Spring 2000 Joint Meeting of the Scientific Steering and Evaluation Panels for the Dynamics of Earth’s Interior and Earth’s Environment

May 8-10, 2000, Cambridge, United Kingdom

May 8, Department of Earth Sciences, Downing Street, Cambridge University, Cambridge, CB2 3EQ England, United Kingdom

8:30 ISSEP Chair Julie Morris and ESSEP Chair Neil Lundberg opened the Seventh Joint Meeting of the Scientific Steering and Evaluation Panel for the dynamics of Earth's Interior and Earth's Environment, welcoming especially new members and guests. After introduction of panel members, liaisons, and guests, the meeting host, Mike Bickle, offered some information on local logistics of the meeting. The panel thanked the meeting hosts for organizing a pre-meeting outing on the River Cam, and Mike Bickle and Miss Margaret Johnston, Cambridge Department Administrator, for organizing and hosting the meeting. Juergen Thurow then offered logistical information on the post-meeting field trip, to visit classic fossil-hunting localities of the Devon coast on May 10-12.

JOIDES Office Report: Bill Hay and Warner Brueckmann

Warner Brueckmann reviewed proposal statistics. A healthy number of new and revised proposals were received, as SSEP members are aware. These included 9 pre-proposals, several proposals submitted as full new proposals and 16 full proposals . Roughly 40% of proposals were submitted in electronic format, as pdf files. This is being encouraged. Warner asked the SSEPs to consider receiving proposals electronically, as .pdf files.

Bill Hay reported on several issues from the OPCOM/ EXCOM meeting in February. One issue involves highlighting exciting drilling results to EXCOM. Because there is mounting pressure to do some sort of cost/benefit analysis, it is important to be able to point to exciting science that has resulted from ocean drilling. It is generally not as productive to discuss the most recent legs, because often the more exciting results come after post-cruise analysis of cores and data. Bill reported to EXCOM about recent papers published in Science and Nature, but found that often attributions to the ODP were to be found only in figure captions, if present at all. Many people apparently view the ODP as a given, rather than a program that needs to be supported. Bill asked members of the SSEPs and guests for ideas of recent papers publishing exciting scientific results from the program, in order to expand the database beyond Science and Nature, and to encompass the diversity of exciting science. Of 10 recent articles Bill had found, 9 were in paleoclimatology and 1 was in paleomagnetics, but none were, for example, in ocean crust, petrology, or tectonics.

Bill Hay then reported several motions and actions from the EXCOM meeting:
1. A transition plan to the new program was referred to JOI.
2. A problem was raised regarding the need for a quorum at the next SCICOM meeting. Many SCICOM members, as elsewhere in the ODP Advisory Structure, are conflicted as proponents of proposals to be considered. EXCOM decided that conflicted SCICOM members can not vote in the ranking of any proposals. The expectation is that alternates, who are not conflicted and so can vote, will be invited to attend the meeting by ODP member nations and consortia. As an example, USSAC has been working on finding alternates for US members of SciCom. The worst-case scenario is that SCICOM cannot conduct the ranking necessary to schedule the next year’s drilling. Losing a country’s or consortium’s vote is also probable, in the absence of a non-conflicted representative.
3. A SCICOM motion approved by EXCOM clarifies that PPG Chairs will attend SSEP meetings if invited by the SSEP chairs.
4. A Science Symposium was well received by EXCOM. Ken Miller spoke on progress on sea-level changes; Steve d’Hondt reported on geobiocycles; Nils Holm on geochemistry, including implications for life on Mars; Alastair Robertson spoke on recent advances in tectonics; and Mike Coffin spoke on advances in deep seismic studies. This was the first time such a symposium had been held, and was seen as a good opportunity to present scientific results directly to EXCOM.
Julie Morris asked Bill to comment on the number of drilling legs that SCICOM might plan to schedule at their August 2000 meeting. Bill answered that there has been a tradition to schedule more than will fit into a year, in order to provide flexibility in the ship schedule, including financial issues. The answer is probably 4 or possibly 5, out of perhaps 8 remaining legs in the current program.

Regarding areas of operation, SCICOM passed a resolution that the JOIDES Resolution will operate in the Atlantic in some portion of the year 2002. Beyond this, there are no constraints, and the areas of operation for the remainder of the program will be directed by proposal pressure.

**SCICOM Report**

Nils Holm reviewed actions taken by SCICOM at the joint EXCOM/OPCOM/SCICOM/PANCH Meeting in February. He reviewed steps being taken to address communication problems in the advisory structure. SCICOM minutes will include comments on proposals, but without attribution. The SCICOM watchdogs will write the letters that go to proponents, and pass them around SCICOM for general review. In future, minutes from the August SCICOM scheduling meeting will be published as soon as possible, and before the SSEP meeting in November.

