP.

Proposed by Orcutt; seconded by Beiersdorf.

One absent (Nowell).

**EXCOM Consensus 98-2-14**

The Executive Committee thanks Bob Detrick for his leadership of JOIDES during the past two years. He has given himself selflessly to the promotion of ocean drilling and done an excellent job of leading the Program through challenging times. Although his national and international travel has been demanding, he has continued always in good humor his leadership task. The Program, thanks to Bob, stands poised for an exciting Phase IV in the next millennium, We wish him great success on his future scientific endeavors and his leadership of the oceanographic scientific community.

Proposed by Orcutt; seconded by Leinen.

One absent (Nowell).

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**AT**

**DEUTSCHE FORSCHUNGSGEMEINSCHAFT (DFG)**

**BONN, GERMANY**

**JUNE 23 -24, 1998**

## **D R A F T   M I N U T E S**

**TUESDAY**

**June 23**

**8:30 am**

### **1. Welcome & Introduction**

1.1 Detrick welcomed all participants to the summer EXCOM meeting and thanked Deitrich Maronde for graciously hosting the meeting. EXCOM members, liaisons, and guests were introduced. Kate Moran, formerly of the Bedford Institute of Oceanography (BIO) in Canada, is the new director of ODP at JOI. Nick Piasias attended the meeting not in his previous capacity as Interim ODP Director, but representing Brent Dalrymple from OSU. Arthur Nowell was absent because, unfortunately, he became ill during his flight to London, and is convalescing in the hospital in London. Since the JOIDES Office will be moving to GEOMAR, Germany in January 1999, Bill Hay and Warner Bruckmann, who will be the Chair of SCICOM and the JOIDES Science Coordinator, were present.

### **1.2 Meeting logistics**

Maronde welcomed all EXCOM, ODP Council and IWG participants to the DFG. Detrick expressed thanks to Maronde for the interesting field trip which explored the surrounding area.

### **1.3 Approval of Agenda**

#### **EXCOM Motion 98-2-1**

EXCOM approves the Agenda for the June 1998 EXCOM Meeting.

Proposed by Orcutt; seconded by Beiersdorf.

15 in favor; one absent (Nowell).

## **2. Minutes and Matters Arising**

### **2.1 Approval of January 1998 EXCOM Minutes (TAB 1)**

#### **EXCOM Motion 98-2-2**

EXCOM approves the January 1998 EXCOM Meeting Minutes.

Proposed by Raleigh; seconded by Feary  
15 in favor; one absent (Nowell).

## **3. NSF Report**

### **3.1 NSF Management Report (TAB 2)**

Heinrichs reported that there was little to add to the report in the Agenda Book. NSF has provided JOI with a target budget of \$48.5 million which includes the second increment of \$3 million of the total of \$6 million promised for the refurbishment of the JR. NSF has approved the appointment of Kate Moran as ODP Director at JOI. He welcomed her on behalf of NSF.

The FY 1999 NSF budget has not yet been finalized.

### **3.2 Membership (TAB 3)**

- **China**

China signed an MOU in April and Professor Wang of the People's Republic of China will attend the ODP Council session. Heinrich's noted that China is the first Associate Member of ODP.

#### **EXCOM Motion 98-2-3**

EXCOM welcomes China to ODP and congratulates all those whose efforts contributed to this achievement. EXCOM looks forward to active and growing involvement of scientists from the People's Republic of China in all aspects of the Program, and the scientific excitement and advances that their involvement will stimulate.

Proposed by Briden; seconded by Leinen.  
15 in favor; one absent (Nowell)

## **4. Country Reports (TAB 4)**

### **4.1 Australia-Canada-Chinese Taipei-Korea**

Feary said he wished to emphasize his previous remark that the Asian economic crisis has had a devastating impact on PACRIM. This, in combination with the strength of the US dollar, poses a problem for the consortium. Korea, for example, had previously received approval to increase their contribution from the 1/12 to the 1/6 level. At present, however, they will have to triple their contribution to meet the original 1/12 level.

Larry Mayer has completed his term as Chair of the Canadian Council for ODP. Changes in the Australian ODP structure include the replacement of Bob Carter by Jock Keene as the Secretariat has moved from Townsville to Sydney, Chris Pigram has taken over the duties of Australian ODP Council Chair, and Alexandra Isern will take over as Chair of the Australian ODP Scientific Committee.

Feary mentioned the difficulty of integrating new members into the consortium. It takes awhile for the broad based involvement to be achieved and he urged JOIDES to be sensitive to this as China, the new Associate Member, may be similarly affected.

#### **Discussion:**

Fox noted that the steep learning curve cuts both ways as new members become incorporated into ODP. He wondered whether ODP/TAMU could do something to help the process of integration and asked Feary if he had suggestions. Feary recommended being sensitive to the matter and doing all that can be done.

#### **4.2 ECOD**

Eldholm reported that the ECOD Management Committee met on June 8. With regards to financing of their membership in ODP, there is a discrepancy of 1-2% in the membership contribution which ECOD is confident can be resolved in the near future. More detailed information will be presented at the Council meeting. A consensus was not reached on the selection of Eldholm's replacement to EXCOM. If this has been resolved, it will also be reported at the Council meeting.

#### **4.3 France**

Mével reported that France's contribution will be decreased to between one third and two thirds of a full membership. France will not commit to working towards increasing to a full membership level, nor will any attempt be made to form a consortium. Mevel reported that the responsibility for French membership in ODP will move from IFREMER to CNRS next year. Mével introduced Philip Vidal, Director of CNRS Earth Science Division, who was present as an observer.

#### **4.4 Germany**

Beiersdorf reported that Germany has established a working group for scientific drilling in the Eastern Mediterranean as a starting initiative for a larger international project that will include drilling on land, as well as offshore. Germany hopes to attract European and international support for this endeavor which, in its initial phase, will investigate the continent-continent collision in the eastern Mediterranean. The eastern Mediterranean is the only place in the world where you can see continent-continent collision in its final stage. The working group is composed of participants representing the paleoclimate and geophysics communities, and the ICDP, KTB, and ODP groups. Contact with other countries will soon be initiated, particularly with Greece, which is expected to be a strong participant in the effort. The final goal is to drill a seismogenic zone in the eastern Mediterranean - the second such effort prior to IODP (the first will be at a seismogenic zone close to Japan). Germany wants to establish formal links in Europe for the joint planning and use of larger facilities in Europe. This working group is seen as a vehicle for

this type of interaction. Recently, there was a meeting following the annual ODP meeting in Germany in March to explore opportunities in Brussels for additional funding for ODP/IODP-related research. It was learned that there are possibilities to fund science projects as well as technological projects, although technological projects are favored. There is, however, reluctance to fund large scale projects like ODP.

#### **4.5 Japan**

Taira reported that the Japanese government has approved a new supplemental budget for 1998 which includes new money for ODP - Japan. These funds will be used for the enhancement of site survey capabilities. Six million dollars has been earmarked for a side scan system, and echo sounder. JAMSTEC has also received a large amount in a supplemental budget for ODP-related activities. Taira added that, contrary to reports in the newspapers, Japan still has a strong commitment to long term investment in science and technology.

#### **4.6 PRC (The People's Republic of China)**

#### **4.7 UK**

Briden reported that Professor Nick Shackleton has been knighted, and commented on the impact of the second ODP European Forum, which will take place in Edinburgh on September 19-22, on long-term planning for ODP in Europe. He said that the UK marine science community considered what "top of the list" science should be done post-2003. NERC shared this prioritized list at a session at the Lisbon meeting (Third European Conference on Marine Science and Technology) chaired by Christian Patermann. At that meeting, it was revealed, as already mentioned by Beiersdorf, that the various European partners are thinking about the science and technology that can be done within the context of the facilities that might be available in the future, including the Japanese vessel, and new prospects for technology development in the hydrocarbon industry. He said that this thinking will serve as the backdrop for the Edinburgh meeting, which follows on from the Oldenburg meeting two years ago. There will likely be a separate session to talk things through for European EXCOM members and other key individuals in Europe sponsored by EMAPS. Julian Pearce (UK SCICOM member) is urging the European partners to go through a similar exercise to the UK, that is, a prioritization of the science that can be done post-2003.

#### **Discussion:**

Eldholm urged EXCOM to take note of the industry/academic-oriented initiatives which could serve as a template for work either within, or in affiliation with, ODP itself. He added that there are very interesting prospects that should be followed up on.

Heinrichs said that the Lisbon conference was the Third MAST Conference. The session Chaired by Christian Patermann focused on potential European contributions to long-term post-2003 scientific ocean drilling. ODP Council and IWG will have a more organized presentation of the outcome of this meeting. Heinrichs stated that while he may have missed some of the nuances of the interaction, it is his impression that the EU would not sponsor a membership in ODP, although there is a desire to fund fixed-term

projects that will contribute to carrying out ODP science. Briden noted that there is a one page official summary of the Lisbon meeting and a paper by Ludden and Wefer. While neither document has been approved by participants yet, and he does not wish to invest them with an authority they do not have, they contain some interesting statements. For example: "Involvement of the European community in ocean drilling in the 21st century must look past its own margins to become global". Briden said the significance of this statement is that it removes limits on the scope of research that can be sponsored by the European community. "The new integrated ODP now being planned will present a new vision of scientific drilling which the EC could be intimately involved in both the planning and the execution. The new program must involve a multi-platform approach to drilling and the costs involved are large, if not prohibitive. Europe will be able to participate in this new exciting global initiative only through a coordinated approach involving industry and academia of its member states." Mével said that she understood that progress has been made with respect to the projects that can be funded. Beierdsdorf explained that projects outside of Europe can now be funded, if they are of interest to Europe. This was clear and is the first time that this has been explicitly stated.

