JOIDES EXECUTIVE AND SCIENCE COMMITTEES JOINT MEETING

THE WASHINGTON MONARCH HOTEL
WASHINGTON, D.C.

15 FEBRUARY 2000

Executive Committee - EXCOM

Helmut Beiersdorf (Chair)	Bundesanstalt für Geowissenschaften und Rohstoffe, Germany
James Briden	Environmental Change Unit, Oxford University, United Kingdom
Maria C. Comas	Instituto Andaluz de Ciencias de la Tierra, Universidad de Granada, Spain, (ECOD)
G. Brent Dalrymple	College of Oceanic & Atmospheric Sciences, Oregon State University, USA
Robert Detrick	Woods Hole Oceanographic Institution, USA
Chris Harrison	Rosenstiel School of Marine & Atmospheric Science, University of Miami, USA
Richard Hiscott	Earth Sciences Department, Memorial University of Newfoundland, Canada (PacRim)
Dennis Kent	Department of Geological Sciences, Rutgers University, USA
Roger Larson	Graduate School of Oceanography, University of Rhode Island, USA
John Mutter	Lamont-Doherty Earth Observatory, Columbia University, USA
John Orcutt	Scripps Institution of Oceanography, University of California, San Diego, USA
David Prior	College of Geosciences, Texas A&M University, USA
C. Barry Raleigh	School of Ocean and Earth Science and Technology, University of Hawaii, USA
Paul Stoffa	Institute for Geophysics, University of Texas at Austin, USA
Asahiko Taira	Ocean Research Institute, University of Tokyo, Japan

Associate Member Observers - EXCOM

Mathilde Cannat	Laboratoire de Pétrologie, Université Pierre et Marie Curie, Paris, France
Wang Zhixiong	Marine High Technology Bureau, Beijing, China

Science Committee - SCICOM

Sherman Bloomer	Department of Geosciences, Oregon State University, USA
Millard Coffin	Institute for Geophysics, University of Texas at Austin, USA
Steven D'Hondt	Graduate School of Oceanography, University of Rhode Island, USA
Patricia Fryer	Department of Geology and Geophysics, University of Hawaii, USA
William Hay (Chair)	GEOMAR Research Center, University of Kiel, Germany
Nils Holm	Department of Geology and Geochemistry, Stockholm University, Sweden (ECOD)
Jock Keene	School of Geosciences, University of Sydney, Australia (PacRim)
Emily Klein	Department of Geology, Duke University, USA
Kenneth Miller	Department of Geological Sciences, Rutgers University, USA
Gregory Mountain[a]	Lamont-Doherty Earth Observatory, Columbia University, USA
David Rea	Department of Geological Sciences, University of Michigan, USA
Alastair Robertson	Department of Geology and Geophysics, University of Edinburgh, United Kingdom
Hidekazu Tokuyama[b]	Ocean Research Institute, University of Tokyo, Japan
Douglas Wiens	Department of Earth and Planetary Science, Washington University, USA
James Zachos[c]	Department of Earth Sciences, University of California, Santa Cruz, USA

Associate Member Observers - SCICOM

John Ludden	Centre de Recherches Pétrographiques et Géochimiques, CNRS-Nancy, France
Zhou Zuyi*	Department of Marine Geology & Geophysics, Tongji University, Shanghai, China

[a] Alternate for Gerard Bond
[b] Alternate for Yoshiyuki Tatsumi
[c] Alternate for J. Casey Moore
* Absent

Liaisons

Jack Baldauf	Ocean Drilling Program (ODP), Texas A&M University, USA
Jeff Fox	Ocean Drilling Program (ODP), Texas A&M University, USA
David Goldberg	Lamont-Doherty Earth Observatory (LDEO), Columbia University, USA
Neil Lundberg	Department of Geology, Florida State University, USA
Bruce Malfait	National Science Foundation (NSF), USA
Kathryn Moran	Joint Oceanographic Institutions (JOI), Inc., USA
Julie Morris	Department of Earth and Planetary Science, Washington University, USA

Guests

James Allan	National Science Foundation (NSF), USA
James Austin	Institute for Geophysics, University of Texas at Austin, USA
Mahlon Ball	U.S. Geological Survey, Denver, USA
Keir Becker	Rosenstiel School of Marine & Atmospheric Science, University of Miami, USA
J. Paul Dauphin	National Science Foundation (NSF), USA
Margaret Delaney	Department of Ocean Sciences, University of California, Santa Cruz, USA
John Diebold	Lamont-Doherty Earth Observatory, Columbia University, USA
Sören Dürr	Deutsche Forschungsgemeinschaft (DFG), Germany
John Farrell	Joint Oceanographic Institutions (JOI), Inc., USA
Chris Franklin	Natural Environmental Research Council (NERC), United Kingdom
James Gill	Department of Earth Sciences, University of California, Santa Cruz, USA
J. Frederick Grassle	Department of Geological Sciences, Rutgers University, USA
Roy Hyndman	Geological Survey of Canada, Sidney, B.C., Canada
Tom Janecek	Antarctic Research Facility, Florida State University, USA
Hajimu Kinoshita	Japan Marine Science and Technology Center (JAMSTEC), Japan
Kazuhiro Kitazawa	Japan Marine Science and Technology Center (JAMSTEC), Japan
Shin'ichi Kuramoto	Science and Technology Agency (STA), Japan
Ted Moore	Department of Geological Sciences, University of Michigan, USA
Arthur Nowell	School of Oceanography, University of Washington, USA
Robert Owen	Department of Geological Sciences, University of Michigan, USA
Nicklas Pisias	College of Oceanic & Atmospheric Sciences, Oregon State University, USA
Warren Prell	Department of Geological Sciences, Brown University, USA
Michael Purdy	National Science Foundation (NSF), USA
Mary Reagan	Lamont-Doherty Earth Observatory, Columbia University, USA
Masanori Shinano	International Working Group (IWG) Support Office, USA
Thomas Shipley	Institute for Geophysics, University of Texas, USA
Shiri Srivastava	Geological Survey of Canada Atlantic, Bedford Institute of Oceanography, Canada
Neil Sullivan	Department of Physics, University of Florida, USA
Kiyushi Suyehiro	Japan Marine Science and Technology Center (JAMSTEC), Japan
Shinichi Takagawa	Japan Marine Science and Technology Center (JAMSTEC), Japan
Takeo Tanaka	Japan Marine Science and Technology Center (JAMSTEC), Japan
Philippe Vidal	Centre National de la Recherche Scientifique (CNRS), Paris, France
James Watkins	Joint Oceanographic Institutions (JOI), Inc., USA
Robert Winokur	Consortium for Oceanographic Research and Education (CORE), USA

JOIDES Office

Warner Brückmann	GEOMAR Research Center, University of Kiel, Germany
Bettina Rohr	GEOMAR Research Center, University of Kiel, Germany
Jeffrey Schuffert	GEOMAR Research Center, University of Kiel, Germany

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FINAL MINUTES

A. Welcome, Introductions, and Logistics

Helmut Beiersdorf welcomed everyone to the joint portion of the EXCOM and SCICOM meetings and asked the participants to introduce themselves when speaking. Beiersdorf hoped that this special joint meeting would foster communication among all parts of ODP and help to dispel the perception that EXCOM sat too far removed from the science planning process. He emphasized the importance of these goals, given the difficult task of planning the phase-out of the old program and phase-in of the new one. Beiersdorf looked forward optimistically to a successful meeting and thanked the management at JOI for arranging the meeting facilities and social events.

Kate Moran explained the meeting logistics and introduced Bridget Chisholm and Jenny Ramarui as assistants from JOI. She also noted a few minor changes to the schedule and reminded everyone about a special ODP seminar scheduled for the following evening at the Canadian Embassy.

B. Approval of Agenda of Joint Meeting

Beiersdorf announced several minor changes to the agenda for the joint meeting, and all committee members approved the revised agenda by consensus.

C. Selected ODP Achievements

Warren Prell reported on the preliminary results of Leg 184, the first major drilling expedition in the South China Sea (SCS). He stated the main goal of understanding the Southeast Asia monsoon system and then described the strategy of studying different sedimentary regimes with different sedimentation rates. Prell showed the seasonal pattern of rainfall migration across Southeast Asia and explained that sedimentary records from the SCS should preserve the effects of that seasonal migration and its variability through time. He noted that they drilled at five sites, one in the southern SCS and four in the northern SCS, and logged at four of the five sites. He also noted that to reach the target objectives at three sites, they had to drill deeper than planned because of higher than expected sedimentation rates. Prell said that all of the sites should yield high-resolution records of climate variability on orbital and sub-orbital time scales. In particular, the section recovered at Site 1144 extends to only 1 Ma but has a very high sedimentation rate and thus offers an excellent chance for studying rapid, abrupt climate change. Site 1146 yielded a continuous section extending to 20 Ma with no significant disturbances or turbidites, and Site 1148 penetrated Oligocene (32 Ma) deep-water sediment, thus resolving a debate over the nature and depth of the seismic reflectors at that site.