Nils also reported on several changes in the current science plan.
1. Scientists directing Leg 190 had asked for a re-prioritization of drilling objectives, with new sites based on the new 3-D seismic results. The SSEPs were not notified, and SCICOM recognized that they should have been consulted, as the new sites are in a different region of the prism, with potentially different scientific implications.
2. Scientists planning the Ontong Java leg, based on a recalculation of transit time, requested 8 more days. They were given about 3 days.
3. The timing for several legs was shifted in order to delay drilling Hydrate Ridge until the next fiscal year, in order to remain within budget for the current year. This shifts Hydrate Ridge drilling into a less optimal weather window.
4. Leg 197 may be redesigned such that the ship may bypass Dutch Harbor as a port call.

Roy Hyndman presented a final report of the Seismogenic Zone DPG, and reports were presented by Chairs or representatives of the Architecture of Ocean Lithosphere, Climate-Tectonics Links, Gas Hydrates, and Deep Biosphere PPGs. An Ad hoc committee for oversight of deep biosphere issues, created at this meeting, was later judged to have been created prematurely, prior to submittal of the final report of the Deep Biosphere PPG.

Tool development: A SCICOM motion defined a timeline for development of the Advanced CORK system.

Another SCICOM motion states that the active proposals in the current program, along with their evaluations, will go forward to the new IODP to form part of the basis of the new drilling program.

Bill Hay reported on a well-received public symposium held at the Canadian Embassy, with presentations from Ted Moore and John Armentrout on the future of ocean drilling and potential interaction between industry and the new drilling program. The form of such interaction has not yet been defined.

**JOI Report: John Farrell**

John Farrell provided a broad review of the current ODP structure and where the SSEPs fit. He outlined recent changes in JOI, with a chronology, including the establishment of the JOI Board of Governors Management Oversight Committee (MOC) to help oversee the program during the transition. John Orcutt is leading the effort on the transition plan. Admiral Watkins has announced his retirement. JOI and CORE have been split into 2 corporations. JOI will have a separate President; an advertisement has been published.

John reviewed the MOC members and mandate, and outlined what is known of the ODP/IODP Transition Plan. He presented the FY2000 drilling legs on a global map; and then showed the 2001 map, with the
switch of legs 198 and 199 discussed earlier. He also showed the FY2001 ODP Plan, and discussed how the schedule is finalized, as well as other financial aspects of the Program.

John then commented on External Reviews of ODP proposals. JOI has the responsibility for obtaining the external reviews, to ensure anonymity and long-term continuity in the face of 2-year rotations of the JOIDES office.

Other comments: a JOI-USSAC Newsletter is published 3 times per year. JOI, in support of the new IODP, has set up a new support office, to support the International Working Group (IWG), a group of funding agencies of countries potentially interested in the new drilling program, and the IODP Planning Subcommittee (IPSC). The new support office is funded by STA (Japan) and NSF (US).

**ODP-TAMU Report: Jeff Fox**

Jeff Fox reviewed the Dry Dock activities in 1999, some of which were mandated by contractual agreement, and others taken to improve the capabilities of the JOIDES Resolution. ODP-related tasks were funded by co-mingled funds. A new Automated Station-Keeping System (ASK) should improve handling in hostile weather and reduce the minimum water depth capabilities of the ship. Now the ship has a 75m limit; this may be changed to 50m soon. A new breathing system allows cores with hydrogen sulfide to be handled without SCUBA-type gear.

ODP projects include changes in the lab stack, including permanent installation of the microbiology lab, a renovated downhole telemetry lab, a new downhole measurements lab, a new conference room for the science party, and a loading platform for scientific equipment. Active Heave Compensation has improved decoupling of the bit from ship heave during drilling under mild sea conditions, although it is unclear as yet what effect this will have ultimately on core quality. A new Rig instrumentation System allows a digital record of current drilling conditions to be viewed anywhere on the ship, in real time. Remaining projects include testing shallow-water capabilities of the ship; moving the microbiology lab; fine-tuning core handling; training the B crew on the use of the Active Heave Compensation; and testing Heave Compensation.

John Farrell asked about the 50m water depth limit. Jeff said that this depends on a successful testing of the new ASK system. Initial estimates suggested a 30m drilling limit, and the limit may improve to less than 50m. Testing has not yet been scheduled.

Mike Bickle asked the status of the XRD. It was left where it was. A smaller, newer unit will be considered if funding appears for it.

Juergen Thurow asked whether the heave compensation system has been tested on chert-chalk sequences. Jeff replied that this type of sediment has not been encountered since the system was installed. Dick Norris asked whether there had been an improvement in core quality, especially in the ooze-chalk transition. Jeff replied that this is not yet clear. The system was designed and installed because it makes intuitive sense; in industry, both quantity and quality improved dramatically. Leg 189 saw 99% recovery even using the worst case conditions. Heave compensation system is limited by the magnitude and rate of heave; if heave is 15-25 feet, at over 4 feet/sec, active heave compensation cannot be used.