#### **EXCOM Motion 98-2-4**

It is with great pride and admiration that EXCOM congratulates our colleague, Sir Nicholas Shackleton, on his knighthood. He is the latest Shackleton to be honored for his voyages of discovery. Like his ancestors, Nick Shackleton has mapped new territories: his contributions to the CLIMAP, COHMAP and SPECMAP provided guides for countless geoscientists who followed him along paths of knowledge of the Pleistocene and Holocene. Never to be constrained to "PC" (piston core) subjects, he is truly a man for the ages (including pre-Pleistocene ages, as well as the PAGES and IMAGES). Shackleton has shown his mastery of the nuances of tone and harmony whether the frequencies are in sound or climate. He does his work in a true spirit of generosity, collegiality, and of modesty - he has more clarinets than shoes. We thank him for sharing his wisdom and his wit with us and send our very best wishes for the future.

Proposed by Leinen; seconded by Raleigh  
15 in favor; one absent (Nowell).

#### **4.8 USA**

Malfait mentioned the uncertainties associated with the FY 99, and to some extent, the FY 98 budgets. ODP at NSF is faced with supporting the mid-life upgrade of the drill ship within the total overall ODP budget. The only place where there are options to manage FY 98 and 99 expenses is the US Science Support Program which supports field programs directly from NSF, as well programs at JOI. NSF is trying to keep US Science Support activity on a reasonable growth curve; that means that over the next year or two there will be a reduction in NSF/ODP-related field programs.

#### Update on 1998 activities

- All the OSN instruments have been recovered and all ran well for over three months.
- There will be an international meeting in September related to the Margins initiative.

Malfait introduced Jamie Allan, formerly of ODP/TAMU, who will be managing US science participation in ODP.

Regarding post-2003 activities within the US, Piasias added that the COMPOST2 document, and NFS's response to it, will be published in EOS.

## **5. FY 1999**

### **5.1 Presentation of the final FY 1999 ODP budget (TAB 5)**

Piasias said that it was a pleasure to have worked with Goldberg, Fox, and the JOI staff.

Piasias reported that the \$900K FY 99 budget deficit, which had existed at the time of January 1998 EXCOM Meeting, was solved for this year and the budget is balanced. To balance the budget, some items were eliminated (i.e. the hammer drills, which SCICOM had indicated were needed). He added that he had also exploited the "tricks of the trade". By extending the existing LDEO contract instead of issuing a new one, for example, some tens of thousands of dollars in overhead were saved. He indicated that Humphris would expand on the summary budget table in the Agenda Book and present SCICOM's prioritization of items/activities, should funds become available (Appendix 1).

### **Discussion**

Orcutt suggested that there was another "sleight of hand" in the budgeting with regard to the microbiology facility. He noted that the \$400K figure for this facility had been taken out of the list of X-Base items and placed in a "special category". He asked what the designation, "special category", really meant. Piasias said that this was not the case and explained that the approach being taken by SCICOM with respect to the microbiology facility was a phased approach, initially providing the minimum amount of equipment on the ship. He questioned whether this was the correct approach.

### **5.2 Impact of the final FY 1999 budget on Program delivery (TAB 6) FY 1999 Science Plan**

Humphris reviewed the FY 1999 science plan, previously approved by EXCOM in January 1998.

Next, she traced the evolution of the budget. She showed SCICOM's recommendations of priorities for the X-base budget that were developed at the August 1997 meeting (Agenda Book, Tab 6, p. 2) and compared these to what remained of SCICOM's original recommendations in the final budget (Agenda Book, Tab 6, p. 3). FY 1999 is a year without LWD and ice support and so the FY 1999 TAMU and LDEO leg-based budgets are very cheap. In spite of this, there was a struggle to get many items into the budget. Humphris predicted that problems in future will be more acute. At the March 1998 meeting, SCICOM and OPCOM produced a prioritization by group (Consensus 98-1-3) of items that they would like to see reinstated, should additional funds become available

in FY 1999 (Agenda Book, Tab 6). Many items in the top group are logging tools that will enhance the science of a leg. At the top of the list is the GLT, which was cut from Leg 185. This tool, essential for assessing the downhole geochemical variations, especially in cases where core recovery problems occur, was requested by the Co-Chiefs and the lead proponent for the Izu Mariana program. The sonic tool (WST) is the check shot tool which is very useful for high resolution seismic correlations of sedimentary sequences. Leg 184, East Asian Monsoon, would really benefit from the deployment of the WST. The WST would also be useful for the sedimentary sequences at Kerguelen (Leg 183), but perhaps less so than Leg 184, thus it has slightly lower priority. The VSP would be very helpful in characterizing the area around the two observatory sites planned for Leg 186. It is important to have information about the environment in which long-term observatories are set up. The ARI is an upgrade of a tool that ODP currently uses, the lateral log. SCICOM felt that it would be great to have higher quality data, but this does not appear possible with this budget.

SCICOM also added one operational hammer (hammer drilling system) back into their prioritization scheme because there is a proposal under consideration for which the hammer drilling system would be needed IF this proposal is deemed a high priority for the program by SCICOM in August.

The Microbiology Lab is in a special category. SCICOM has firmly said that they want to do something related to the Deep Biosphere Pilot Project. It presents an opportunity for the Program to make an important contribution to a field in which ODP has not been previously involved. One of the difficulties is how to go about it. SCICOM opted for a phased approach. However, SCICOM has not yet obtained clear estimates of what is needed to begin to tackle this project. The Chair of the Deep Biosphere PPG has been invited to the August 1998 SCICOM meeting to present an assessment of what is really needed. With the present FY 1999 budget, it is not possible to undertake getting a facility on board. Meanwhile, the microbiologists are trying to determine what the contamination and sampling issues are. Without carry forward funds for FY 1999, ODP will not be able to advance this initiative.

— The Downhole measurements lab is a big ticket item. The idea was to expand it. SCICOM felt that it would be great to do but the Program does not have the money at present. Downhole measurements are currently carried out, and the Program will have to continue to do things as they are done now. Of the remaining top projects in SCICOM and OPCOM's March 1998 prioritization, CORESEIS and Borehole Stability Project are innovations.

### **Discussion**

Feary asked about the fate of the mirror sites. Humphris said that these have been deferred, although it is recognized that they must be an integral part of an interrelated publications and data distribution policy. SCIMP will examine and address this issue. Maronde indicated that moving forward on the microbiology project will serve to broaden the base of support for ODP in Germany.

## ODP/TAMU

Fox reported that while all core services will be delivered by ODP/TAMU in FY 1999, there are some consequences which are hard to quantify, but easy to identify (Appendix 2). The range of activities that will be restrained are:

- Leg operations. Fox explained the phenomenon of "leg creep" which has historically affected the budgeting process of legs. As a leg matures and moves beyond the initial budgeting phase, the Co-chiefs get involved and, as a natural consequence of the necessity to refine an experiment, the budget for the leg often grows by \$50K to \$100K. Leg 180, for example, increased in expense by a quarter of million dollars because of the cost of the hardware (i.e. perforated casing) needed to address a fundamental problem in geoscience. TAMU will not be able to accommodate this type of growth in the future. One way that TAMU is trying to address "leg creep" is by scheduling pre-leg meetings to jump-start the budgeting process for sophisticated programs on the horizon. Proposal 445 (Nankai) is a good example. Although it is not yet scheduled, a subset of the key Nankai proponents met with TAMU representatives at TAMU in May 1998. This will minimize "leg creep" and help TAMU to be able to more realistically estimate the cost of a leg before the proposal, if highly ranked by SCICOM, is considered for scheduling by OPCOM.
- The pace of engineering technology projects is reduced.
- The training of staff has been cut back by about 80% in some of their functional centers. TAMU has historically considered this high priority in order to take advantage of technologies coming on line, and in recognition that such professional enhancement is mutually beneficial to both TAMU and staff.
- The replacement of aging computers and laboratory equipment is far below that considered acceptable. In the past, computers were replaced on the ship once every three years, and in the shore-based facility, once every 5 years. TAMU has fallen away from that replacement rate in the past 4 years and are finding that the ability to catch up in this financial environment is difficult.
- TAMU has reduced the inventory of drilling and lab stack supplies to keep inventories at the very minimum levels that have been historically required. TAMU is depending on a new inventory process that will be more proactive in identifying when things have to be replaced. This is a difficult game to play in the drilling industry because there is so much activity in this type of market that the lead time is measured in years.
- Only essential vacancies are being filled. TAMU is testing to see if it is possible to leave some FTEs open. Fox will only fill a vacant FTE if the "patient" (functional center) appears to be going belly-up!

The consequences of this situation is a reduction in innovation and the ability to respond to scientific opportunities. In addition, there is reduced morale and a general

feeling of frustration among the staff, and a loss of efficiency at some levels. TAMU is currently exposed to major equipment loss and failure, and has reduced its ability to respond. These ongoing consequences have been managed over the last few years, but this will not be possible in the future.