Hay asked whether sedimentation rates increased in the SCS at 8 Ma, as expected by analogy with the Arabian Sea. Prell said that some of the SCS sites showed an increase in sedimentation rates, but only during last 300 kyr. Miller asked if they had determined the onset of the monsoon system, but Prell said that it would take much more analytical work to answer that question. D'Hondt asked whether the recovered sequences remained rich in sulfate or showed evidence of methanogenesis. Prell said that some methane occurred in the lower parts of the sections. Robertson asked if the results from Leg 184 might shed any light on the tectonic history of the SCS. Prell confirmed that their results definitely could contribute to a better understanding of what happened tectonically at the boundary between continental and oceanic crust.

John Ludden reported on the preliminary results of Leg 185 to the Izu-Mariana forearc. He described the leg as a study of subduction zone fluxes in terms of global geochemical balances and explained the goals of characterizing the geochemistry of the subducting sediment, pore fluid, organic matter, and crust. Ludden said that they returned to Site 801, penetrating the oldest known piece of oceanic crust from a fast-spreading ridge, and drilled a new hole nearby at Site1149. He noted that they found evidence in the basaltic glasses for microbial alteration. Other leg highlights included the first shipboard microbiology tests for contamination and culturing of bacteria and the discovery that a rapid switching of the magnetic signal downhole could explain the apparent magnetic quiet zone as measured from the surface.

Raleigh asked if the sedimentary sections looked fractured as well as the basement. Ludden said that no one looked specifically for fracturing, though one scientist measured shear strength downhole. Comas asked about the recovery at Site 801. Ludden said that they had a recovery rate of 40-50%. Robertson asked if they found any signs of local hydrothermal alteration. Ludden said that they drilled through two active alteration zones, with silica-rich deposits, at temperatures of 50-60˚C. Larson described the alteration zones as still very permeable but not active. Morris asked whether the style of alteration differed at these sites compared to other sites such as Hole 504B. Ludden replied that they saw a difference even between the two sites drilled on this leg.

Suyehiro reported on the preliminary results of Leg 186 to the Japan Trench. He described the main objective of installing two geophysical observatories as part of the ION project and mentioned that borehole sensors provide a better signal than seafloor sensors. Suyehiro showed a map of seismic activity around Japan since 1926 and explained that these records played a crucial role in selecting the two drilling sites, with Site 1150 located in a region of high seismic activity and Site 1151 located in an aseismic zone. He characterized the regional subduction zone as tectonically erosive and said that sedimentation rates varied from 20–200 cm kyr^{-1}. Suyehiro described the challenges of drilling through old sediments and cementing instruments in the borehole at 1200 mbsf. He said that the leg ultimately succeeded, although JAMSTEC installed the actual sensors later. Suyehiro showed ROV camera photos of the seafloor package in place, noting the power and data recovery connections on top of the reentry cone. He said that the system can run for several years on battery power, and replacement of the batteries could extend the life of the observatories for many years.

Morris asked if they planned to install a cable for real-time data recovery. Suyehiro confirmed that they planned to extend an existing cable about 10 km to the new sites. Wiens asked when they would retrieve the first data, and Suyehiro said in September 2000. Orcutt asked if they grouted the seismometers in the hole, and Suyehiro said yes. Raleigh asked about the type of transducer used in the instruments. Suyehiro stated that they used a standard linear vertical differential transducer (LVDT). Robertson wondered if any other useful science might result from this leg. Suyehiro replied that other topics of study would include volcanic ash layers, subsidence history, and the much greater decrease in salinity than observed at other active margin sites.

Following the leg reports, Hay offered a summary of recent papers in *Science* and *Nature* related to ODP results. He noted that the authors did not always mention ODP in the title or abstract, but they often used ODP data as reference sections to compare with other new data. Hay said that paleoclimate studies had made an especially strong showing, with emphasis on young sedimentary records, particularly of Holocene age.

Beiersdorf stressed the importance of evaluating the scientific literature for ODP content because of the need to document the achievements of ODP more clearly in the phase-out plan and to address a shortcoming identified by the PEC-V. Allan commented that he had searched the literature last summer, mostly in *Science* and *Nature*, and found over 100 articles related to ODP science. He admitted feeling surprised at how much use the cores had received and the generally good level of acknowledgement to ODP. Watkins recommended that the program should view this as a public

affairs opportunity and do a thorough, systematic job of identifying this information over the next two years. He also suggested approaching the authors and asking them what they would have lost without the ODP data. Beiersdorf hoped to make it a broader, more visible effort. Hay said that SCICOM would definitely devote time to this issue and again emphasized the hidden nature or lack of direct attribution to ODP. Mountain asked if that reflected upon authors from outside of the ODP community or upon those who should know better. Hay replied that the slighting of ODP did not seem intentional. Mountain suggested that the authors of these papers might make good candidates for the distinguished lecture series. Allan saw it as a more serious problem of researchers not properly documenting or acknowledging the source of their samples. Hay said that sometimes he could only trace the link to ODP through the reference list or figure captions. D'Hondt asked whether the papers usually included site numbers. Hay answered yes, but they did not always identify the sites as ODP holes and sometimes even used the pre-drilling site designation. Coffin felt that this simple exercise illustrated the success of the program but also the failure to show that ocean drilling comprises a vital part of the scientific community. He added that even after 30 years of success, we still have to justify the need for more ocean drilling, whereas astronomers, for example, do not have to do this. Raleigh suggested that we have to convince our fellow scientists, not the public or the government.

D. NSF/ODP Council Report

Bruce Malfait diagrammed the NSF programmatic structure and updated the report distributed in the Agenda Book, noting recent personnel changes at NSF, such as the hiring of Margaret Leinen in mid January, and mentioning that some developments had occurred with respect to India joining the program. An audit of JOI indicated that everything essentially balanced out, with unallowable charges amounting to less than $5000 and a few allowable but uncharged items identified. Malfait explained that the U.S. Government Performance Results Act now requires every federal agency to identify its goals for each year and report on how it met those goals. ODP fared well in the sense that it experienced a very low rate of facility downtime, less than 1%, throughout the program. Malfait showed the agenda for the upcoming IWG meeting, noting that Ted Moore would deliver a status report on IPSC and Peggy Delaney would report on progress of the CDC. IWG would also discuss international arrangements for the future program as well as the response concerning the IODP Initial Science Plan.

E. Country/Consortium Reports

Beiersdorf accepted the country and consortium reports as read and invited each national representative to offer additions as necessary. Rick Hiscott introduced himself and Jock Keene as the new PacRim representatives for EXCOM and SCICOM, respectively. Menchu Comas announced that Ireland plans to join ECOD and that ESF would soon submit a Letter of Intent to participate in IODP planning. Asahiko Taira distributed the report from Japan and added that Japan and France would cooperate this year to obtain further 3-D seismic data from eastern Nankai. Jim Briden announced that David Falvey would replace him after this meeting, and Chris Franklin would represent the U.K. at the IWG meeting this week. He also noted that the U.K. would hold an ODP meeting in early March. Mathilde Cannat and Wang Zhixiong had nothing to add to their reports. Beiersdorf introduced Sören Dürr as the replacement for Dietrich Maronde from DFG.

Beiersdorf reported on an ESF sponsored workshop on 27 January 2000 in Strasbourg, France. He said that the workshop participants fully endorsed the IODP Initial Science Plan, and he listed specific topics of interest to European scientists, including the deep biosphere, gas hydrates, Arctic drilling, deep margins, and tectonic processes. Beiersdorf also listed the members of an advisory group for establishing a joint European Ocean Drilling Initiative toward participating in IODP and for advising European funding agencies on ODP/IODP matters. Cannat expressed optimism about this effort. Holm added that the European consortium now had everyone on board to issue a Letter of Intent to join the new program. Taira asked if the European goals on infrastructure included

other platforms. Beiersdorf replied that those goals could include platforms, laboratories, or tools, but they could not yet offer specific details before talking further with funding agencies, political entities, and industry.

F. ODP Management and Operations Report

F.1 FY2001 Budget

Moran illustrated how the FY2001 target budget of $46.1M would distribute among TAMU, LDEO, and JOI and said that the exact numbers could change by about $200K. She showed a map of the FY2001 drilling schedule and explained that Legs 193 (Manus Basin), 196 (Nankai II), and 198 (Hydrate Ridge) would require special operating expenses for LWD. In addition, two advanced CORKS on Leg 196 and microbiology in general would entail added costs.

Moran proposed to switch the schedule for Legs 198 (Hydrate Ridge) and 199 (Equatorial Pacific) because this would effectively defer one relatively expensive leg until the next fiscal year. Detrick asked if such a switch would push Hydrate Ridge into an unfavorable weather window. Moran replied that it looked marginal toward the end of the leg, but Leg 146 had succeeded in the same area during that time of year, plus LWD could wait until the end of the leg and tolerate marginal weather conditions.