**NSF Report: Bruce Malfait**

Bruce Malfait briefly reviewed the funding structure for the new panel members. He gave a summary of the current members of the program and the funding level (US $46.1M for FY2000 and a target of the same for FY2001), and reported that there are no active negotiations with new partners. NSF has reviewed and extended US science support through 2006, with the last three years for winding down ODP. NSF is clearly looking at supporting programs that will not be drilled until the new program.

Bruce then reviewed planning for the new IODP. He reviewed IWG activities, including review of the Science Plan and basic principles under which the new program will be operating. NSF and STA of Japan
are meeting regularly to develop some of these basic principles. The IODP will begin Oct. 1, 2003, with a "seamless" transition from ODP, with the date to begin drilling using the riserless vessel depending on how it is capitalized. STA/JAMSTEC have let the contract for the riser ship, at roughly US $500M.

Julie Morris asked about the timeline for the riserless ship. Bruce responded that the RFP for the new drill ship, and a funding decision for an official commitment is anticipated in late 2001 or early 2002.

Harold Tobin asked about the potential impact of EarthScope. Bruce answered that this is probably positive, in that it refocuses NSF on Earth Sciences in general, including use of drilling, and on traditional types of science. It is not seen as competitive to IODP.

**IPSC Report: Ted Moore**

Ted Moore reported on progress of the IODP Planning Subcommittee (IPSC), charged with the simple task of planning the new program. He reviewed all the work that has been done to produce the current Science Plan, which is available for review at iodp.org/ipsc. Opinions are sought from SSEP members and guests. The current Science Advisory Structure is viewed as a good structure, one that needs little work and is satisfactorily driven by proposal pressure. IPSC feels that PPG’s and DPG’s are very important, and sees a DPG as probably necessary for every riser hole. Ted also spoke of potential Industry-IODP links, with issues at several levels: the professional level, with companies; the grassroots level, with individuals involved in cooperative proposals, like several proposals that have come out of the recent workshop in Houston; and the government level, with taxes on industry possibly funding scientific drilling.

**JOI BoG Changes: Neil Lundberg and Julie Morris**

Neil Lundberg reviewed responses by SSEP members to the recent actions of the JOI Board of Governors in requesting Kate Moran to resign as Director of ODP. Charlie Paull suggested a motion to be considered by the SSEPs in this regard. All interested parties were encouraged to speak with Charlie over the course of the meeting, for resolution on the final day of the meeting.

**10:45-17:00 Separate ISSEP (Room 2) and ESSEP (Room 3) Meetings to Review Proposals**

The SSEP chairs reviewed the conflict of interest rules prior to the start of proposal reviews. Proponents are excluded, as are those having active projects closely related to the projects proposed. For Ancillary Program Letters (APL), nominated co-chiefs must recuse themselves. SSEP members at the same institutions as a proponent and/or participating in a project directly related to a proposal must identify themselves to the SSEP chairs prior to review discussions.

During the meetings (May 8-10), the SSEPs considered the following proposals:

<table>
<thead>
<tr>
<th>Proposal</th>
<th>Title Code</th>
<th>Contact</th>
<th>Panel</th>
</tr>
</thead>
<tbody>
<tr>
<td>482-Full3</td>
<td>Wilkes Land Margin</td>
<td>Escutia</td>
<td>E</td>
</tr>
<tr>
<td>504-Add</td>
<td>NARM Deep Hole</td>
<td>Tucholke</td>
<td>I/E</td>
</tr>
<tr>
<td>505-Add</td>
<td>Mariana Convergent</td>
<td>Fryer</td>
<td>I/E</td>
</tr>
<tr>
<td>515-Full</td>
<td>Black Sea Climate</td>
<td>Flood</td>
<td>E/I</td>
</tr>
<tr>
<td>547-Full2</td>
<td>Oceanic Deep Biosphere</td>
<td>Fisk</td>
<td>J</td>
</tr>
<tr>
<td>548-Full</td>
<td>Chicxulub K-T Impact</td>
<td>Morgan</td>
<td>E/I</td>
</tr>
<tr>
<td>552-Full2</td>
<td>Bengal Fan</td>
<td>France-Lanord</td>
<td>E/I</td>
</tr>
<tr>
<td>553-Add2</td>
<td>Cascadia Hydrates</td>
<td>Hyndman</td>
<td>E/I</td>
</tr>
<tr>
<td>554-Full3</td>
<td>GOM Gas Hydrates</td>
<td>Kennicutt</td>
<td>E/I</td>
</tr>
<tr>
<td>557-Full</td>
<td>Storegga Slide Hydrate</td>
<td>Andreassen</td>
<td>E/I</td>
</tr>
<tr>
<td>561-Full3</td>
<td>Caribbean LIP</td>
<td>Duncan</td>
<td>I/E</td>
</tr>
<tr>
<td>569-Add</td>
<td>CO2 Sequestration</td>
<td>Goldberg</td>
<td>I/E</td>
</tr>
<tr>
<td>572-Full</td>
<td>N Atlantic Climate</td>
<td>Channell</td>
<td>E/I</td>
</tr>
<tr>
<td>573-Full</td>
<td>Carbonate Mounds</td>
<td>Henriet</td>
<td>E/I</td>
</tr>
</tbody>
</table>
Final decisions on these proposals are summarized in Attachment A.