### **Discussion**

Mutter asked if decreased morale causes people to leave, or creates difficulty to recruit good people. Fox responded that decreased morale is seen within the organization itself. With respect to the drilling industry and information services, the job market is robust. There is turnover at TAMU as a consequence of decreased morale and because TAMU cannot compete with the salaries being offered elsewhere.

### **WLS/LDEO**

Goldberg reported that the WLS will also be able to put the FY 1999 budget into action without major negative implications (Appendix 3). Savings are associated with the indirect cost of the logging contract, as explained previously by Piasias, but primarily with respect to salaries. The WLS has been hiring less experienced personnel at lower salaries, although this increases training expenses. As a result, it will not be necessary to downgrade the porosity tool. In addition, WLS is moving forward with plans for modest modification to the DHML on the ship during dry-dock and the development of the software package for the core-log integration. Thus, some innovation is taking place. Goldberg noted that Humphris has pointed out the special deployments tools that were not funded for some legs; however, on the positive side, five specialty tools are funded for FY 1999. On the negative side, there is no backup for the APS and HNGS tools and this poses an operational risk. Overall, LDEO will be fine for FY 1999.

### **Discussion**

Detrick said that EXCOM had delved into this in more detail than in the past, but he felt that it was necessary for the Committee to understand what had been involved in meeting the budget target. The presentations have given a sense of what sacrifices have been made to achieve the target budget - it is beginning to have implications with respect to science delivery in the short term in terms of certain tools not being run on particular legs, and there will be longer term consequences in terms of things like upgrades to the laboratories not taking place, or development projects being curtailed. This is a message that EXCOM needs to be aware of, and that EXCOM must convey to ODP Council (Humphris and Detrick attended the Council meeting). Detrick added that it was worth reiterating the point made by Piasias that some of the savings that have been made in meeting the budget target this year are one-time savings which cannot be reproduced again in the future to deal with anticipated budget shortfalls. Following the break, EXCOM will consider what mechanisms will be in place to make these future decisions.

Orcutt asked what efficiencies have allowed for the reduction in the amount budgeted for repositories. Fox replied that this represented a reduction in the number of FTEs staffing the repository at Scripps. TAMU examined the use of facilities and made the decision to cut the second FTE at Scripps. The individual involved, however, has not lost his/her job, but will sail instead as a shipboard technician. TAMU is continuing to examine

ways of maintaining services at this repository. Pias pointed out that the ship is going back to the Pacific and there may be renewed interest in samples taken previously.

### **5.3 Approval of the FY 1999 ODP Program Plan (TAB 7)**

Detrick asked EXCOM to formerly approve the budget for the FY 1999 Program Plan. He reminded EXCOM that they had previously approved the science plan for FY 1999 at their January meeting.

#### **EXCOM Motion 98-2-5**

EXCOM approves the FY 1999 Program Plan.

Proposed by Raleigh; seconded by Stoffa

13 in favor; 2 abstentions (Feary and Pias - conflicted); one absent (Nowell).

## **6. Phase III Issues**

### **6.1 Potential impact of the Phase III Budget projections on program delivery.**

Pias referred to the figure in the agenda Book. (TAB 8, page 4) and showed an overhead of phase III budget projections (Appendix 4). The projected deficits are primarily linked to the day rate increases. In order to translate the projected deficits into science loss, Pias, in connection with TAMU, categorized proposals now in system by levels of expense: moderate legs cost up to \$200K and very expensive legs cost up to \$1 million above a standard level (Appendix 4 - tables that show the cost of the science under consideration). Pias noted that in FY 1997 the legs scheduled are not super expensive legs. Based on this exercise, Pias projected that \$14 million would be required to accomplish the science in these proposals from now until the end of the Program in 2003, resulting in a problem on the order of \$5-7 million to be addressed.

#### **Discussion**

Briden noted that there were 27 proposals in the list of proposals analyzed and that this number exceeds the number of proposals that can be drilled in the remaining four years. Consequently, a percentage of the \$14 million figure will disappear by time pressure. Pias replied that Briden was correct that not all 27 proposals considered will translate into legs. In reality, there are only 24 more legs that can be scheduled to be drilled. Briden said that 15% of the \$14 million would disappear by time pressure, but he pointed out that 85% is still a large number. Pias said that he could be off by \$2 to \$4 million, but it is still a lot of money. He added that there are programs proposed that would be very difficult to carry out without some change in the funding. Detrick said that it was interesting to observe the distribution of legs with respect to the science, and especially noted the predominance of high latitude legs.

## **6.2 SCICOM response to EXCOM Motion 98-1-8: Procedure to provide a framework, based on a prioritization of themes of the Long Range Plan, for future budgetary decisions.**

Detrick summarized EXCOM's charge to SCICOM with the question: "How do we select which components of the science plan can be attacked within the constraints of the current budget projections?"

Humphris described the approach taken by SCICOM at the March 1998 meeting in response to this motion. Rather than prioritizing and then cutting things, SCICOM took a programmatic approach; that is, looked at the scientific priorities and asked the question, "What services or technological developments are needed in order to meet those objectives?". SCICOM identified three different activities required to address the question. First, the solicitation of advice on the prioritization of the science that the Program should accomplish in Phase III. And, given that science, definition of the required technological developments. The SSEPS were tasked with beginning this activity. The second activity is the identification of the services required to achieve these objectives. SCIMP was charged with this activity. The third activity, to be carried out by SCICOM, is a compilation of information provided by the SSEPs and SCIMP, the development of a final framework into which the budgetary projections can be placed, and a prioritization the science to be done. Humphris referred to the flow diagram in the Agenda Book (TAB 8). She outlined the process and activities of the panels and groups charged with specific tasks, and reviewed the timetable. Humphris noted that the scientific prioritization would occur at the same time as the programmatic prioritization, after which the two SCICOM subcommittees would examine the environment and interior themes and integrate all the input prior to the August SCICOM Meeting. Humphris said that it would not be desirable for the Program to settle on doing a little bit less of everything. Instead, she expects that the outcome will be a series of objectives (some of which may be extremely expensive) and a hierarchy for decision-making in the context of different budget scenarios. For example, SCICOM may decide that Antarctic drilling is the highest priority of the Program, of such importance that SCICOM will give up everything to accomplish the task. Or, SCICOM may determine that Antarctic drilling cannot be achieved and will then select from among another category of less expensive high priority scientific objectives. She would like to identify three or four high priority things that ODP will set out to accomplish, depending on the budget situation.

### **Discussion**

Pisias said that SCICOM will have to look at the budget and decide which are the top **priorities**. This should be done once, and not each year. Humphris agreed and said that for themes that involve a lot of expense because of the large technological component (i.e. Antarctic and hard rock drilling), SCICOM will have to determine which of these is their top priority. This will be tough!

Eldholm noted that the need for **ice boats** for high latitude legs was mentioned at the last EXCOM meeting. He asked if it was realistic for ODP to expect to see outside funding for

their acquisition, and inquired about the consequences. Piasias noted that Prydz Bay was put on the schedule on the condition that the proponents could come up an ice boat. If someone else pays for the ice boat, the cost of the Prydz Leg becomes fundamentally different. There is a dilemma to do this within ODP's planning time frame. Fox said that Piasias had identified a key issue, but noted that the proponents are aggressively searching for vessels/ice platforms and there are some potential opportunities that could reduce the cost of ice support for ODP. However, there are problems of timing because, until a leg is scheduled, ODP/TAMU cannot go to an ice ship operator to vigorously engage them in a dialogue and commit to leasing a vessel. SCICOM wants to assess the results of Leg 178 before committing to Prydz Bay as Leg 188. Thus, TAMU is being held hostage by the natural evolutionary process of the Program and the time schedule. Piasias added that there is also a problem with the budgeting process. He added that the Prydz Bay proponents are trying to identify suppliers of vessels and then TAMU will engage them in the dialogue to acquire the vessel. This process commenced in the spring. Humphris told the committee that there is Swedish icebreaker that has been offered as a part of a new proposal currently in the JOIDES system.

Detrick declared that the pursuit of outside funding is an option that ODP must explore. The only way that Antarctic and other expensive highly ranked legs, like Nankai, will be scheduled is if there is some contribution from other countries or geoscience programs that are particularly interested in certain legs. Expensive legs are not only going to have to be well-justified but also need to bring funds to the table. This message must be communicated to proponents of proposals in the JOIDES system. Humphris said that all the proponents of the most expensive high ranking proposals are well aware of this issue. This applies especially to the Nankai proponents who have become very aware as a more realistic estimate of the costs of that program has been acquired. Mével reminded EXCOM that many international programs do not have money. Detrick noted that they have contacts and that their endorsement could help proponents to acquire outside funds.

Mutter suggested that the more ODP goes through the exercise of prioritizing and cutting back, the more it allows non-US members to think that they can drop out and it won't matter as NSF will supplement the Program. The problem is that ODP seems to be unable to quantify or discuss the impact of the shrinking budget on the growth of knowledge. He indicated that the cost of the Program might be reduced in one way, but in another way, it becomes more expensive because the cost per unit advancement of knowledge actually goes up since a lot less is learned per leg. This process may have turned ODP from a relatively efficient program to a relatively inefficient program in terms of knowledge generation.