F.2 Drydock

Moran identified various shipboard facilities upgraded during drydock, including the data management system, auto station-keeping, the seventh level on the lab stack (primarily for microbiology and downhole tools), the main core lab, H_2S safety equipment, and the Schlumberger data acquisition unit.

F.3 Microbiology

Moran noted several recent achievements with regard to microbiology, including a LExEn grant of $250K for shipboard equipment, definition of shipboard sampling protocols and technical needs by the Biology Under Ground Steering Committee (BUGSCOM), and submission of two microbiology proposals. She said that further plans call for extensive modification of the shipboard microbiology lab on the transit leg in May 2000, with routine staffing of microbiologists beginning on Leg 190 (Nankai Trough). Moran also expressed optimism about moving forward on microbiology collaborations in Europe.

Morris asked about the division of labor between BUGSCOM and the Deep Biosphere PPG. Moran replied that BUGSCOM did its work and has ended. She explained that JOI formed BUGSCOM to implement the recommendations of the Deep Biosphere PPG and SciMP. BUGSCOM provided direct guidance on what equipment to buy and what protocols to follow. Beiersdorf added that the ODP managers had agreed to form this small group to fill a short-term need for quick action before the Deep Biosphere PPG could hold its next meeting.

F.4 ODP Industry Partnerships

Moran reported that good progress had occurred on the HYACE project and the JAMSTEC/JOI agreement for developing the advanced diamond core barrel (ADCB), and work might start soon on retractable bit technology. She described a recent joint academic–industry workshop in Houston as very successful and said that JOI had consequently received seven pre-proposals for review. The proponents planned to prepare those pre-proposals for submission before the 15 March 2000 deadline. Moran commended John Armentrout and Felix Gradstein for their efforts in organizing and leading the workshop and said that a second workshop on geopressures would occur in March 2000. Moran gave a talk to the Canadian Society of Petroleum Geologists in Calgary before a group of more than 800 industry scientists who meet for lunch every two weeks, and JOI had prepared a paper for the Offshore Technology Conference in May 2000. Other scheduled events included a special meeting at AAPG on the Gulf of Mexico and a follow-up workshop in Europe

this summer. Moran also recommended establishing a formal industry liaison committee in ODP and IODP.

F.5 Performance Evaluation Committee (PEC-V)

Moran reported that JOI had received the PEC-V report and obtained comments on it from the ODP subcontractors. She planned to present those comments to the JOI BoG this week and seek their approval to submit the overall report to NSF. She then expected to distribute the report to others in JOIDES for comment. Moran said that PEC-V concluded that program management and operations had improved significantly since the previous evaluation. She explained that although the report contains minor detailed recommendations on management, the major concern of PEC-V centers on the prospect of a drilling gap between ODP and IODP.

Beiersdorf said that EXCOM should see the PEC-V report as soon as possible because it might contain suggestions about JOIDES management with respect to planning and policy making. He conceded that EXCOM had to accept the decision not to distribute the full report yet. Moran said that the JOIDES Office had received a copy and could certainly distribute any part of it. Briden questioned the unprecedented route of implementing the report without obtaining advice from the JOIDES advisory structure. He understood the formal reporting requirements, but noted that all previous PEC reports had gone to EXCOM and SCICOM, and he wondered if the JOI BoG felt content that it could do an optimum job without going through that loop. Raleigh did not think they intended to miss that step. Although he had not seen this report, he noted that previous PEC reports typically dealt with subcontractor issues, and JOI had to assemble the comments of the subcontractors to complete the overall report to NSF. Raleigh promised that EXCOM would receive the report before the JOI BoG acts upon it. Pisias reiterated that the JOIDES Office received the report, so the advisory structure should have it. Hay confirmed that the JOIDES Office had received the report and responded to specific questions posed to it by JOI, but had not seen anything further.

Briden said that as he understood it, the report would go to the JOI BoG, they would report to NSF and that would represent the final step. Moran explained that the full report to NSF would include the PEC-V report and the comments from the subcontractors, including the JOIDES Office, but JOI needed approval from the JOI BoG before they could officially send anything on contracts to NSF. Moran believed that the process had proceeded appropriately. Beiersdorf said that EXCOM would have to review the report carefully and make suggestions at the next meeting on how to respond to immediate issues identified by PEC-V concerning the JOIDES advisory structure. Briden asked if that meant that no action would occur until after July. Raleigh replied that action could occur as soon as the BoG had given their approval. Moran said that they could do so at the meeting this week. Raleigh said that the JOI BoG had no problem with the procedure, and he did not know why it appeared that one existed. Beiersdorf read a portion of the executive summary from the PEC-V report that criticized the lack of a document summarizing the overall achievements of the program. He said that EXCOM must prepare to address this serious issue at its next meeting after receiving copies of the full report.

F.6 Public Affairs

Moran commented on the success of recent public affairs activities, including the June 1999 port call in Yokohama, Japan, the ODP booth at the December 1999 AGU meeting in San Francisco, and the series of four ODP Seminars on Capitol Hill that would conclude this week. She also mentioned several upcoming activities such as the ODP booth and special symposium at the February 2000 AAAS meeting, the March 2000 port call in Hobart, Tasmania, and the May 2000 American Society of Microbiologists meeting.

F.7 Communications
Moran reported that a meeting of representatives from the international program offices in September 1999 at JOI had successfully improved communication and understanding on a program-wide basis. She hoped to schedule a similar meeting in early 2002. Over 300 scientists attended the ODP town meeting at the December 1999 AGU meeting, and the managers of the ODP contractors continue to meet on a regular basis.

G. SCICOM Report, Amendment of Terms of Reference
Hay reported on the final membership of the new PPGs for Hydrogeology and the Arctic's Role in Global Change. He noted that the program effectively had industry money coming in to support Martin Hovland as chair of the Arctic group. Watkins expressed concern about integrating the new USCG cutter Healy into the plans for Arctic drilling. Hay believed that some of the U.S. members on the PPG had the knowledge to address that issue.

Hay presented the following request from SCICOM to amend the Terms of Reference regarding the establishment of liaisons to PPGs.

SCICOM Motion 99-2-16
SCICOM requests EXCOM to amend the Terms of Reference for Program Planning Groups as follows:

6.5 **Liaison.** ~~SCICOM establishes liaison with the PPGs by the appointment of non-voting liaisons~~. The SSEPs will appoint liaisons to the PPGs, and ~~The~~ PPG Chairs ~~will~~ may attend one meeting of the SSEPs per year, ~~as~~ if requested by the SSEPs Chairs.

Mountain asked about the reason for not requiring the PPG chairs to attend a SSEPs meeting once per year. Hay said that the proposed change allows the SSEPs chairs the flexibility to decide when and how often the PPG chairs would attend. Mountain wondered why SCICOM constitutes the PPGs and then lets the SSEPs decide how to incorporate their input into the program. Lundberg explained that the question of how the panel structure should handle the PPGs has a long history, especially concerning the conflict of interest issue, and although SCICOM establishes the PPGs, they decided that the PPGs should report to the SSEPs. He said that the SSEPs hope to communicate more closely with the PPGs and had invited the two new PPG chairs to the next SSEPs meeting, but they do not necessarily want to receive the final PPG reports. Hay added that the PPG chairs now consult regularly with the SSEPs. Beiersdorf deferred voting on this issue until the separate EXCOM session.

H. Partnerships with ODP

H.1 International Continental Drilling Program (ICDP)
Hay reported on the progress of cooperative efforts between ODP and ICDP. He announced that a JOIDES observer would attend the next ICDP meeting for proposal discussion and ranking, and an ICDP observer would attend the next SSEPs and SCICOM meetings. In addition, TEDCOM would meet with the ICDP drilling technology group in Potsdam, Germany. Hay also raised the question of how to pay for liaisons to non-JOIDES meetings.

Larson asked about the membership and budget of ICDP. Miller explained that ICDP has three full members, the U.S., Germany, and Japan, and several associate members, including China, Mexico, and Poland. He also clarified that the $2M annual ICDP budget acts only as leverage; the actual drilling projects have a much higher total budget. Mutter suggested identifying and pursuing the result desired several years from now in terms of a joint commitment, but Hay saw the first step as just getting to know each other. Larson recalled that several years ago the continental drilling side had taken a very open and encouraging view toward merging with ODP. He thought it seemed reasonable from a conceptual standpoint, if not a political one. Beiersdorf stressed the importance

of increasing the manpower in ODP to run more platforms and said that he viewed ICDP as the best place to start because of the strong overlap in interests.