In addition, External Reviews and Proponent Response Letters were considered for the following proposals:

<table>
<thead>
<tr>
<th>Prop. No</th>
<th>Title Code</th>
<th>Contact</th>
<th>SSEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>512-Full 2</td>
<td>Core Complex</td>
<td>Blackman</td>
<td>I</td>
</tr>
<tr>
<td>514-Full4</td>
<td>Maldive Sea Level</td>
<td>Droxler</td>
<td>E/I</td>
</tr>
<tr>
<td>*519-Full</td>
<td>Tahiti Sea Level</td>
<td>Camoin</td>
<td>E</td>
</tr>
<tr>
<td>*520-Full2</td>
<td>Kyushu Palau Ridge</td>
<td>Ohara</td>
<td>I</td>
</tr>
<tr>
<td>522-Full 2</td>
<td>Fast Deep Crust</td>
<td>Wilson</td>
<td>I</td>
</tr>
<tr>
<td>533-Full2</td>
<td>Arctic Ocean</td>
<td>Blackman</td>
<td>E/I</td>
</tr>
<tr>
<td>537-Full 3</td>
<td>Proto-seismic zone</td>
<td>Von Huene</td>
<td>I/E</td>
</tr>
<tr>
<td>539-Full2</td>
<td>Blake Ridge</td>
<td>Holbrook</td>
<td>E/I</td>
</tr>
<tr>
<td>544-Full2</td>
<td>Subduction Zone</td>
<td>Silver</td>
<td>I/E</td>
</tr>
<tr>
<td>545-Full2</td>
<td>Juan de Fuca</td>
<td>Fisher</td>
<td>I/E</td>
</tr>
<tr>
<td>551-Full</td>
<td>Hess Deep</td>
<td>Gillis</td>
<td>I</td>
</tr>
<tr>
<td>555-Full2</td>
<td>Cretan margin</td>
<td>Kopf</td>
<td>I/E</td>
</tr>
<tr>
<td>*559-Full</td>
<td>Walvis Climate</td>
<td>Zachos</td>
<td>E</td>
</tr>
<tr>
<td>*560-Full</td>
<td>Return to Woodlark</td>
<td>Taylor</td>
<td>I</td>
</tr>
<tr>
<td>564-Full</td>
<td>New Jersey Shelf</td>
<td>Miller</td>
<td>E</td>
</tr>
<tr>
<td>566-Full2</td>
<td>Nankai Hydrate</td>
<td>Matusumoto</td>
<td>E/I</td>
</tr>
<tr>
<td>570-Full</td>
<td>Axis East Pac. Rise</td>
<td>Batiza</td>
<td>I</td>
</tr>
<tr>
<td>571-Full</td>
<td>Peru Deep Biosphere</td>
<td>D’Hondt</td>
<td>E/I</td>
</tr>
<tr>
<td>577-Full</td>
<td>Demerara Rise</td>
<td>Wilson</td>
<td>E</td>
</tr>
</tbody>
</table>

* External Reviews and PLRs discussed at Nov. 99 meeting, need to be grouped at Cambridge meeting.

20:00 to 23:00 Meetings of Joint SSEP Review Working Groups, Rooms 1-5, Department of Earth Sciences, Downing Street, Cambridge University.
The following Joint ISSEP/ESSEP Review Working Groups were established by the SSEP chairs to coordinate review of proposals in the areas of (1) Gas Hydrates and the Deep Biosphere; (2) Fluids in the Near-Surface; and (3) Climate-Tectonics Links. An ISSEP-only Working Group was also established by the ISSEP chair to provide coordinated evaluation and establish relative priorities of mantle and ocean crust proposals returned from external review on (4) Mantle and Ocean Crust. Working group members were instructed to deal with conflicts of interest by first discussing jointly all those proposals for which there were no conflicts, and then discussing those proposals for which there is a conflict with the conflicted person out of the room.

**Joint Review Working Group on Deep Biosphere Zone and Gas Hydrates.**
These two groups met jointly to discuss the microbial aspects of gas hydrate proposals, then separated to discuss proposals, or aspects thereof, that are strictly deep biosphere (DB) or gas hydrates (GH).