Raleigh asked about contributions from industry. The oil industry is not spending as much on research as before. Although individual proponents can approach local oil industry companies within their own countries, there might be some advantage in having the heavier weight of EXCOM pursue industry participation and support. Otherwise, ODP will not be doing the kinds of things in which industry is particularly interested. The national contributions might be leveraged because these expensive legs are the ones

that are of interest to industry. JOIDES as a group needs to approach industry, but with some assurances that the national contributions will be enhanced, not replaced, by this source. Detrick said EXCOM has addressed this issue in the past and will consider it again at this EXCOM meeting.

Detrick noted that, with respect to science delivery per leg, certain tools that will increase the scientific benefit of a particular leg will not be run. SCICOM's task will be to identify the smaller number of things that can be done well so that the scientific benefit from the legs done will be high. The broad spectrum of goals embodied in the entire set of JOIDES proposals will not be addressable. This is the most difficult thing for SCICOM and the community to deal with because JOIDES is used to feeling that it is possible to do a little bit of everything, while only a subset of goals can be accomplished. The SSEPs have had difficulty in grappling with this. The message for EXCOM to communicate to them is that the science delivery should remain high. Since not everything can be accomplished, EXCOM wants them to recommend what delivery can be cut back to achieve this aim. Humphris reiterated that the approach is to identify the science and then say what services are needed. What should be cut is what is not necessary to address the objectives. This is a huge task for SCICOM to accomplish in one meeting, but the message of what EXCOM has asked SCICOM to do is clear.

Briden noted that ODP Council, except during the recent renewal period, meets annually. He said he expected ODP Council to be disappointed by the progress reflected in the papers of this EXCOM meeting. He emphasized the importance of conveying to Council the progress that has been made and to explain the timing, in particular, to point out that that SCICOM will report back to EXCOM in September. Previously, some members of ODP Council were impressed that JOIDES was at last getting a grip on the issues. Detrick said that the timing has been driven by wanting to do a thorough job, and works well in terms of the development of the next fiscal year's budget. The output will be available as the budget is developed. Pias says that the plate that SCICOM has to deal with at two meetings in one year is very full. He added that he thought that it impossible for them to achieve the necessary interaction with the other panels. Humphris explained that there will be only one meeting of the SSEPS during the time required. Eldholm expressed concern that SCICOM might not be able to do the job with two meetings a year and may need more meetings. Humphris disagreed and expressed confidence that SCICOM can handle the task within the necessary time frame.

Leinen said she was pleased that Humphris had turned the focus back from cutting services to highlighting science. She emphasized that an important piece of this would be how to struggle with the problem of whether you are prioritizing objectives or themes in the LRP. It unlikely that the prioritization can be done without eliminating further progress on certain elements of the LRP. She noted that there would be much pressure to not eliminate any of those threads of the LRP and it will be a challenging job, but also an opportunity to accent which elements of the LRP ODP will not be able to advance, allowing ODP to focus its activities on trying to find alternative ways to address these.

Detrick will circulate SCICOM's report in late September so that EXCOM can conduct an electronic discussion of their recommendations.

## **7. Revised EXCOM policy on JOIDES panel representation for Associate Members (TAB 10)**

Detrick reported that until 1995, there had been only one class of membership in ODP. In 1995, at the Edinburgh meeting, the ODP Council approved the category of Associate Membership defined in terms of 1/6 levels of a full contribution. China is the first and only Associate member that ODP has attracted to the Program with this policy. It was noted at the last EXCOM meeting that this issue had to be revisited, in part because of the new structure, and also to address the problem of previously Full members who were no longer able to pay a Full membership. The 1995 Associate Membership Policy provides no easy way of dealing with a country that cannot not make a Full membership. Detrick said that the proposed policy under consideration was developed by the JOIDES Office in consultation with JOI and NSF. Detrick reviewed its elements. The goal is a policy that will serve to attract new members to the Program and, at the same time, encourage participating Associate members to upgrade to a Full membership.

The proposed policy defines three levels of Associate Membership and one level of Full Membership. Recognizing that some unanticipated events occur, the policy would allow a Full member to drop down to the Associate level status, but with reduced participation in legs and the JOIDES advisory structure. In brief, the policy attempts to define representation on JOIDES panels/committees, to provide incentives for those members that need to reduce their participation to come back up to Full level, and to attract new members to ODP at the Associate level.

### **Discussion**

**MOUs and membership on JOIDES panels.** Beiersdorf asked whether different types of MOUs would be required for the different levels of Associate membership. Heinrichs explained that the basic framework of the MOU with China is very similar to the MOU for Full members. The elements pertaining to participation are included in an Annex. Shipboard participation is proportional to the level of contribution. The MOUs themselves do not specify committee membership on JOIDES. In the case of the MOU with China, committee/panel names are indicated in the Annex. Similarly, the Associate membership MOU would need to reference the Annex for the definition of committee participation, in which JOIDES would have a say. Henrichs noted, however, that the Chinese have the right to change the panels in which they participate, although this would require modifying the Annex. Mutter observed that this gives the Associate member the ability to go through all the panels, if they so wish. Raleigh noted that three countries that combined resources to participate at the Associate 2 level (1/2 a Full membership) would each fare better in terms of representations on panels than if they each participated at the 1/6 level. In fact, as a group, they would have a greater representation on panels than each Full member. Pias noted, however, that the real

benefit for a Full member is greater representation on legs. Beiersdorf asked what the implications of the proposed policy were with respect to the selection of co-chiefs. Heinrichs responded that the MOUs do not provide the details of participation. This is a JOIDES issue. Thus, EXCOM should make the recommendations of what they would like to see with respect to participation.

**The right of observers to participate in committee/panel discussions.** Mével said that France needs to be able to assure their Ministry of Science that France will be able to participate in committee/panel discussions. She pointed out that the right for observers to participate in discussions that France was seeking was not explicitly stated in the document. Mével said that it was important to state this point explicitly in the policy as observers are not normally allowed to participate in discussions. Raleigh asked if JOIDES meetings were open meetings. Heinrichs indicated that there is no legal right imposed by NSF, no clause saying that the meeting should be open. The level at which observers can participate in JOIDES committee/panel meetings is at the discretion of the chair. Piasis stated that the chair must retain the right to stop participation/discussion, otherwise the Associate member is essentially just like panel members who are representatives of Full members. He also noted that panels can take a meeting into an executive session. Mutter asked if someone from an Associate membership could chair a panel. Heinrichs replied that they could, if they were a member of that panel. The intent of the suggestion made by France is that associate members could be full participants, though not have voting rights. Detrick reminded EXCOM that the policy was not intended to be exclusionary, but an attempt to limit the voting rights. Raleigh observed that being able to participate in discussions is what is important because it allows the participant to influence votes. Mutter suggested that this permitted Associate members to buy their way into influential positions. He added that, if observers are permitted to speak, some Associate members may not consider it really worth the money to participate at a higher level; this does not provide them with an incentive to work towards a Full membership.

**Attraction vs. Participation.** Mutter noted that ODP wants to attract new members, but not from the present complement of Full members. Associate membership, with scaled participation as a key element, is intended to bring in new members who are unlikely/unable to participate as Full members. "Associate membership", he declared, "is for members whose intellectual contribution is desired, but who cannot make the level of contribution, not for those who chose not participate at a higher level!" Orcutt pointed out that a shrinking budget results in shrinking opportunities and, at the same time, decreases the breadth of members on the EXCOM and other JOIDES panels. A more integrated program is needed if there is to be a scientific ocean drilling program beyond 2003. Orcutt said that he could see the need to limit the current participation but was worried that if participation was limited, then JOIDES would discourage participation in IODP. He noted that Associate membership becomes very attractive if participation on EXCOM is permitted. Heinrichs commented that it was important to retain the fundamental JOIDES structure and honor ODP's commitment to current members. He added that the structure of the future program will be different from the present JOIDES

structure, and what that will be is not yet known. Membership on EXCOM should be as planning needs dictate for ODP. The IWG is the vehicle for post-2003 planning.

Eldholm wondered if Orcutt's concerns could be allayed by inviting Associate members to participate in the IWG. Beirsdorf pointed out that all that is necessary for a country (or consortia) to participate is to simply write a letter of interest to the IWG. Mutter argued that what you need is to encourage scientific participation. Mutter said JOIDES is between a rock and a hard place and queried whether it is actually helpful to have 3 levels of Associate membership. "Associate 3", he added, "is almost too good!" Heinrichs disagreed, saying that he could see benefits to the gradations. Mével said that France has not yet decided at what level they can participate, so it is important for their continued involvement to have different levels available.

#### **Shipboard participation.**

Mutter asked if co-chiefs of ODP legs could be from defaulting nations. Detrick replied that being a co-chief is not restricted to Full members. Mutter expressed additional concern that the levels of participation in JOIDES committees/panels defined in the proposed policy did not provide sufficient incentive to encourage Associate members to upgrade to Full membership. Feary said that shipboard participation would be the real reason for increasing the level of membership. Feary noted that PACRIM, with 11/12 of a Full membership, does not participate fully. He added that the moment the consortium's level of contribution dropped, it was reflected in the shipboard participation. In fact, some scientists from the consortium scheduled to sail on legs were uninvited! Thus, the background section of this agenda item (Agenda Book, TAB 10, p.1) provoked a strong response within the PACRIM consortium. Although Canada has reduced its participation, Australia, Chinese Taipei and Korea, despite difficulty, have met their subscription commitments. For this reason, members of PACRIM felt that the proposed policy unduly and unjustly penalized them, and have suggested that Associate membership be considered separately from the issue of the shortfall of Full members.