Fox noted that TAMU had already received support from NSF and DOSECC for a half-time engineer to design and build a portable lake-drilling platform for ICDP projects. Orcutt mentioned EarthScope and the San Andreas Fault Observatory at Depth (SAFOD) project, but Miller commented that EarthScope did not represent an ICDP or DOSECC activity. Orcutt replied that it nonetheless represented continental drilling and it would most likely receive funding. Fryer noted that COMPLEX had identified high-latitude drilling as an important goal and wondered if EXCOM or SCICOM had considered land-based drilling in Antarctica or the Arctic. Beiersdorf thought that the Arctic PPG could consider the issue and redirected the discussion toward strengthening the connection between ODP and ICDP. He hoped to clarify the liaison and funding issues tomorrow. Miller suggested coordinating along the lines of publications and archiving, two areas where ODP performs well but other groups lack capability. Beiersdorf agreed that the ability to archive non-ODP material represented a good topic of future discussion among EXCOM, SCICOM, and IPSC.

H.2 Industry

Beiersdorf reported on a forum held last November at BGR in Hannover to familiarize German industry with ODP activities. Twenty engineers, managers, and scientists from industry attended the forum, and fifteen ODP scientists gave talks on a variety of themes. The industry representatives requested more meetings of this sort and offered to assist in proposal preparation. Beiersdorf foresaw increased industry participation at the annual German ODP meeting and an expanded basis for recruiting industry experts to staff ODP/IODP advisory panels, though the instability within industry would remain a problem. Briden commented that last year's European industry forum resulted in an increased level of engagement focusing on margins and slopes and a greater awareness of ODP among service and technology components of industry. Beiersdorf noted that industry also participated at the recent Strasbourg workshop, and the European Ocean Drilling Initiative had since begun drafting a proposal aimed toward improving links among various industries and entities for achieving full European membership in IODP. Ludden clarified that they hoped to establish a rotating position for a liaison between national secretariats and industry. Beiersdorf added that the workshop participants stand fully behind this approach and hope to succeed in obtaining funding from Brussels for common proposals or for better databases and technologies.

H.3 Other Scientific Initiatives

Beiersdorf noted that EXCOM at its last meeting had named a subcommittee (Taylor, Mutter, Orcutt, Beiersdorf) for promoting cooperation with other scientific initiatives around the world. He said that although the subcommittee had nothing substantial to report yet, they planned to contact other initiatives such as InterRidge, InterMargins, and ION before the next meeting. Beiersdorf suggested that all EXCOM members could look into these types of initiatives and alert the subcommittee. He viewed this as a first attempt to find common ground for encompassing a larger community, and he said that EXCOM would revisit the issue at all subsequent meetings and discuss how to improve their efforts.

H.4 Distance Learning Initiative

Jack Baldauf reported that the Colleges of Geoscience and Education at TAMU had formed a partnership to establish a Distance Learning Initiative within ODP. TAMU had already received a $350K grant for this project from the State of Texas, and they planned to seek additional external support from corporate sponsors. As an immediate goal, TAMU hoped to sail a high school science teacher on Leg 194. The teacher would broadcast lessons by INMARSAT to students in the classroom, initially targeting rural middle schools (grades 6-8) in Texas. This initiative would deliver shipboard and classroom equipment, a web-based curriculum, instructional material, real-

time communication between the ship and classroom, and a professional development workshop at TAMU for teachers. Other benefits would include an enhanced link between ODP and the K-12 education community, direct teacher involvement, and delivery of today's science into the classroom. The Distance Learning Initiative would greatly increase the educational capability of the *JOIDES Resolution*, and it would lay the foundation for a broad-based educational outreach program. TAMU therefore sought endorsement from EXCOM for sailing secondary school teachers and for the time resources required of ODP/TAMU staff to complete the project.

Cannat asked whether the international community would have access to the web-based curriculum, Klein asked about its availability in other languages besides English, and Fryer asked if TAMU hoped that NSF would support the international effort. Baldauf replied that the international community would have full access to the web-based material and that TAMU hoped to obtain international support for the long-range goals of an expanded outreach program, available in multiple languages. Fryer also asked how this project would affect the berthing of scientists, but Baldauf could not say because TAMU had not yet completed the staffing of Leg 194. Fox mentioned that ODL often had extra berths and perhaps ODP could use one for a teacher. Mutter asked to what extent the teachers would participate in the science onboard. Baldauf said that he would prefer to have them involved, perhaps by training them for one of the simpler jobs, but selecting the right individuals would pose the greatest challenge. Fryer asked how far the plan had progressed, and Bauldauf repeated that TAMU had already received funding and proceeded now with planning how to implement the program. Klein mentioned that some textbooks have a feature box about ODP and urged TAMU to contact publishing companies about publicizing the web links.

Bauldauf showed a USSAC Consensus Statement encouraging SCICOM to sail high school teachers on the *JOIDES Resolution*. Delaney clarified that USSAC approved that statement in the absence of any information from TAMU about their initiative and added that it would have helped to have received an update at the recent USSAC meeting. Prior explained that the TAMU initiative arose from a concern about the quality of science education in the State of Texas. He emphasized that it would build upon previous efforts in the science and education colleges and provide a springboard for a broader outreach program in the future. Beiersdorf applauded TAMU for their initiative toward the important issue of enhancing science understanding across the globe. He suggested that SCICOM should decide whether the distance learning initiative would have a net positive or negative effect on ODP, balancing the primary concerns about berth space and support for TAMU staff to finish the planning effort against the benefit of expanded educational outreach. Beiersdorf requested SCICOM to craft a motion the following morning and send it back to EXCOM in the afternoon because TAMU could not wait until the next meeting for an answer.

I. IODP Planning

I.1 OD21 Report

Asahiko Taira began by showing a silhouette of the *JOIDES Resolution* superimposed on a silhouette of the much larger OD21 riser drilling ship. Shin'ichi Kuramoto continued with an update on the status of the OD21 science, budget, organization, and basic design and construction of the ship. He showed a timeline of various OD21 activities and stated that STA had already received authorization for 74% of the total $500M budget. Shinichi Takagawa reported that JAMSTEC would complete the design of the riser drilling ship by the end of February 2000 and that construction would begin in March 2000. He showed schematic drawings of the ship and its facilities for core processing, other lab space, and research management. Takagawa explained that the ship would accommodate 150 personnel, mostly with single-room berths (128 single, 11 twin), and the typical single room would occupy 10 m^2 of floor space.

Hiscott asked about the proportion of scientists versus crew. Takagawa said that the basic design allotted for 31 scientists, 21 technicians, and the rest crew, with eight reserves. Harrison noted that

the *JOIDES Resolution* accommodates about the same number of scientists and technicians and wondered whether some operations of the riser drilling ship might require a larger science party. Takagawa said that JAMSTEC expected a turnover of the science party during a leg because riser legs would last at least six months rather than two. Taira added that re-supply operations would provide a chance for turnover of scientific personnel. Larson asked if JAMSTEC had chosen a construction contractor, and Takagawa answered no, not yet.

I.2 Conceptual Design Committee (CDC) Progress Report

Peggy Delaney reported on the charge, strategy, and progress of the CDC. NSF and USSAC established the CDC to formulate a conceptual design for a non-riser vessel. The CDC would identify the optimal capabilities needed for scientific drilling, provide a feasibility survey of existing and planned vessels, and prepare a detailed report by 1 March 2000. Delaney listed the CDC membership, noting that it included a private technical consultant and a liaison from IPSC. The CDC met in June and September 1999 and adopted a strategy for synthesizing high-priority science into type sections and defining the technical requirements for drilling those type sections. They also canvassed existing international ship owners, matched the technical requirements with known ship capabilities, and recommended ships with possible capital modification to NSF.

The CDC requested target sections from the U.S. chairs of the COMPLEX working groups and the PPGs. They asked them to consider high-priority science themes and objectives and specific factors such as water depth range, maximum penetration, lithology, thermal gradients, minimum core recovery limits, maximum core disturbance limits, number of holes, sampling, testing, and logging needs, site survey needs, and environmental conditions. The CDC received thirty target sections and reduced these to nine synthetic target sections related to observatories, rifting processes, convergent margins, oceanic plateaus, hydrothermal massive sulfides, oceanic crust, passive-margin stratigraphy, deep-ocean sediments, and carbonate reefs, atolls, and banks. They determined that the ideal non-riser vessel would drill and keep station in a wide range of water depths (<20–10,000 m), operate globally for up to eight weeks without re-supply, and carry a shipboard party of sixty scientists. It would also have the capabilities to reach target depths of >2000 mbsf, deploy a total drill-string length of ~11,000 m, store sufficient mud and casing, sample continuously, and use the latest sampling, coring, and logging tools. After considering SciMP recommendations, OD21 plans, and consulting with IPSC, the CDC identified other basic shipboard requirements such as 1800 m^2 of heated and air-conditioned interior laboratory space, deck space for ten 20' core-storage reefers and five 20' special-purpose modules, and an underway geophysics lab on the stern.

The CDC contacted nineteen international ship owners to gather information about existing and planned drilling ships. They received twelve responses representing 31 of the 41 ships on their list and compiled an extensive summary of vessel characteristics and operating parameters. Some of the ships do not have dynamic positioning or other basic requirements. The CDC also discussed other platforms, such as geotechnical drilling ships, submersibles, and semi-submersible, jack-up rigs. Delaney distributed a draft survey report to the CDC in December 1999 and submitted a complete vessel survey to NSF in January 2000.