Attending:
Paul Baker
Hans Brumsack
John Hayes
Debbie Kelley*
Charlie Paull (conflict with 557)
Ingo Pecher
* Working Group Leader

New/revised proposals considered: 547-Full-2 (DB), 553-Add2 (GH/DB), 554-Full3 (GH/DB), 557-Full (GH/DB) 573-Full (DB), and 584-Full (DB).
Reviewed proposals considered as time permitted: 539-Full2 (GH/DB), 555-Full2 (DB), 566-Full2 (GH/DB), and 571-Full (DB).

**Joint Review Working Group on Fluids in the Near-Surface.**

Members:
Barbara Bekins*
Mike Bickle (conflict with 584)
Mike Mottl (conflict with 545)
Liz Screaton
Harold Tobin
Guest: Craig Manning
* Working Group Leader

New/revised proposals considered: 505-Add, 569-Add, 580-Full, 584-Full, 589-Full, and APL-11.
Reviewed proposals considered as time permitted: 537-Full3, 544-Full2, 551-Full, and 545-Full2.

**Joint Review Working Group on Climate-Tectonic Links.**

Members:
Chris Charles
Randy Forsythe*
Don Fisher
Dave Hodell
Chris Small
Juergen Thurow
K.Y. Wei
* Working Group Leader

New/revised proposals considered: 515-Full, 552-Full2, 578-Pre, 585-Pre, and 588-Pre.
Reviewed proposal considered as time permitted: 533-Full2.
ISSEP Review Working Group on Mantle and Ocean Crust.

Members:
Mike Bickle (conflict with 584)
Colin Devey
Bernie Housen
Teruaki Ishii
Benoit Ildefonse*
Piera Spadea
Dave Vanko (conflict with 584)
* Working Group Leader

Reviewed proposals considered: 512-Full2, 522-Full 2, 545 Full 2, 551Full, and 570 Full;
New: 561-Full2 and 584-Full.
At SCICOM: 525 Peridotite (a top ranked proposal); 535= Indian Ocean gabbros at 735 Deep

All working groups engendered considerable discussion, with refreshments graciously provided by the Department of Earth Sciences of Cambridge University. The SSEP chairs thanked everyone for their patience, with the meetings concluding at approximately 23:00.

Tuesday, May 9, 2000

8:30-12:30 Joint SSEP Meeting (Room 2)

Discussion of Joint Proposals: Review Working Group Leaders

After another review of the conflict of interest rules, the following Review Working Groups Leaders provided a brief summary of the groups’ discussions and final recommendations regarding the proposals considered:

Gas Hydrates and Deep Biosphere: Debbie Kelley
Fluids in the Near-surface: Barbara Bekins
Climate-Tectonics Links: Randy Forsythe

ISSEP and ESSEP then discussed together the externally reviewed proposals of joint panel interest.

13:30 to 16:15 Separate ESSEP (Room 3) and ISSEP (Room 2) meetings to complete discussions of externally reviewed proposals, discuss priorities, and discuss “grouping” of proposals. Balloting for grouping to be done individually overnight, with results to be tallied on the following morning.

16:30 Ocean Drilling Program Open Science Forum

An Open Science Forum was held in Room 6 (Tilley Lecture Theatre), Downing Hall, Cambridge University, and sponsored by the UK ODP Committee, Cambridge University and ODP Science Steering and Evaluation Panels. Stimulating talks were presented by Dr. Steve Clemens, ESSEP, on ”Paleoclimate: The Evolution of Science and Drilling Technology;” by Dr. John Hayes, ESSEP, on ”Fundamental Questions about the Bacterial Biosphere in Marine Sediments;” by Dr. Charles Paull, ISSEP, on ”Gas Hydrates: Internal Dynamics and Effects on the Earth's Carbon Cycle;” by Dr. Mike Bickle, ISSEP, on “Ocean drilling and the Earth's internal processes”, and Dr. Ted Moore, IPSC, on ”The Future of Ocean Drilling.”

19:00 Reception and Dinner, Emmanuel College, courtesy of UK ODP.

Wednesday, May 10
8:30 – 14:30 Separate ISSEP (Room 2) and ESSEP (Room 3) Meetings

Panels met separately to collate ballots on proposal groupings and continue reviews of new, revised, and pre-proposals.

14:00 – 15:15 Joint ISSEP/ESSEP Meeting

**PPG Reports:**

*Hydrogeology PPG Report: Shemin Ge*

Shemin Ge, Chair of the new Hydrogeology PPG, reviewed the progress and goals of the PPG. The PPG had just had their first meeting, in Boulder, Colorado, on April 9-10, 2000. The group discussed their mandate, heard a number of presentations by invited speakers, and defined tasks to be accomplished before their second meeting. Issues discussed included: the critical importance of hydrogeologic processes in understanding a variety of geologic processes; fluid flow as an effective agent in transporting heat and solutes; the major roles of fluid flow in sediment compaction and erosion; the intimate linking of fluid pressure state and seismic rupture processes; and the importance of considering hydrogeologic systems as dynamic coupled processes. Also discussed were driving mechanisms and basic variables of state, which need to be measured and understood both spatially and temporally. The preliminary work plan includes work summarizing: the global importance of submarine hydrogeology; goals of hydrogeologic investigations in ODP; the current state of knowledge; approaches that should be taken; and recommendations.