**Defaulting Full Members.** Briden expressed concern regarding the issue of defaulting Full members. He said that the difficulty is that EXCOM may wish that they had established principles in the past. He expressed discomfort with extending the formula set up for Associate Membership to defaulting members. He wants to stick to historical precedents established in the past and to treat the shortfall from Full members as distinct from the Associate membership issue. He said that he preferred EXCOM, guided by certain principles, determine the consequence of the shortfalls of subscriptions. This would involve the degree to which the situation was beyond the direct control of the country (i.e. the fall of the Asian economy). He suggested that a Full member is a Full member! France is a Full member until proved otherwise. Leinen said that she supported Briden's suggestion to separate the two issues and to have principles clearly set forth on paper. This would permit countries to have explicit details of the consequences of an action, which they could then use to leverage their countries' funding agencies. Stoffa agreed with the need to separate exceptional cases and proposed that EXCOM deal with such cases by petition. Detrick agreed that the first issue is the proposed Associate

membership policy, and the second issue is what to do with a members whose level of contribution falls below the Full membership level.

**The role of Council.** Raleigh said that while he could see the point, he thought the matter was a Council issue. Detrick reminded EXCOM that JOIDES sets up the advisory structure. Heinrichs said that he would like EXCOM's advice. Heinrichs explained to EXCOM that ODP Council is a consultative body which can only accept a document that is acceptable to all participants of the Program. He noted that with respect to the Associate Membership policy, Council is seeking a recommendation from EXCOM. In 1995, Council accepted the Associate membership policy endorsed by EXCOM without modification. If this current policy is a suitable document, then Council will most likely also accept it without modification. Heinrichs further explained that the pre- and post-1995 practice regarding defaulting Full members involved a full discussion of the matter by the ODP Council. Council inquired if the member planned to return to Full membership, and requested an update on progress.

**Guidelines.** Heinrichs said that he personally felt that it would be useful for ODP Council to have some guidelines from EXCOM, noting that Briden had mentioned (1) the magnitude of the shortfall, and (2) willingness of the defaulting member to return to Full membership as two possible guiding principles. Eldholm said that defaulting members should be asked if they want to drop to Associate member level, or if the solution is being forced on them. They should have one year with the commitment to work towards returning to Full membership status. The consequence that the level of shipboard participation will drop to reflect the level of contribution when any member falls below Full level should also be explicitly stated. Piasias noted that the magnitude of the shortfall would need to be defined, otherwise there could be a case in which the level of contribution of the defaulting member fell below 2/3, but the member continued have the same privileges as a Full member, even though the member was contributing at less than a level 3 Associate member. Leinen noted that NSF can control the level of shipboard participation with the MOUs, and that this change would be reflected immediately. She suggested that one criterion should be that the magnitude is below Full, but above 2/3, and that the intent to work towards full membership should be the second criterion. Detrick suggested that a third criterion could be demonstrated progress towards achieving the goal of returning to Full membership. Heinrichs agreed. He said that Council had reviewed progress on a case by case basis in an informal way. While financial progress did not occur every year, there were demonstrated focused activities towards this end. Briden raised the issue of the tone of the policy. With respect to the Associate Membership policy, EXCOM wished to be encouraging in the tone. In this case, EXCOM does not want to encourage back-sliding by Full members so the tone should be deterrent. He noted that the current French issue was not under consideration here. The French situation had been resolved since France will pay (at maximum) 2/3 of a Full membership.

**Advice to JOI.** Moran said that she understood JOI's role with respect to the Associate membership issue is to (1) assist consortia in bringing their membership to the Full level, and (2) to develop consortia among the Associate members. She asked for comments.

Following a lively, lengthy discussion, EXCOM modified the wording of the Associate Membership Policy to clearly address entitlements corresponding to the three categories of Associate membership and observer status on JOIDES panels for Associate members, and to emphasize the policy as an incentive for countries to join ODP. In addition, the Framework for a policy regarding members whose contribution falls below the Full membership level, to between 2/3 and Full, emerged. EXCOM agreed that France and PACRIM represent two different situations. France will become an Associate 3. The status of PACRIM will remain the same as it has been in the recent past.

EXCOM Motion 98-2-7

EXCOM endorses the revised policy on Associate Membership levels with corresponding JOIDES panel representation as modified by EXCOM at this meeting, and recommends its adoption to ODP Council.

Proposed by Harrison; seconded by Leinen

14 in favor; one abstention (Mével - France); one absent (Nowell).

## ASSOCIATE MEMBERSHIP

Although a policy of full and equal participation remains a goal of ODP, this document identifies degrees of participation in the JOIDES Advisory Structure at reduced membership levels. Membership levels will consist of Full Members and three levels of Associate Membership. Each level has defined degrees of participation in the JOIDES Advisory Structure. Countries and consortia at all levels have the right to observer status on all JOIDES panels and committees, and can participate in their discussions at the discretion of the chair.

**Only Full Members of ODP (whether individual countries or consortia) have voting rights in the policy- and scientific-decision making for ODP (i.e. on EXCOM and SCICOM).** All other levels of membership do not include representation on EXCOM and SCICOM.

For the purposes of defining the Associate Member levels, the standing Panels and Committees within the JOIDES Advisory Structure are divided into three groups:

Group I (Highest level of advice on ODP science and policy)

EXCOM

SCICOM

Group II (Scientific advice)

ESSEP

ISSEP

Group III (Technical and operational advice)

SCIMP

SSP

TEDCOM

PPSP

**Privileges of Different Membership Levels**

**1. SHIPBOARD PARTICIPATION**

Shipboard participation will be directly proportional to the contribution.

**2. PARTICIPATION IN THE JOIDES ADVISORY STRUCTURE**

**Membership Level Contribution Privileges**

<b>Associate 3</b>	2/3	One member on all Panels of Groups II & III;
<b>Associate 2</b>	1/2	One member on one Panel from Group II; One member on two Panels from Group III;
<b>Associate 1</b>	1/6	One member on one Panel from Group II; One member on one Panel from Group III

**EXCOM Motion 98-2-8**

EXCOM urges the ODP Council to maintain the principle of full, equal international membership to the maximum extent. Recognizing that this has not always proved possible, the JOIDES Executive Committee agrees on the following rules for members that have been full contributors in the past, but who have reduced their contribution below the full subscription:

- (1) Shipboard participation will be in proportion to their contribution
- (2) Provided that they satisfy the following criteria, they will be permitted to retain their full privileges on committee and panel membership:
  - (a) Contribution must be equal to, or greater than, 5/6 of a full membership
  - (b) They must make a firm commitment to work towards full membership
  - (c) They must make significant progress towards achieving full membership each year. The Executive Committee will review the situation annually.
- (3) If these conditions are not met, then the member will be designated as an associate member of the appropriate category.

Proposed by Harrison; seconded by Prior.

14 in favor; one abstentions (Mével - France); one absent (Nowell).

## **8. SCICOM Report(TAB11)**

### **8.1 EXCOM Approval of the Four Year Ship Track for the *JOIDES Resolution* through FY'01.**

**SCICOM Motion 98-1-11:** In order to fulfill the objectives of the LRP and to respond to existing proposals, SCICOM established that the general ship track for the *JOIDES Resolution* will remain in the Indian and Pacific Oceans through FY'01. SCICOM anticipates that the ship will return to the Atlantic Ocean prior to the end of Phase III.

#### **EXCOM Motion 98-2-9**

EXCOM approves the general Four Year Ship Track for the *JOIDES Resolution* set by SCICOM at their March 1998 Meeting (SCICOM Motion 98-1- 11)

Proposed by Feary; seconded by Raleigh.

10 in favor; four abstentions (Pisias,Orcutt,Taira,and Eldholm - conflicted); two absent (Nowell and Harrison).

## **9. Management and Operations Reports(TAB 12)**

### **9.1 JOI**

#### **9.1.1 Leadership changes at JOI/ODP (new Director/new Assistant Director)**

Pisias welcomed Kate Moran, the new Director of the Ocean Drilling Program, and Frank Rack, the new Assistant Director (not present). He said that JOI is now staffed with personnel who have significant background in the science of the Program and Kate Moran possess an excellent understanding of industrial relationships. He thanked the staff at JOI and John Farrell, in particular, for their assistance during his tenure as Interim Director.

#### **EXCOM Consensus 98-2-10**

The JOIDES Executive Committee welcomes Dr. Kate Moran to her new position as Director of the Ocean Drilling Program at JOI. The future holds great opportunities for ODP as it celebrates its 30th Anniversary and looks forward to new scientific and managerial challenges. Scientifically, the future for ODP has never been brighter with potential new opportunities in understanding the role of fluids in the ocean lithosphere, the extent of the geobiosphere, the long-term history of climate on Earth, and the exploitation of ODP's technology in making global and regional observations at all spatial and temporal scales. We wish Kate our best as she accepts these new responsibilities.

Proposed by Orcutt; seconded by Prior.

One absent (Nowell)

#### **9.1.2 Update for the strategy for international participation in ODP (EXCOM Motion 98-1-7)**

JOI has not moved forward in updating this strategy (Appendix 5). However, China is now an Associate member of ODP and South Africa has submitted a proposal to join at

the level of 1/12. Recently, an expression of interest was received from Ireland. Two people from Ireland were invited to this EXCOM meeting, but they were unable to attend.