Cannat noted that the *JOIDES Resolution* appears on the CDC list and asked if it met the basic requirements. Delaney answered that every vessel on the list would require at least some modification. Hyndman suggested that the riser ship could also operate in non-riser mode, though not efficiently, and wondered if that might loosen the restrictions on the non-riser ship. Delaney said that the CDC considered whether a non-riser vessel could operate with a seafloor blowout prevention system to drill certain objectives, such as Santa Barbara Basin, and concluded that they would not expect the non-riser ship to do well-control drilling in water deeper than 500 m. They also concluded that shallower-water objectives that need well-control drilling might also require a riser platform and could pose the most difficulty. Hyndman asked whether the riser ship could

handle certain deep-water objectives in non-riser mode. Delaney replied that they could set a different screening depth for the total length of drill string, but that would not really change the number of vessels on the list. Fox asked whether any of the ships identified by the CDC already had long-term contracts that would preclude their availability at the start of the new program. Malfait said that NSF did not ask the CDC for that information and did not receive it. Larson asked how many of the ships would not fit through the Panama Canal, and Delaney said that about half of them would not. Beiersdorf asked if any of the ships had an ice-class rating. Delaney said that only one did, and in all likelihood, ice operations would require another vessel.

I.3 European Initiatives Report

Beiersdorf said that he had already covered this issue in other reports and summarized by saying that the European ocean-drilling community had begun working hard to supply a third leg to IODP. Ludden added that further discussion would take place on new ways to capitalize European involvement in IODP.

I.4 COMPLEX Report

Nick Pisias announced that the COMPLEX Report had reached the final stages of editing, and he expected to see it finished by the end of this month and published by the middle of March. Beiersdorf led EXCOM and SCICOM in applauding the completion of the COMPLEX report.

I.5 IPSC Report

Ted Moore reported on the status of the industrial-liaison, technical-advice, and science-plan working groups and said that the main effort of IPSC so far had focused on the latter group. The science-planning group began work in September and quickly drafted the Initial Science Plan, structured around three general scientific themes and subdivided into nine specific initiatives. The draft plan went for review by mid November and detailed reviews came back in a month. The review board recommended to 1) include an implementation strategy, 2) increase the emphasis on drilling the seismogenic zone, 3) strengthen the justification for a multi-platform drilling program, 4) shorten the document, and 5) correct errors in grammar, punctuation, and editing. IPSC had since named an *ad hoc* advisory group to devise an implementation strategy. They also had posted a revised science plan on the web for further review. Moore thought that the browser version worked best and asked about the experience of others in downloading the science plan. Larson said that the figures did not come out well in the downloadable version.

Moore presented a schedule for reviewing, revising, and submitting the Initial Science Plan. Purdy commented that the IWG had not yet approved that schedule. Robertson asked about the timing of finishing the remaining items of the science plan, and Detrick stressed the importance of seeing a complete document at some point and not just the partial one available now. Miller asked about the appropriate level of discussion and comment to engage in at this meeting. Beiersdorf supposed that everyone had not yet had a chance to read the plan carefully, but all should have an opportunity to provide input. Moore stated that he would like to receive written comments from the ODP community in the next few weeks. Mountain asked if IPSC expected to produce another version of the science plan. Moore replied that the next version would involve a serious rewrite. Beiersdorf congratulated IPSC for their progress on the science plan and asked about the deadline for providing input. Moore said that EXCOM would see the final draft in June.

Moore outlined the basic principles of the IODP scientific advisory structure. Although the new structure would look similar to the current one, it would also include a few new parts, such as a technical planning group, an industry advisory committee, an education committee, and detailed planning groups for riser legs. Harrison suggested that the science committee would have a greatly expanded workload because they would have to deal with multiple platforms. Moore, however, expected that the workload of the science committee would not increase much because the number of riser sites or alternate platforms used per year would remain low. Wiens wondered how the

evaluation of riser sites would fit within the guise of the current advisory structure. Moore acknowledged that it would require a lot of work, and he expected that the detailed planning groups would handle most of it. Wiens then asked if proposals would come from outside or within the detailed planning groups. Moore said that SCICOM would have to decide that. Pisias noted that one of the biggest challenges would stem from the much longer lead time needed for planning a riser drilling leg and how the panel structure would maintain that longer-term view. Moore suggested that planning for the first riser site could begin in 2003 or 2004 and perhaps for the second site before drilling starts at the first site. Ball said that SSP planned to discuss at its next meeting how their workload would change with respect to riser drilling. Beiersdorf noted that the new advisory structure would not begin taking shape for another two years, and for now IPSC only sought approval of the guiding principles rather than the details. Meanwhile, the current advisory structure had to develop a plan for phasing itself out, keeping in mind the contingency that a future program may or may not come into existence. Moore said that IODP would certainly have a different proportional representation than ODP, and he raised the question of how to review proposals during the transition to the new program before knowing its membership. Morris remarked that some proponents had already started showing concern about the continuity between programs. Moore suggested reminding proponents that NSF had already indicated a certain commitment to a new program. He thought proponents should also receive advice on the likelihood of seeing their proposal scheduled in the next program.

Moore reported that IPSC had discussed five possible management structures, and he diagrammed the two selected for further consideration. Miller noted that one of the management structures showed two project managers and asked if that would include two levels of archiving, publications, etc. Beiersdorf saw it as premature to address such details. Pisias wondered whether two project managers would suffice. Moore said that IPSC also discussed the needs for expanded shore-based labs, an expanded OPCOM, an engineering development office, database management and acquisition, science synthesis and educational outreach, improved science and technology exchange with industry, detailed planning groups for riser sites, and long-term monitoring. Coffin suggested that IODP would need a mechanism to ensure adequate site surveying and preparation, saying that industry typically devoted 10% of total drilling costs to such efforts. Moore cautioned that the site surveying necessary to justify a proposal differed from that necessary to justify safety. Hyndman also cited the high cost of riser drilling and associated site surveying, and said that the unlikely chance of getting approval for one without an advance commitment to the other meant that overall approval would have to come much earlier. Moore agreed and said that it would help to develop better ties with industry in this regard.

Beiersdorf felt satisfied with the outcome of the joint meeting and adjourned the committees at 5:00 PM.

JOIDES EXECUTIVE COMMITTEE MEETING

THE WASHINGTON MONARCH HOTEL
WASHINGTON, D.C.
16 FEBRUARY 2000

Executive Committee - EXCOM

Helmut Beiersdorf (Chair)	Bundesanstalt für Geowissenschaften und Rohstoffe, Germany
James Briden	Environmental Change Unit, Oxford University, United Kingdom
Maria C. Comas	Instituto Andaluz de Ciencias de la Tierra, Universidad de Granada, Spain, (ECOD)
G. Brent Dalrymple	College of Oceanic & Atmospheric Sciences, Oregon State University, USA
Robert Detrick	Woods Hole Oceanographic Institution, USA
Chris Harrison	Rosenstiel School of Marine & Atmospheric Science, University of Miami, USA
Richard Hiscott	Earth Sciences Department, Memorial University of Newfoundland, Canada (PacRim)
Dennis Kent	Department of Geological Sciences, Rutgers University, USA
Roger Larson	Graduate School of Oceanography, University of Rhode Island, USA
John Mutter	Lamont-Doherty Earth Observatory, Columbia University, USA
John Orcutt	Scripps Institution of Oceanography, University of California, San Diego, USA
David Prior	College of Geosciences, Texas A&M University, USA
C. Barry Raleigh	School of Ocean and Earth Science and Technology, University of Hawaii, USA
Paul Stoffa	Institute for Geophysics, University of Texas at Austin, USA
Asahiko Taira	Ocean Research Institute, University of Tokyo, Japan

Associate Member Observers

Mathilde Cannat	Laboratoire de Pétrologie Université Pierre et Marie Curie, Paris, France
Wang Zhixiong	Marine High Technology Bureau, Beijing, China

Liaisons

Jeff Fox	Ocean Drilling Program (ODP), Texas A&M University, USA
David Goldberg	Lamont-Doherty Earth Observatory (LDEO), Columbia University, USA
William Hay	GEOMAR Research Center, University of Kiel, Germany
Bruce Malfait	National Science Foundation (NSF), USA
Kathryn Moran	Joint Oceanographic Institutions (JOI), Inc., USA