The second meeting of the PPG is planned for September 24-25, 2000 in Paris. Invitees will include experts to speak on preliminary discussion on areas and groups (Site Survey Panel, the continental drilling community, and experts on different geologic environments). Major issues of interest include: spatial heterogeneity; routine hydrogeologic measurements during drilling legs; in-situ hydrologic testing, packer experiments and hydrofracturing; water budgets and global flux at continental margins and at global scales; inexpensive monitoring networks, similar to the ocean seismic network; and the role of fluids in diagenetic processes, gas hydrate and petroleum formation, salt-water intrusion in coastal areas, and in deep biosphere and mid-oceanic ridge environments.

*Arctic Climate PPG Report: Martin Hovland*

Martin Hovland, Chair of the new Arctic Climates PPG, reviewed the progress and goals of this PPG. The Arctic Climates PPG had also just had their first meeting, in Stavanger, Norway. One early consensus of the PPG is that Arctic drilling will be technically difficult and expensive. Drifting pack ice requires advanced modeling of ice movements, at least 2 ice ships, and contingency planning and resources. The main issues are seen as: proposing a viable strategy on where, when, and how to drill and sample in Arctic and Antarctic waters. Technical issues (how to drill) are seen as the most prominent and urgent. Scientific issues on where and when to drill are seen as more or less answered by the NAD plan; but priority needs to be stated clearly according to a short-range (3 to 7 years) and long-range plan (for drilling deep holes within 10 years, based on new technology). The latter is hoped to develop a strategy that would guarantee drilling access to the most important sites in polar seas within one decade. This strategy would be seen as including a pilot plan for SCICOM to consider, including details on how to secure a technically viable method and hardware for such operations. The Arctic Climates PPG plans to hold their next meeting in Calgary, Canada on June 26 and 27, 2000.

*Logging Report: Tim Brewer*

As a result of extreme time pressure caused by the large numbers of proposals to be considered, in lieu of a formal Logging Report, Tim Brewer distributed ODP Logging CD’s to all panel members. He invited questions and interactions on an individual basis following the meeting.
In view of extraordinary time pressures, no formal presentations were made. Liaisons participated extensively in the panel discussions.

**Other Business/Recommendations**

Next the panels addressed the issue of the recent resignation of Kate Moran as Director of the ODP. The SSEP chairs asked Charlie Paull to start by presenting a draft SSEP consensus statement on this issue. The SSEP chairs then asked for discussion by other SSEP. After adopting some minor changes in wording two consensus statements were adopted by the SSEPs.

Consensus #1:

The SSEPs wish to express their deepest appreciation and gratitude for the outstanding contributions made by Kate Moran during her tenure as ODP Director. Kate, your deep commitment and activism, technical expertise and scientific vision energized and led the program at a critical period near the end of this phase of the Program. We look forward to working with you on future aspects of ocean drilling.

Consensus #2:

The SSEPs wish to acknowledge the JOI Board of Governors’ efforts to address and resolve some of the underlying issues associated with Dr. Moran’s resignation. We consider cooperative discussions between the JOIDES Advisory Structure, the JOI President, and the entire JOI BoG, that address appropriate aspects of JOI management and personnel policies, to be essential to reestablish confidence and ensure a strong future in scientific ocean drilling.

**November 2000 SSEP meeting**

Mike Mottl has agreed to host the next joint SSEP meeting in Hawaii, during the week of November 5-12, 2000.

**Acknowledgments**

ISSEP and ESSEP thank Mike Bickle and Margaret Johnston for organization of the meeting. Mike for organizing the pre-meeting outing on the river Cam, and Juergen Thurow for leading the post-meeting excursion to the Devon Coast.

ISSEP and ESSEP gratefully acknowledge the outstanding leadership provided by John Tarduno as first ISSEP chair. John’s clear view of the central role of the SSEPs in the advisory structure led to a very effective tenure and helped establish the guidelines the SSEPs will follow into IODP. We particularly appreciate John’s ability to motivate high-level scientific discussion and true cooperation between the panels. As a consequence, during his tenure the panels were able to provide both effective nurturing of proposals as well as their objective evaluation. We’ll miss you, John.

ESSEP gratefully acknowledges the long and consistent service of Ryuji Tada, setting an ESSEP record for length of service and providing valuable guidance on paleoceanographic and paleoclimatic issues.

The SEP chairs acknowledge the dedication of Randy Forsythe and Craig Manning, who agreed to attend the meeting in Cambridge, serving beyond their normal 3-year rotation. Their continued dedication and effort in reviewing proposals has helped ensure needed continuity and organizational memory in the face of extremely high proposal pressure.