### **9.1.3 Update on progress towards mutually beneficial partnerships with industry.**

JOI has received a letter from the KDM Institute of Petroleum Exploration in India indicating their desire to purchase ship time on the JR. Piasis replied explaining that ODP does not sell ship time. He provided information about the Program and KDM have written back expressing an interest in joining ODP and inquiring about panels. Effort underway to interest Brazil in membership in ODP are continuing.

Moran endorsed SCICOM's approach to focus on technology and science saying that it would allow JOI to refine and target industry participation (Appendix 6). TAMU is focusing on deep water drilling requirements for industry in the areas of shallow water flow and pore pressure measurements.

### **Discussion**

Mével observed that oil industry companies compete against each other and asked how JOI envisioned collaborating with them. Moran responded that ODP must work with consortia that are defining the group industry problems. JOI will start looking for such **collaborative opportunities** for ODP in the Gulf of Mexico. Prior added that as the industry tries to work in new environments in the Gulf of Mexico, companies are cooperating initially. The old days of locking up the data are being overridden by the need to forge links with people who generate new information. The GEOFORUM consists of approximately 100 representatives from all the major oil companies, and oil service industry. ODP would like to participate in the GEOFORUM meeting in Houston. Leinen suggested that this was an area that should be taken seriously because it could put ODP in partnership with groups that possess tremendous resources. Moran said that because ODP has been doing deep water drilling for 30 years there is the opportunity to form partnerships with oil companies who are interested in exploring for hydrocarbons in deep water. Eldholm said that he thought that ODP was too passive and modest in this respect. Industry is now interested in this knowledge. He suggested that it would be beneficial for ODP to present their results and experience openly, without expectation of immediate financial contribution.

Beiersdorf asked about **TEDCOM's** role. Detrick replied that there may be a role for TEDCOM, but the industry/partnership initiative needs to come out of JOI. Humphris explained that TEDCOM's main role is to advise ODP on technology development, suggest projects for ODP to pursue, and to inform JOIDES on what is happening in industry. She added that there is a cross-over and said that TEDCOM has a role to play. Mutter asked if TEDCOM has been invited to participate before.

Detrick said that JOI was asked to pursue industry collaboration before by EXCOM, but Piasis was unable to do this because of time constraints. EXCOM would like to see a plan from JOI regarding partnerships with industry in January of 1999. Leinen said that, in the past, nothing really happened on different fronts until EXCOM gave the ODP Director a

plan, budget and time. She said there was enough time to open the door to Moran to permit her to develop a plan, evaluate the resources needed, and determine whether JOI also requires professional assistance in this area. Raleigh said that he would like to see a lot of thought go into this initiative. Mutter reiterated that **JOI needs resources, perhaps a full-time employee** (is a professional in the field of academic industry relations), to dedicate to the task.. Leinen said that this is the sense of what she was getting at. It is not what EXCOM should expect the ODP Director to do on the side. Leinen said that what EXCOM is hearing from Moran is that there is the need for her to hire someone for this endeavor.

#### **9.1.4 Gas Hydrates - ODP partnership possibilities (TAB 13)**

JOI has recently identified several opportunities for ODP to collaborate in gas hydrate research. Moran provided an update on the Gas Hydrates Bill and congressional hearing at which testimony from Admiral Watkins and selected PPG members was given (Appendix 7). JOI hopes to have NSF named in the mark-up of the bill expected in July. The US Department of Energy has developed a Gas Hydrates Program Plan. JOI solicited input from the ODP community because it is clear that ODP has had a important contribution to the understanding of gas hydrates. Discussions are ongoing between ODP and DOE.

The ODP Gas Hydrates PPG will meet in late June in College Station. JOI has received inquiries from India regarding gas hydrate exploration with the JR. Japan is also very interested in gas hydrates. Next year Japan will drill industry holes for gas hydrate exploration and there is one ODP Proposal (478) in the system with a Japanese lead proponent. The JNOC hopes to collaborate with ODP.

#### **Discussion**

At the AAPG meeting, Leg 164 was highlighted in ODP's display and Charlie Paull was there. Fox observed that in spite of the fact that the ODP booth was not well positioned, the gas hydrates exhibit drew people to the booth like iron filings to a magnet. They were interested in gas hydrates not only as a resource, but how the process contributes to our understanding of climate.

Mutter suggested that DOE could fund a leg. Piasias asked how the ODP community would feel if the facility was leased out to an exclusionary group. He asked whether there was a benefit for doing this for KDM in India. Mutter said that other opportunities for funding in addition to NSF should be pursued. Piasias added that ODP has a special day rate and Schumberger might get upset if JOIDES contracted out the vessel for a leg. Heinrichs noted that as the sponsor of the Program, NSF is putting in most of the funding. While NSF would not mind some additional funds coming in, they must be used to support activities that are consistent with the goals of the Program. Stoffa said this is similar to what was said before in Arizona. The issue is the timing and there needs to be a fast track planning process that will permit ODP to respond quickly to industry opportunities, otherwise the Program never responds. Moran observed that gas hydrates provide a promising opportunity for partnerships now. JOI will pursue them and include them in the development of the industry/partnership initiative. Detrick pointed

out that this kind of partnership would involve a very different style of organization and staffing of a leg. It should be made clear that ODP is not trying to sell ship time, but trying to promote technology development as goals for partnerships.

#### **9.1.5 Public Affairs Subcommittee update (TAB 14)**

- **30th Anniversary Plans**
- **Recent Port Calls**

Orcutt presented the report. Baker-Masson could not attend because she was in the late stage of her pregnancy (Appendix 8). The Public Affairs effort started two years ago and is progressing well despite a limited budget. He reviewed plans for the 30th anniversary of ocean drilling and upcoming port calls, and recounted the achievements of recent port calls.

Public Affairs mounted an ODP booth at the May 1998 AAPG meeting. Because of lack of visibility, it is recommended that the booth be moved from the non-profit division to the commercial section in future years. The primary industry interest was in gas hydrates. There was scant interest in the JANUS and logging displays. There will be an ODP booth at the ICP in Lisbon in August.

Public Affairs has collaborated with Canadian EXPO 98 officials and Robin Riddihough. to produce an interactive ODP video game that will be available at the Canadian pavilion. These may be used as promotional materials for the Year of the Ocean activities and at the AAPG booth next year.

Orcutt praised Baker-Masson, saying that she has done a good job and has developed a strategic plan to reach targeted groups.

#### **Discussion**

Detrick inquired how the interaction between the JOI and TAMU was working. Fox said it was working well. Baker-Masson and Woods determine ahead of time who will be responsible for which port call and then work with the on-site country team to prepare for them. Communications have not been as robust as they could have been at times in the past six months, but when you look at the results, it all looks very good. Beiersdorf commented that JOI was able to prepare a German translation of the recent ODP brochure with very short notice so that it was available in time for the EXCOM meeting. An article on paleoclimate in which ODP is featured has appeared in *Der Spiegel*.

### **9.2 ODP/TAMU Management Report (TAB 15)**

#### **9.2.1 Update on leg 179 operations.**

Fox declared Leg 179, which was beset by significant logistical nightmares, as the "Leg from Hell". He reviewed the entire saga of disasters starting with the failure of the Magna Shipping Company, engaged in January 1998, to transport essential equipment and supplies to Cape Town (Appendix 9). Two shipments were declared on the same bill of lading and ODP/TAMU received verbal confirmation that shipment was sent to Cape Town. In March, TAMU's representative couldn't find the material on dock in Cape

Town. Alas, El Niño winds in South Africa had led to bad weather conditions and disorganization at the docks. Even after the disorganization had been sorted out, TAMU's representative still couldn't locate the shipment, nor obtain verbal confirmation of the shipment being there!. This coincided with Easter Holidays, which closed the port for three days. On Tuesday, TAMU was informed by the shipping agent in South Africa that one of the two containers had not been put on the container vessel bound for Cape Town, and was instead bound for La Spezia, Italy on a vessel that left on April 8. Indeed, the Magna Shipping Company had loaded the shipment without a bill of lading in violation of all shipping practice. When the shipment arrived in La Spezia, it was broken into component parts and air freighted to Réunion island. ODP/TAMU contracted a French shipping company to send the essential components to the JR, and the rest was shipped to Darwin. Unfortunately, the weather conditions were such that the supply ship could not off load in the heavy seas. The bits for the hammer drill system were transferred to the JR by floating them across. TAMU is in discussion with lawyers to find a course of action. The Magma Shipping Company will be asked to reimburse TAMU by about \$200K. As a consequence, the multi-varied and multi-faceted planned program could not be satisfactorily carried out. While the hammer was tested, it was not possible to test the hammer casing system. The two ship experiment was not carried out and the strainmeter was not tested. The seismic while drilling experiment was done, and Leg 179 retrieved additional cores of gabbro that have added another dimension to Leg 176 (Hole 735B) results.