Guests

James Austin	Institute for Geophysics, University of Texas at Austin, USA
Jack Baldauf	Ocean Drilling Program (ODP), Texas A&M University, USA
J. Paul Dauphin	National Science Foundation (NSF), USA
Sören Dürr	Deutsche Forschungsgemeinschaft (DFG), Germany
John Farrell	Joint Oceanographic Institutions (JOI), Inc., USA
Chris Franklin	Natural Environmental Research Council (NERC), United Kingdom
James Gill	Department of Earth Sciences, University of California, Santa Cruz, USA
J. Frederick Grassle	Department of Geological Sciences, Rutgers University, USA
Hajimu Kinoshita	Japan Marine Science and Technology Center (JAMSTEC), Japan
Kazuhiro Kitazawa	Japan Marine Science and Technology Center (JAMSTEC), Japan
Emily Klein	Department of Geology, Duke University, USA
Shin'ichi Kuramoto	Science and Technology Agency (STA), Japan
Ted Moore	Department of Geological Sciences, University of Michigan, USA
Arthur Nowell	School of Oceanography, University of Washington, USA
Robert Owen	Department of Geological Sciences, University of Michigan, USA
Michael Purdy	National Science Foundation (NSF), USA
David Rea	Department of Geological Sciences, University of Michigan, USA
Neil Sullivan	Department of Physics, University of Florida, USA
Shinichi Takagawa	Japan Marine Science and Technology Center (JAMSTEC), Japan
Takeo Tanaka	Japan Marine Science and Technology Center (JAMSTEC), Japan
Philippe Vidal	Centre National de la Recherche Scientifique (CNRS), Paris, France
James Watkins	Joint Oceanographic Institutions (JOI), Inc., USA

JOIDES Office

Jeffrey Schuffert	GEOMAR Research Center, University of Kiel, Germany

JOIDES EXECUTIVE COMMITTEE MEETING

THE WASHINGTON MONARCH HOTEL
WASHINGTON, D.C.

16 FEBRUARY 2000

SUMMARY OF MOTIONS

EXCOM Consensus 00-1-1: EXCOM approves the agenda for the January 2000 meeting.

Harrison proposed, Briden seconded; approved by consensus.

EXCOM Motion 00-1-2: EXCOM approves the minutes of the June 1999 meeting.

Briden proposed, Detrick seconded; 15 in favor.

EXCOM Consensus 00-1-3: EXCOM recommends that JOI develop a preliminary ODP phase-out plan for comment by the JOIDES Advisory Structure and for presentation at the June 2000 EXCOM meeting.

Presented by Kent.

EXCOM Consensus 00-1-4: EXCOM commends IPSC and its working groups for their excellent progress in developing an IODP Science Plan over a very short period of time and for their consideration of the various management and operational issues associated with the development of IODP. We look forward to a further update on these planning efforts at our June 2000 meeting.

EXCOM will provide comments to the IPSC Chair on the draft IODP Science Plan and suggest potential reviewers of the plan from among a broad range of earth and ocean scientists. EXCOM also requests SCICOM to provide similar input to IPSC.

Presented by Detrick.

EXCOM Motion 00-1-5: EXCOM approves a science plan for FY2001 and beyond that includes the following programs:

479-Full3	Manus Basin
510 Full3	Marion Plateau
431-Rev	W. Pacific ION Network (WP-1)
517-Full	Nankai II (with LWD and advanced CORKs)
523-Full	Hawaii Emperor Seamounts
546-Full	Hydrate Ridge
486-Rev	Equatorial Pacific Paleogene Transect

Detrick proposed, Kent seconded; 13 in favor, 2 abstained (Orcutt, Taira).

EXCOM Motion 00-1-6: EXCOM endorses SCICOM Motion 00-1-1 regarding the Distance Learning initiative.

Harrison proposed, Mutter seconded; 14 in favor, 1 abstained (Prior).

EXCOM Motion 00-1-7: EXCOM advises the JOIDES office to ensure that a non-conflicted alternate member replaces, for the relevant business, any SCICOM member with a conflict of interest on a drilling proposal considered by SCICOM.

Briden proposed, Orcutt seconded; 15 in favor.

EXCOM Motion 00-1-8: EXCOM amends the Terms of Reference regarding appointment of PPG liaisons, as requested in SCICOM Motion 99-2-26.

Hiscott proposed, Harrison seconded; 15 in favor.

EXCOM Consensus 00-1-9: EXCOM endorses the following plan for developing closer relations with ICDP.

1. SCICOM will send an observer to the ICDP meeting on 3-4 April 2000 in Merida, Mexico.
2. ICDP will send an observer to the SSEPs meeting on 6-10 May 2000 in Cambridge, U.K., and to the SCICOM/OPCOM meeting on 1-4 August 2000 in Halifax, Nova Scotia, Canada.
3. TEDCOM should arrange to meet with ICDP drilling technology counterparts on 22-23 May 2000 in Potsdam, Germany.

Presented by Mutter.

EXCOM Consensus 00-1-10: EXCOM bids a fond farewell to Jim Briden. We cannot imagine an EXCOM meeting without Jim! His dedication to ODP and his ardent support for ocean drilling have marked his nearly 15 years of extraordinary service on EXCOM. As Chair of EXCOM between 1994-96, Jim successfully navigated the program throughout the run-up to Phase 3 renewal and played an instrumental role in maintaining the U.K. as a full partner in ODP. We express our gratitude to Jim for his long service and many contributions over nearly half the history of scientific ocean drilling. We wish Jim well for the future and look forward to his involvement in some capacity in the new IODP.

Presented by Detrick.

EXCOM Consensus 00-1-11: Over the last day and a half at this unique joint meeting of the JOIDES EXCOM and SCICOM, we have focused much of our attention on the changes and uncertainties that the future will surely hold for scientific ocean drilling. Even the most visionary of our members looks to 2003 and beyond and perceives only a clouded vision of the future. In such times of flux, we always seek a strong pillar of security to brace ourselves against as the winds of change whip around us. For eleven years, Arthur Nowell has served as that pillar for the Ocean Drilling Program. His unflurried wisdom has provided a deep keel that has helped us sail many times through troubled water. But now, as the storm clouds of uncertainty begin massing on the horizon, he will leave us—just when we need him most. But Arthur apparently operates on the same time scale as the sun spot cycle; eleven years have passed and so he must move on. Arthur, we will miss your sage council in our moments of stress. But most of all we will miss your ability to see over the horizon. This program stands immeasurably better for your devoted service and we thank you for it. We all owe you a great debt.

Presented by Mutter.

EXCOM Consensus 00-1-12: Whereas Margaret Leinen has served as our esteemed colleague on EXCOM for the past 10 years, and whereas she has provided a voice of reason and an unfailing source of wisdom in our deliberations, thereby having earned our profound respect and gratitude, and whereas the National Science Foundation has, in its wisdom and uncommonly good judgement, selected Margaret as its Assistant Director for the GEO Division, and whereas Margaret must now withdraw from membership on EXCOM, EXCOM hereby resolves that her famous EXCOM motion shall remain, in perpetuity, the longest ever passed, and we anticipate that her tenure as an Assistant Director at NSF will prove as brilliantly successful as her previous career, and we hope to continue enjoying the great pleasure of her company as often as her new responsibilities permit.

Presented by Raleigh.

JOIDES EXECUTIVE COMMITTEE MEETING

THE WASHINGTON MONARCH HOTEL
WASHINGTON, D.C.

16 FEBRUARY 2000

FINAL MINUTES

A. Approval of June 1999 EXCOM Minutes and Matters Arising

Beiersdorf opened the separate portion of the EXCOM meeting and asked the participants to introduce themselves. He also noted several changes to the agenda and called for its approval.

EXCOM Consensus 00-1-1: EXCOM approves the agenda for the January 2000 meeting.

Harrison proposed, Briden seconded; approved by consensus.

Beiersdorf asked for approval of the minutes from the previous EXCOM meeting. Hiscott first requested a minor change regarding the PacRim report, and all approved.

EXCOM Motion 00-1-2: EXCOM approves the minutes of the June 1999 meeting.

Briden proposed, Detrick seconded; 15 in favor.

B. ODP Phase-Out and ODP/IODP Transition

Beiersdorf presented timeline diagrams for the phase-out of ODP. He reiterated the goals of the phase-out and emphasized that it must consider the advent of the new program. Beiersdorf also noted that existing MOUs do not cover the post-2003 portion of the phase-out. Furthermore, the new advisory structure must reflect equal participation by the U.S. and Japan, whereas the commitment level of other international partners remains unknown. Beiersdorf recognized the difficulty of planning the phase-out and listed several important elements for consideration. He said that EXCOM as a policy-making body has to decide how to develop the final phase-out plan and initiate that activity as soon as possible because NSF needs an outline in one year. Beiersdorf proposed establishing a small working group for devising the phase-out plan. He recommended first establishing a small subcommittee to develop a mandate, task list, generic membership criteria, and a list of potential candidates for the working group. Beiersdorf said that the working group would depend on volunteers, and the final planning might require a dedicated person, but first we need an outline or strategy, something similar to what we did with IPSC.