The SSEPs are deeply appreciative of ISSEP member Deb Kelley. Her breadth, depth and unique combination of expertise in igneous petrology, geochemistry, fluid flow, and the deep biosphere will be sorely missed.
15:15 Continuation of Separate ISSEP and ESSEP Meetings to complete evaluating proposals and write reviews.

16:00 The meeting was called to a close by the SSEP chairs. The field trip, led by Juergen Thurow and Kevin Pickering, University College of London, departed for Lyme Regis.

16:00 - 18:00 Several panel members completed reviews.

Meeting Attendees

ISSEP
Mike Bickle
Colin Devey
Donald Fisher
Bernie Housen
Benoit Ildefonse
Teruaku Ishii
Deborah Kelley, alternate
Julie Morris (Chair)
Mike Mottl
Charles Paull (non-voting member)
Ingo Pecher
Christopher Small
Piera Spadea
Harold Tobin
David Vanko
Randy Forsythe, alternate
Craig Manning, Guest

ESSEP
Paul Baker
Barbara Bekins
Svante Björck
Hans Brumsack
Gilbert Camoin
Chris Charles
Steven Clemens
Craig Fulthorpe
John Hayes
David Hodell
Neil Lundberg (Chair)
Dick Norris
Liz Screaton
Ryuji Tada
Juergen Thurow
Kuo-Yen Wei

Liaisons and Guests

Bruce Malfait, NSF
John Farrell, Acting ODP Director and USSSP Director, JOI
William Hay, JOIDES chair
Warner Brueckmann, JOIDES
Jeffrey Schuffert, JOIDES
Nils Holm, SCICOM liaison to ESSEP
Alistair Robertson, SCICOM liaison to ISSEP
Chris MacLeod, alternate UK member of SciCom
Daemon Teagle, alternate SCICOM liaison to ISSEP
John Diebold, SSP liaison to ISSEP
Flavio Anselmetti, SSP liaison to ESSEP
Jeff Fox, TAMU
Paul Wallace, TAMU liaison to ISSEP
Carlota Escutia, TAMU liaison to ESSEP
Timothy Brewer, Logging liaison to ISSEP
Shemin Ge, Chair of Hydrogeology PPG
Martin Hovland, Chair of Arctic Climates PPG
Ulrich Harms, International Continental Drilling Program observer
Theodore Moore, IPSC Chair

Guest List for ODP Science Forum

Andrew Kingdon, British Geological Survey
Gideon Henderson, Univ. Oxford
Sarah Haaggas, Univ. Leicester
David Gubbins, Univ. Leeds
Peter Barker, BAS
Samantha Barr, Univ. Leicester
Joe Cann, Univ. Leeds
Simon Conway- Morris, Univ. Cambridge
Phil England, Univ. Oxford
Chris Franklin, NERC
Peter Harvey, Univ. Leicester
Caroline Ingram, Brunel Univ.
Rachel James, Open Univ.
Hugh Jenkyns, Univ. Oxford
Rob Larter, BAS
Chris MacLeod, Univ. Cardiff
Julian Pearce, Univ. Cardiff
Jenny Pike, Univ. Cardiff
Charles Turner, Open University
Derek Vance, Royal Holloway

Attachment:

A. SSEP Decisions on Proposals Reviewed

Attachment A: SSEP Decisions on Proposals Reviewed, Nov. 1999

Joint ISSEP/ESSEP Reviews and Proposal Decision

Disposition and ESSEP/ISSEP Responsibilities for Proposals, Addenda and Ancillary Program Letters
May 8-10, 2000 in Cambridge, England