### **9.2.2 Major technology development in ODP Phase III**

- **Status of the active heave compensation System**

The Retsco Company was tasked to deliver the Active Heave Compensator based on a competitive bid system. A question arose regarding the rightful ownership of software to be used and so a hold was placed on the project in January of 1998. Retsco delayed responding to TAMU through the spring. The contract was subsequently rebid, and Mike Fredrichs has opened discussions with V Control Flow and Maritime Hydraulics (Appendix 10)

- **Hammer drilling system/Leg 179**

Details regarding the progress made on the hard rock reentry system can be found in Appendix 10. Due to the missing freight, a complete sea test of the hammer drilling system could not be carried out on Leg 179. It was possible to test the standard hammer, however, and the eccentric and concentric retractable bits. The casing running tool was not deployed. During the sea trials, gale force winds and heaves in excess of 4 meters were experienced creating excursions of weight-on-bit that resulted in major problems. Pounding of the hammer on the seafloor resulted in a cracked valve in the hammer, and bending stresses actually scored the hammer. The hammer was lost in the last hole. The retractable bits were not designed to withstand the excessive heaving and bending, and did not survive. TAMU's engineers believe that these problems would not have occurred if the JR had been fitted with the active heave compensator. In spite of the problems, a penetration rate of more than 4 meters per second (comparable to rates on land) was achieved with the hammer. Thus, the test demonstrated that the hammer works well, but design modifications are needed to make the valves and bits more robust. The

engineering changes required to address the problems are straightforward. TAMU will begin the assessment and redesign of the hammer drilling system this summer, and enter into discussions with SDS on a contractual agreement to proceed with this work. Modifications are expected by mid- fall. AMOCO has a test facility in Texas bottomed in granite which is now open to the public. TAMU will explore the possibility of a relationship with AMOCO that will allow them to test engineering developments at the site. Land tests will take place towards the end of this calendar year and then a short sea test will be considered, if it can be accommodated into the ship's schedule. By the end of March 1999, TAMU expects to have advanced the system to that level.

### **9.2.3 Update on industry cooperative opportunities/joint ventures.**

TAMU delivered a presentation about the hammer drilling system at a meeting of the DEA. Drilling Engineering Association, Project 114, involves offering HRRS test reports to participants of TAMU/industry partnership developed in conjunction with JOI. UNOCAL is a subscriber. EXXON, Mobil and ARCO have expressed interest (Appendix 10).

### **9.2.4 Update on dry-dock**

The tasks are outlined in the Agenda Book (TAB 15, p. 3) and Appendix 11. The total estimated cost of the dry-dock activities exceed the \$6 million dollars allocated by NSF. This is because all TAMU's estimates are conservative in that costs have been projected at the high end of the spectrum. The engineering specifications (worksopes) have been defined and bids have been received. Currency devaluations in the Asian area have affected this process to the benefit of ODL and TAMU as all the ports in the region are competitive. Initially only Singapore was a possibility.

### **Discussion**

In response to Mével's inquiry regarding potential sites for a second sea trial of the hammer drilling system, Fox identified Kerguelen as a possibility, although the weather constraint is great. TAMU prefers to tackle the hammer drilling heave problem after the active heave compensation has been developed and installed on the ship. Detrick asked if the money for the active heave is still available. Fox replied that there are funds carried forward from FY 97 commingled with some FY 1998 monies. In response to a query from Orcutt, Fox indicated that the NERO hole was completed to a depth of 80 meters into basement with the top 40 meters into basement cased. The hole was not logged because of time. Mével noted the absence of the microbiology lab from the list of dry-dock projects. Fox indicated that ODP has a van which can be outfitted to provide a modest facility initially. A more elaborate facility can be constructed later, perhaps with DOE funds, once the primary components have been satisfactorily identified.

### **9.3 Wireline Logging Service Report (TAB 16)**

Goldberg highlighted two additions to the report in the Agenda Book (Appendix 12). WLS has migrated all the historical conventional data for 277 holes and work has begun on migrating the FMS data. The WLS has lost Carlos Permez from their group at LDEO

and are advertising for a logging scientist at LDEO. This is a Post Doctoral or Associate Scientist position.

### **9.3.1 Technology Development and Innovations in ODP Phase III**

A summary of projects is found in Appendix 13. Some technology development will focus on addressing the heave situation on the ship. The TAP (Temperature and Acceleration Pressure Tool) will replace the Lamont temperature logging tool.

### **9.3.2 Update on industry cooperative opportunities/joint ventures**

The WLS was approached one year ago by AAPG regarding the compilation of an FMS Atlas. The WLS has contributed 15 to 320 images to the atlas, which will be available in print form or CD ROM next calendar year. Preliminary data from the SWD experiment, carried out on Leg 179 in collaboration with WHOI, indicate that the experiment was very successful.

### **9.3.3 Dry-Dock Plans (DHML)**

Dry dock plans include replacing the MAXIS unit with a modular PC-based data acquisition unit and upgrade of the existing space in the DHML.

### **Discussion**

Briden asked about the status of the French group. Goldberg said that there have not been any problems with the relocation or the personnel turnover. The process has proceeded without glitches. Detrick congratulated Goldberg and his group for getting all the historical conventional data for 277 holes up on line.

## **10. Discussion of the Terms of Reference for PEC V (TAB 17)**

Pisias said that the consensus at the January EXCOM meeting was not to conduct the standard PEC, but focus instead on how the Program is preparing for the future.

EXCOM Consensus 98-2-11

EXCOM endorses the charge to PEC V and recommends its adoption by JOI BoG.
--

One absent (Nowell)

**WEDNESDAY**

**June 24**

**8:30 am**

## **12. Planning for IODP**

### **12.1. EXCOM Letter to IWG and IWG reply (Detrick)**

Detrick referenced background in the Agenda Book and reviewed the request conveyed to JOIDES in a letter from the IWG. He outlined his response to the IWG. In April he received a reply from the IWG confirming that they understood the planning activities to be undertaken by JOI (JOIDES).

## **12.2 IODP Scientific and Technical Planning.**

### **12.2.1 1999 Conference on the Scientific Objectives of Ocean Drilling in the 21st Century (organizing committee and mandate) - response to EXCOM Consensus 98-1-12 (TAB 19).**

Humphris reviewed the diagram showing the proposed scientific and technical planning proposed by JOIDES, and approved by EXCOM in January 1998. At their March 1998 meeting, SCICOM set up the mechanism for planning the scientific conference. Letters and advertisements went out calling for brief proposals for post-2003 drilling objectives. SCICOM also set up an executive planning committee of 4 to 6 people who are responsible for issuing a call for abstracts, planning a venue and then inviting others to participate in an organizing committee. This organizing committee will determine the scope of the conference, organize the papers, invite speakers, integrate the final papers and compile the reports. The outcome will be instrumental in developing the RFP for the conceptual design of the second ship for post-2003 scientific ocean drilling. Co-Chairs are Asahiko Taira and Nick Piasias. A call for letters of interest by the first of September has gone out in EOS, GSA Today, Nature, Geotimes, and the JJ. In addition, the JOIDES Office sent the advertisement, along with a letter to every ODP office, and every member of the JOIDES advisory structure. The goal is to get a large number of extended abstracts. The ad was also distributed to a variety of international geoscience initiatives. The date of the conference (which does not yet have a name, but is referred to as the Conference on Ocean Drilling for the 21st Century) will be in late May at the University of British Columbia in Vancouver. The time does not conflict with spring AGU or Memorial Day. JOIDES has received about 15 letters of interest thus far.

### **Discussion**

Prior said that he saw no effort to embrace industry. He urged JOIDES to involve industry in the conference right upfront. Humphris said that she had made a point asking national offices to send her letter to appropriate industries in their countries and their journals. The letter was also distributed to PPSP with a similar request; the conference was advertised at the AAPG meeting. JOI is in the process of modifying the letter to send to the GEOFORUM Group and other similar entities. Leinen suggested including one or two industry members to the organizing committee. Prior said that more than just add-on members was necessary. He said that a message that welcomed industry participation and a mechanism to involve them was necessary. Raleigh concurred. Beirersdorf cautioned that it is important to select people from industry in a way that does not convey a feeling of favoritism to one or another group. Humphris welcomed this input.

### **12.2.2 Seismogenic Zone Detailed Planning Group - response to EXCOM Consensus 98-1-13 (TAB 20)**

In considering planning for drilling the seismogenic zone with a riser drilling vessel, SCICOM recognized that, even though this may be five years off, much site survey work is required. SCICOM felt that there was not sufficient time to put out a major call for ODP preliminary proposals and determined that what was needed instead was to plan an

experiment and simultaneously determine what preliminary work is needed. There are constraints: (1) the experiment needs to be near Japan since it will take place on the first leg of drilling (shake -down) using the new Japanese riser vessel; and (2) the target must be in water depths no greater than in 2500 meters. SCICOM set up a Detailed Planning Group (mandate in the Agenda Book, TAB 20) with core membership of four people who have conducted business by email thus far. The call for Letters of Intent was widely advertised and sent to national community offices. In August, SCICOM will consider the response to this solicitation in order to finalize the DPG membership

### **Discussion**

Eldholm expressed concern about properly identifying the survey requirements for deep drill holes. He noted that the gap between industry and academic capabilities is widening, and inquired whether this aspect is being adequately considered in the planning. He reiterated that there is a need to document industry capability. Humphris responded that this issue has been identified as a real need by SSP. She mentioned the jointly sponsored NSF/JAMSTEC Ewing Cruise (Late summer of 1999) to collect 3-D seismics at the Nankai Trough and indicated that the approach towards data collection is new and different.