Cannat returned to the question from the previous day about what would happen to proposals. Beiersdorf said that the phase-out plan must certainly address that issue. Larson thought that DSDP proposals did not carry over to ODP, but Austin said that ODP at first used some existing proposals from DSDP. Hiscott asked if DSDP had a phase-out plan. Malfait answered that DSDP did have a funded phase-out plan that lasted four or five years. Briden thought that the timeline looked desperately late, with only 18 months between acceptance of the plan and throwing away the key. He also did not view the forthcoming transition as any smoother than the previous one because the timeline showed an 18-month hiatus between programs. Malfait explained that JOI must submit a final program plan to NSF, whereas the hiatus represents a separate issue controlled by the funding and membership arrangements of the new program as well as the need for resources in 2004 to capitalize a drilling vessel.

Detrick recognized the importance and difficulty of developing a phase-out plan but felt that the timeframe and exact concept remained unclear. Beiersdorf said that the subcommittee would start immediately after this meeting and must finish by the next EXCOM meeting in June. The subcommittee would draft a mandate and task list for the working group and contact potential members. If we establish the working group at the June meeting and they produce a final outline no later than one year from now, then we would fall in line with the NSF goal to have a comprehensive

phase-out plan laid out by early 2002. Briden said that the proposed duality of the phase-out plan made it difficult to envision the membership of the working group. He assumed that the working group would need involvement from TAMU, but this would create a conflict of interest for planning the phase-in of the new program. Beiersdorf said that the working group would provide only an outline and not the final plan, so they would not necessarily need a member from TAMU. Orcutt noted that the proposed process emphasized the phase-out plan, whereas the phase-in of IODP presumably fell under the responsibility of IPSC. Beiersdorf said the outline of the phase-out plan would have to consider the new program. Raleigh asked to whom the working group would report and questioned whether they could plan the phase-out while working around the fact that JOI supplies the funds to the advisory structure and the operators. Beiersdorf said that the working group would report to EXCOM, but clearly would have to maintain contact with JOI and the operators. He expected that the final phase-out plan would incorporate all those elements that deal with financial issues, but according to a definite outline that must avoid any conflicts of interest. Beiersdorf stressed that the subcommittee had to start now and the working group, knowledgeable on the scientific, financial, and legal aspects of the program, had to start no later than August 2000. He added that EXCOM would disband the working group upon accepting their report.

Briden supported the proposal to establish a subcommittee, calling it a modest effort. Raleigh expressed concern about imposing something on JOI that they could not handle, and he wanted to ensure that JOI would conduct their own planning, sooner rather than later. He envisioned the phase-out plan as requiring a full-time effort from someone at JOI and said that EXCOM could not simply give JOI a mandate on how to do the job. Beiersdorf insisted that EXCOM had to provide JOI with an outline, otherwise JOI would do as it sees fit. Malfait noted that the MOUs and contracts already specified many aspects of the phase-out. He therefore saw it more as a need for a statement of the phase-out rather than a detailed plan. Watkins stated the JOI BoG had reviewed the phase-out timeline carefully at its meeting in Sydney. He explained that JOI ideally needs to know one year in advance what each element of the timeline means, though they had already pushed well ahead without knowing anything but the constraining dates. Beiersdorf believed that the picture would get clearer as the end approached, but he could not imagine that JOI alone could consider every aspect of the phase-out. Watkins said that JOI did not have a complete phase-out plan, but they did have a long list of things they needed to know to meet their contractual obligations, and they could not get there from here without doing their homework well in advance. Kent suggested that the advisory structure should entertain proposals for the phase-out from JOI itself, rather than establish a working group concerned with financial and legal complexities. Raleigh agreed that JOIDES should advise JOI and comment on their plans, rather than do it twice and have a committee focused only on the phase-out and not the phase-in.

Beiersdorf asked from whom NSF expected to receive the final phase-out plan. Malfait restated that JOI must submit the program plan for phasing out the contractors with respect to their participation in ODP. Beiersdorf asked if that included phasing out the advisory structure. Malfait answered that it would include phasing out the support to the JOIDES advisory structure. Beiersdorf thought NSF expected advice from the advisory structure on phasing out ODP. Malfait said only in the sense that JOIDES advises JOI on the program. Beiersdorf still doubted that JOI held responsibility for phasing out the advisory structure. Briden said that JOI must have that responsibility because JOIDES represents an entity of JOI in contractual terms. Malfait believed that the MOUs defined JOIDES in terms of the program membership, whereas JOI has the responsibility to provide the administrative support for JOIDES. Briden then saw it as a question of whether EXCOM or JOI initiated the phase-out planning activity. Beiersdorf said that it would simplify the task of the JOIDES advisory structure if JOI could plan the phase-out. Dalrymple said that if JOIDES derives from the MOUs then perhaps NSF has the responsibility for phasing out JOIDES. Larson reminded everyone that a collection of scientists created ODP, not JOI or NSF;

therefore, the science advisory structure should hold the responsibility for its own phase-out. Beiersdorf doubted whether JOI had the resources to develop the phase-out plan and said that EXCOM could disband the working group if it did not work. Comas agreed that EXCOM held the responsibility for the phase-out, and she supported establishing an independent working group.

Kent suggested moving ahead and establishing the subcommittee of EXCOM and letting them solicit a preliminary plan from JOI for the next EXCOM meeting, then we can decide whether we need a more elaborate parallel structure to continue the planning. Taira agreed that EXCOM had to start working immediately on the phase-out plan. Beiersdorf said that EXCOM had to define the expected outcome of these proposals. Kent suggested that the subcommittee could serve as a standing body that would report to EXCOM at each meeting, and he presented a draft motion calling for JOI to develop a phase-out plan. Malfait worried that the phase-out plan would consider only operational issues, with no statement of the intellectual legacy or scientific achievements of ODP. Beiersdorf agreed on the importance of addressing those aspects in the phase-out plan. Hay said that SCICOM had started planning for beyond 2003, but had not considered the issue of summarizing the accomplishments in this program. Kent felt uncertain whether such a summary belonged in the phase-out plan and suggested waiting to see the plan presented by JOI at the next meeting. Harrison thought that JOIDES should identify the scientific achievements of ODP and not JOI. Beiersdorf said that EXCOM must decide how to proceed once JOI comes back with proposal.

EXCOM Consensus 00-1-3: EXCOM recommends that JOI develop a preliminary ODP phase-out plan for comment by the JOIDES Advisory Structure and for presentation at the June 2000 EXCOM meeting.

Presented by Kent.

C. Discussion of IPSC Report and Presentation of SCICOM Suggestions

David Rea summarized the SCICOM discussion of the IODP Initial Science Plan. He said that certain sections of the plan needed strengthening, including those on mantle tomography, sea-level change, Arctic drilling, continental breakup and sedimentary basin formation, and borehole monitoring. Furthermore, the science plan needed to emphasize better the seismogenic zone as a primary thrust of IODP. Rea suggested that perhaps an executive summary could address some of those issues, but the last one especially needed greater prominence. Mutter asked whether SCICOM felt pleased with the basic idea to emphasize the seismogenic zone as the lead component of the plan, and Rea answered yes. Detrick remarked that a riser leg might represent a culmination of effort that also involved non-riser drilling.

Detrick said that he had difficulty in getting a sense of the whole plan from reading the partial document available now, and asked whether the plan would receive further review. Moore said that he hoped to mail out a 95% complete draft by March for review by an international group of respected scientists. Beiersdorf asked about the type of person envisioned for that review. Moore replied that IPSC only has time for one more good review and rewrite before they produce something for IWG, but it could prove useful at this stage to have reviewers from outside ODP. Briden asked if the time had arrived to involve people from the National Academy level. Purdy said that the best timing for that would depend on input from individual countries, and IWG would discuss it tomorrow. He foresaw that IWG would establish a review process to produce a final plan for use by individual nations to solicit funds internally. Moore suggested that each country or consortium might want to write their own prolog to this document, as the U.S. plans to do. He added that IPSC would like to receive an official list of about twenty potential reviewers. Beiersdorf called for EXCOM members to nominate candidates and said that SCICOM should assist in finding the proper assembly of people.

Rea summarized the SCICOM discussion of the IODP science advisory structure and management models proposed by IPSC. He said that SCICOM expressed the most concern about the lack of an

advisory group dedicated explicitly to alternate platforms. SCICOM therefore suggested establishing Detailed Planning Groups as necessary for riser, non-riser, and alternate platforms. SCICOM also believed that the advisory structure would have to provide a centralized source of advice for leading prospective proponents through the process of developing and submitting drilling proposals for the different platforms, and they wondered specifically how the new system would handle large complex riser proposals. Rea said that SCICOM also wondered whether IODP would need a separate management structure for alternate platforms, but they realized that any recommendations in that regard had to wait for a clearer picture to emerge on the overall financial commitments to the new program. Moore said that other elements of IODP would certainly require management, but first we need to define the managerial activities before we decide where they fit in the overall structure.