<table>
<thead>
<tr>
<th>Proposal</th>
<th>Title Code</th>
<th>Contact</th>
<th>Panel</th>
<th>Disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>482-Full3</td>
<td>Wilkes Land Margin</td>
<td>Escutia</td>
<td>E</td>
<td>at SCICOM</td>
</tr>
<tr>
<td>504-Add</td>
<td>NARM Deep Hole</td>
<td>Tucholke</td>
<td>I/E</td>
<td>revise</td>
</tr>
<tr>
<td>505-Add</td>
<td>Mariana Convergent</td>
<td>Fryer</td>
<td>I/E</td>
<td>to SCICOM</td>
</tr>
<tr>
<td>Proposal</td>
<td>Title</td>
<td>Author</td>
<td>Decision</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------------------------</td>
<td>-----------------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>515-Full</td>
<td>Black Sea Climate Flood</td>
<td>E/I revise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>547-Full2</td>
<td>Oceanic Deep Biosphere Fisk</td>
<td>J revise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>548-Full</td>
<td>Chicxulub K-T Impact</td>
<td>Morgan E/I</td>
<td>revise</td>
<td></td>
</tr>
<tr>
<td>552-Full2</td>
<td>Bengal Fan</td>
<td>France-Lanord E/I</td>
<td>revise</td>
<td></td>
</tr>
<tr>
<td>553-Add2</td>
<td>Cascadia Hydrates</td>
<td>Hyndman E/I</td>
<td>revise</td>
<td></td>
</tr>
<tr>
<td>554-Full3</td>
<td>GOM Gas Hydrates</td>
<td>Kennicutt E/I</td>
<td>revise</td>
<td></td>
</tr>
<tr>
<td>557-Full</td>
<td>Storegga Slide Hydrate</td>
<td>Andreassen E/I</td>
<td>revise</td>
<td></td>
</tr>
<tr>
<td>561-Full3*</td>
<td>Caribbean LIP</td>
<td>Duncan I/E</td>
<td>Ext. Review</td>
<td></td>
</tr>
<tr>
<td>569-Add</td>
<td>CO2 Sequestration</td>
<td>Goldberg I/E</td>
<td>revise</td>
<td></td>
</tr>
<tr>
<td>572-Full*</td>
<td>N Atlantic Climate</td>
<td>Channell E/I</td>
<td>revise</td>
<td></td>
</tr>
<tr>
<td>573-Full*</td>
<td>Carbonate Mounds</td>
<td>Henriet E/I</td>
<td>revise</td>
<td></td>
</tr>
<tr>
<td>575-Full2</td>
<td>Hominid Evolution</td>
<td>deMenocal E/I</td>
<td>revise</td>
<td></td>
</tr>
<tr>
<td>576-Pre2</td>
<td>S Barbados Prism</td>
<td>Deville I/E</td>
<td>discourage</td>
<td></td>
</tr>
<tr>
<td>577-Add</td>
<td>Demerara Rise</td>
<td>Wilson E/I</td>
<td>to SCICOM</td>
<td></td>
</tr>
<tr>
<td>578-Pre</td>
<td>Marmara Sea Gateway</td>
<td>Hiscott E/I</td>
<td>encourage</td>
<td></td>
</tr>
<tr>
<td>579-Pre</td>
<td>Skan Bay Climate</td>
<td>Anderson E/I</td>
<td>encourage</td>
<td></td>
</tr>
<tr>
<td>580-Full*</td>
<td>CORK Hole 642.E</td>
<td>Harris E/I</td>
<td>revise</td>
<td></td>
</tr>
<tr>
<td>581-Full*</td>
<td>Drowned Reefs</td>
<td>Droxler E/I</td>
<td>revise</td>
<td></td>
</tr>
<tr>
<td>582-Pre*</td>
<td>Christmas Atoll</td>
<td>Fairbanks E/I</td>
<td>~discourage</td>
<td></td>
</tr>
<tr>
<td>583-Full</td>
<td>=APL-14 (see below)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>584-Full*</td>
<td>TAG II</td>
<td>Rona I/E</td>
<td>Ext. Review</td>
<td></td>
</tr>
<tr>
<td>585-Pre</td>
<td>Murray Ridge</td>
<td>Clift J</td>
<td>~discourage</td>
<td></td>
</tr>
<tr>
<td>586-Pre</td>
<td>Hawaiian Reefs + Basalts</td>
<td>Rubenstone J</td>
<td>~discourage</td>
<td></td>
</tr>
<tr>
<td>587-Pre</td>
<td>GOM Mini-Basins</td>
<td>Nelson E/I</td>
<td>discourage</td>
<td></td>
</tr>
<tr>
<td>588-Pre</td>
<td>Cretaceous Gateway</td>
<td>Gradstein E/I</td>
<td>encourage</td>
<td></td>
</tr>
<tr>
<td>589-Full</td>
<td>GOM Overpressures</td>
<td>Flemings E/I</td>
<td>revise</td>
<td></td>
</tr>
<tr>
<td>590-Pre</td>
<td>Afar Plume(was APL15)</td>
<td>Orihashi I</td>
<td>revise</td>
<td></td>
</tr>
<tr>
<td>APL-10</td>
<td>Conical Smt, PNG</td>
<td>Herzig I</td>
<td>approve</td>
<td></td>
</tr>
<tr>
<td>APL-11</td>
<td>Hawaiian Apron</td>
<td>Harris I/E</td>
<td>disapprove</td>
<td></td>
</tr>
<tr>
<td>APL-12</td>
<td>Pleistocene Pacific</td>
<td>Slowey E</td>
<td>approve</td>
<td></td>
</tr>
<tr>
<td>APL-13</td>
<td>Erba</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>APL-14</td>
<td>Kuroshio (=583-Full)</td>
<td>Wei E</td>
<td>approve</td>
<td></td>
</tr>
</tbody>
</table>

*ISSEP feels that Proposals 572, 573, 580, 581, and 582 should be ESSEP only proposals in future; ESSEP feels that Proposals 561 and 584 should be ISSEP only proposals in future.