### **12.2.3 Technical and Operations Workshop (fall of 1998) to provide advice on the technical requirements and infra- structure of IODP - response to EXCOM Consensus 98-1-13 (TAB 20)**

The goal of a technical and operational planning workshop to take place in the fall of 1998 is to begin to identify the technical and operational issues pertaining to post-2003 drilling. The effort to compile a list of participants is underway. Humphris said she was soliciting participation from PPSP and TEDCOM. In addition, experts at Petrobras have been identified. In Japan, a number planning groups for OD-21 have already been established, one of which is for technical planning. Kensaku Tamaki and Shinichi Takagawa have been identified as liaisons to JOIDES. One possible venue is Houston since industry participation may be enhanced if the meeting is held there. Tokyo has also been suggested, but post-2003 planning meetings have already been held there. Another possibility is to hold the meeting in Rio, Brazil in conjunction with the meeting of the AAPG at which there will be a special session on deep drilling.

### **Discussion**

Beiersdorf recommended involving the KTB representatives. Eldholm noted that the International Lithosphere Group will sponsor an expanded workshop (Chaired by M. Talwani) at the University of Bergen either late in 1998 or in the Spring of 1999. A lot of industry participation is expected. Humphris pointed out to EXCOM that JOIDES assistance with IODP planning is proceeding as requested by the IWG although sources of funding to support these efforts have not yet been identified. Piasis noted that ads alone for the conference and seismogenic DPG call for papers have cost about \$10,000. In addition, coordinators for the meeting have not yet been identified. The cost of the fall technical meeting is expected to be about \$50 K. Detrick indicated that he had raised this issue in his most recent letter to the IWG, but had received no response.

### **12.3 Status of Japanese planning for IODP**

Maryuyama showed the overhead of the plans and time table for Japanese efforts in moving towards post-2003 scientific ocean drilling (Appendix 14). Strong international commitment is very important in helping Japan to move forward with the implementation of plans. Last summer (1997) the Prime Minister of Japan designated OD-21 as the first "big science " project to be undertaken in the current fiscal climate. Consequently, it is imperative for Japan to complete the necessary preparations before the next assessment in August 1998. Although the budgetary situation is volatile with the value of the yen changing relative to the US dollar, Japan is looking to science and technology to revitalize the economy. These trends will continue for awhile so they need to be carefully monitored. This the Year of the Ocean so Japan (STA/JAMSTEC) is trying to increase public awareness and have produced a brochure in English and Japanese (Appendix 14).

### **Discussion**

Humphris asked for clarification regarding preparations before the next assessment in August 1998. Maruyama said that they are now working on an evaluation, then will submit a budget and an updated proposal. The assessment occurs first in August and then immediately after the proposal is submitted. If accepted, negotiations leading to the issuance of a contract for the construction of a ship will commence. Whether the proposal has been accepted or not will be known in December.

### **12.4 Joint ODP/JAMSTEC technology development project (EXCOM Motion 98-1-11)**

Kinoshita reported that JAMSTEC was awarded a supplementary budget of \$20 to \$25 million dollars this year to outfit their geophysical vessels with a multi-beam system and to add huge air guns to shoot consecutively. Starting in 1990, the JAMSTEC budget has increased incrementally to develop technology of benefit to ODP. In sum, \$40 to 50 million dollars have been awarded to develop three kinds of tools to benefit OD 21 and ODP. ORI has also received a supplemental budget of \$6 million for the Haiku Mahru to upgrade its site survey capabilities. JAMSTEC needs assistance from those working for a long time in the field (ODP/TAMU and the drilling industry) to develop the coring and reentry systems. He reported that recent operations to test the Japanese reentry system had been successful. Kinoshita expressed his gratitude to Fox for TAMU's help. He added that JAMSTEC is forging a formal collaboration with ODP/TAMU for joint technology development.

Taira presented the JAMSTEC supplemental budget for development of the Sub-Sea Floor Prototype System (Appendix 15) and explained the nature of the joint technology cooperative agreement between JOI (ODP/TAMU) and JAMSTEC. The Sub-Sea Floor Prototype System will be developed, modified and tested on the JR, and then be available for deployment on the Japanese vessel for IODP. If all goes well, Japan is on target to start new operations by mid-2000. He reviewed the timetable for planning and construction of the riser vessel. Again, if all goes well, the basic design of the drill ship will be approved

next year and construction will start in the year 2000. This will provide 3 years lead to sea trails in 2003, which corresponds with the end ODP.

### **Discussion**

Orcutt asked if the MOU between JOI and JAMSTEC had been signed. Pias said that it was in its final stages and that he expected it be done by the end of the week. The MOU establishes the structure under which JOI and JAMSTEC will operate and notes the activities that will be done. Beiersdorf asked how this related to the JOIDES structure. Pias said that the MOU does not mention the JOIDES structure; however, any activity incorporated into the ODP Program Plan must be approved by EXCOM (JOIDES). Humphris pointed out that TEDCOM had endorsed this joint development effort between JAMSTEC and ODP/TAMU, thus the JOIDES structure was involved in the initial development of the agreement.

#### **EXCOM Consensus 98-2-12**

EXCOM notes with satisfaction all efforts by Japanese authorities to advance the future of the Ocean Drilling Program, in particular by budgeting for related projects on the development of core sampling systems, development of long-term monitoring systems for legacy holes, and for the development of advanced site survey technology for characterizing the seismogenic zone near Japan.

EXCOM also welcomes the MOU between JOI and JAMSTEC for close cooperation in studying the most favorable manner for ocean drilling operations and in developing borehole measurements and bit technologies. We encourage both organizations to implement the terms of this MOU.

Proposed by Raleigh; seconded by Briden.

One absent (Nowell)

### **12.5 Financial planning for IODP**

Purdy listed the IWG members and explained that only those countries that have submitted formal letters of interest are members (Appendix 16). The IWG is planning for a Program, based on the 1996 ODP LRP, with two ships. The projected operational cost ranges between \$130 and \$150 million. More work is required to refine these estimates and this will be an ongoing effort. A key component of the proposed post-2003 program is that Japan and US will contribute at equal levels. He showed a pie diagram cost sharing model (Appendix 16) and said that the ideal situation would be for a 1/3/1/3/1/3 cost-sharing arrangement with the US and Japan each contributing at a one third level. There would be no objection whatsoever if a consortium of other member nations contributed more than one third. Another scenario envisaged, however, is a cost sharing arrangement with the other member nations contributing at the same level as they are at the present time. This would kick the US involvement to a scary number, but NSF is willing to fight for this. Purdy noted the market concerns, saying that it is hard to predict what the cost of drilling will be in 2003. The IWG is pleased with the progress that Humphris and SCICOM have made. An important target date in the US is November 1998. At this time, NSF will go before the National Science Board and bite

the bullet to reveal plans on how they will go forward with scientific ocean drilling. By this time, NSF will have a new Director in place.

### **Discussion**

Stoffa asked what the estimated \$130-150 million included. Purdy replied that this was just for drilling operations and can be considered equivalent to the current \$45 million figure that currently runs the drilling program.

## **13. Future Meetings and Other Business**

### **13.1 US - Miami (January 13-14, 1999)**

The next EXCOM meeting will take place in Miami, Florida, January 13 and 14, and will be hosted by Chris Harrison. Harrison promised to organize a one and half day field trip that would allow him to strand the grumpy EXCOM members on a desert island. There will be no castles!

### **13.2 Australia.**

The summer 1999 EXCOM meeting will be in Sydney, Australia during the week of June 29-30. ODP Council and IWG meetings will be held on July 1; JOI BoG will meet on the afternoon of June 30 and/or the morning of July 1, depending on the length of the EXCOM agenda. An optional field trip may be scheduled for Monday June 28.

### **13.3 Other Business**

#### **EXCOM Consensus 98-2-13**

The JOIDES Executive Committee thanks Professor Nick Piasias for his extraordinary and selfless service to the Ocean Drilling Program. Over the past six months, Nick has provided a steady hand at the helm, instituted a refreshing openness and spirit of team leadership that helped the Program successfully navigate this transitional period. We appreciate the personal sacrifice he made in undertaking this job, which has entailed numerous transcontinental flights, and long periods away from home and soccer games. We wish Nick great success and happiness in his return to Oregon State University and his research, and welcome his future leadership in ODP.

Proposed by Orcutt; seconded by Beiersdorf.

One absent (Nowell).

#### **EXCOM Consensus 98-2-14**

The Executive Committee thanks Bob Detrick for his leadership of JOIDES during the past two years. He has given himself selflessly to the promotion of ocean drilling and done an excellent job of leading the Program through challenging times. Although his national and international travel has been demanding, he has continued always in good humor his leadership task. The Program, thanks to Bob, stands poised for an exciting Phase IV in the next millennium, We wish him great success on his future scientific endeavors and his leadership of the oceanographic scientific community.

Proposed by Orcutt; seconded by Leinen.  
One absent (Nowell).

Detrick expressed his appreciation, and that of EXCOM, to the JOIDES Office at Woods Hole - Susan, Christina and Shirley, and particularly to Kathy who has been the liaison from the JOIDES Office to EXCOM. The next EXCOM meeting will be chaired by Helmut Beiersdorf.

Detrick noted that Mr. Maruyama is moving to a new position. He has been instrumental in moving ODP/OD-21 activities forward for which EXCOM wishes to express its appreciation and to wish him success.

Detrick thanked Deitrich Maronde and to DFG for hosting a well organized meeting, and arranging an enjoyable field trip.

**Meeting Adjourned**