D. Discussion of IPSC Report and Presentation of SCICOM Suggestions (continued)
Beiersdorf noted several aspects of the IPSC report and other related issues that would arise in IWG and asked for further comments. Detrick believed that the implementation component of the science plan might require another review group because he doubted whether the new program could accomplish all of the science described in the science plan in ten or fifteen years. Orcutt suggested that SCICOM should review and comment on the scientific issues associated with borehole monitoring and other technical goals of the science plan. Moore raised the question of who would pay for monitoring efforts once we install borehole instruments. Stoffa returned to the issue of the greater needs and costs for site surveying associated with riser drilling. Mutter said that the academic fleet does not have the capacity to do site surveys for riser legs, and he identified the need for a more sophisticated database than what we have now to manage the output of the more complicated 3-D surveys. Beiersdorf said that these issues definitely required further consideration, but it might depend on individual countries to satisfy those needs, perhaps through special initiatives directed toward specific projects.

Beiersdorf stated that EXCOM needed to give an overall evaluation of the IPSC report. He recommended encouraging IPSC to consider the comments of EXCOM and SCICOM and proceed accordingly. Detrick presented the following statement and Beiersdorf called for its approval by consensus.

EXCOM Consensus 00-1-4: EXCOM commends IPSC and its working groups for their excellent progress in developing an IODP Science Plan over a very short period of time and for their consideration of the various management and operational issues associated with the development of IODP. We look forward to a further update on these planning efforts at our June 2000 meeting.

EXCOM will provide comments to the IPSC Chair on the draft IODP Science Plan and suggest potential reviewers of the plan from among a broad range of earth and ocean scientists. EXCOM also requests SCICOM to provide similar input to IPSC.

Presented by Detrick.

E. Approval of FY2001 Science Plan
Hay presented the FY2001 science plan for approval and described how OPCOM and SCICOM had determined the schedule. Hay also showed a map of the proposed ship track, noting the proposed switch of Hydrate Ridge from Leg 198 to 199 so that it would occur in the next fiscal year. Hay then briefly described the science plan for each leg, including those already scheduled beyond FY2001. Hay commended SCICOM for doing a good job at the last meeting in presenting proposals and deciding upon the schedule.

Beiersdorf asked Hay to explain exactly how the science plan complied with the long-range plan. Hay did so on a leg-by-leg basis and Beiersdorf felt satisfied with the plan. Hay suggested approving the science plan beyond FY2001 to allow flexibility in switching Legs 198 and 199 for budgetary reasons. Beiersdorf agreed and called for approval from EXCOM. Orcutt and Taira each

declared that they had a conflict of interest and would abstain from approving the FY2001 science plan.

EXCOM Motion 00-1-5: EXCOM approves a science plan for FY2001 and beyond that includes the following programs:

479-Full3	Manus Basin
510 Full3	Marion Plateau
431-Rev	W. Pacific ION Network (WP-1)
517-Full	Nankai II (with LWD and advanced CORKs)
523-Full	Hawaii Emperor Seamounts
546-Full	Hydrate Ridge
486-Rev	Equatorial Pacific Paleogene Transect

Detrick proposed, Kent seconded; 13 in favor, 2 abstained (Orcutt, Taira).

F.1 Distance Learning Initiative from SCICOM

Klein presented the following draft motion from SCICOM regarding the Distance Learning Initiative.

SCICOM Motion 00-1-1: SCICOM endorses sailing a secondary education science teacher aboard the *JOIDES Resolution*, assuming minimal impact on leg scientific staffing. SCICOM also endorses the time resources required of ODP/TAMU staff (a total of 12 weeks or 2 weeks/FTE) to complete the Distance Learning Initiative. SCICOM requests ODP/TAMU to prepare a final report on the pilot project that would include recommendations for internationalizing this educational outreach program.

Larson asked what SCICOM meant by a "minimal impact on leg scientific staffing". Klein said that it could mean one less scientist, though SCICOM hoped that the teacher would contribute to shipboard science. Briden asked if the pilot project represented essentially a U.S. effort. Klein explained that the State of Texas had funded the project for outreach to middle schools in Texas. SCICOM hoped that it would expand internationally, but such an effort would most likely require international support. Briden said that his national agency did not have a mandate to support educational work. Kent asked about the process for selecting the teacher. Baldauf described it as a competitive process, eventually on a national or international scale to achieve broader appeal and publicity. Mutter wondered whether ODP could afford to replace 2% of the science party and asked who would submit the final report. Baldauf said that TAMU would submit the final report. Klein reemphasized the fact that an external organization had contributed $350K in funding for this project. Prior added that the total support from Texas probably amounts to more like $450K considering the involvement of TAMU faculty.

EXCOM Motion 00-1-6: EXCOM endorses SCICOM Motion 00-1-1 regarding the Distance Learning initiative.

Harrison proposed, Mutter seconded; 14 in favor, 1 abstained (Prior).

F.2 SCICOM ranking and voting procedure.

Hay explained that he foresaw a problem in maintaining a quorum during the SCICOM scheduling meeting in August 2000. He stated that according to the Terms of Reference for SCICOM, "A quorum shall consist of at least two-thirds of the non-U.S. members and at least two-thirds of the U.S. members." Hay also stated that one of the five non-U.S. members and four of the ten U.S. members would have a direct conflict of interest as proponents of drilling proposals under consideration by SCICOM at its next meeting. In other words, SCICOM would lack a quorum and therefore could not make any official decisions on ranking and scheduling proposals.

Briden commended the JOIDES Office for anticipating this problem and said that only two possible solutions exist. Either 1) replace at least two of the conflicted U.S. members with non-conflicted alternates, try to replace the conflicted non-U.S. member with a non-conflicted alternate, and ensure that no other conflicted members or alternates would attend, or 2) change the rules to relax the restriction against voting by conflicted members. Briden noted that this problem had never arisen before in the three-year history of the current JOIDES advisory structure. He therefore advocated the first approach of working within the existing rules. Comas also favored the first solution because voting rights belonged to the countries and consortia, not the individual members. Raleigh asked why the U.S. should replace only two of its four conflicted members. Briden said that that would suffice to achieve a quorum.

Beiersdorf called for a motion to advise SCICOM on solving the problem. Briden presented a motion and noted that the JOIDES Office would have to inform the conflicted members. Hiscott asked whether the phrase "relevant business" referred to the whole meeting or just the ranking and voting process. Briden preferred to leave it ambiguous and thus allow the national programs the option to decide if the alternate and regular members would attend the meeting or just the alternate.

EXCOM Motion 00-1-7: EXCOM advises the JOIDES office to ensure that a non-conflicted alternate member replaces, for the relevant business, any SCICOM member with a conflict of interest on a drilling proposal considered by SCICOM.

Briden proposed, Orcutt seconded; 15 in favor.

F.3 Amend Terms of Reference

Hay presented the following request from SCICOM to amend the terms of reference regarding the appointment of liaisons to Program Planning Groups (PPGs).

SCICOM Motion 99-2-16: SCICOM requests EXCOM to amend the Terms of Reference for Program Planning Groups as follows:

6.5 **Liaison.** ~~SCICOM establishes liaison with the PPGs by the appointment of non-voting liaisons~~. The SSEPs will appoint liaisons to the PPGs, and ~~The~~ PPG Chairs ~~will~~ may attend one meeting of the SSEPs per year, ~~as~~ if requested by the SSEPs Chairs.

In the absence of any further discussion, Beiersdorf called for a motion to amend the terms of reference as requested.

EXCOM Motion 00-1-8: EXCOM amends the Terms of Reference regarding appointment of PPG liaisons, as requested in SCICOM Motion 99-2-26.

Hiscott proposed, Harrison seconded; 15 in favor.

F.4 Relationship with International Continental Drilling Program (ICDP)

Mutter presented a plan for enhancing cooperation between ODP and ICDP, as discussed earlier in the meeting. The plan called for an exchange of information on proposal review and schedule development, specifically through an exchange of liaisons between programs. It also proposed that TEDCOM should hold its next meeting with a counterpart group from ICDP to discuss ways for cooperating in technology development and equipment use. Comas indicated that ECOD members would have to approach such an initiative country by country, but the path of communication did not look open. Beiersdorf explained that this plan represented only an initial step, and he believed that ODP should proceed enthusiastically and find out how far it could go. Comas agreed completely and said that she just wanted to raise the point. Larson asked if the ODP liaison would come from SCICOM, and Hay answered yes. Beiersdorf called for EXCOM to endorse the plan and all approved by consensus.

EXCOM Consensus 00-1-9: EXCOM endorses the following plan for developing closer relations with ICDP.

1. SCICOM will send an observer to the ICDP meeting on 3-4 April 2000 in Merida, Mexico.
2. ICDP will send an observer to the SSEPs meeting on 6-10 May 2000 in Cambridge, U.K., and to the SCICOM/OPCOM meeting on 1-4 August 2000 in Halifax, Nova Scotia, Canada.
3. TEDCOM should arrange to meet with ICDP drilling technology counterparts on 22-23 May 2000 in Potsdam, Germany.

Presented by Mutter.

G. Evaluation of Joint Meeting

Beiersdorf thought that the joint meeting had saved resources, heightened communication, and still allowed EXCOM to accomplish all of its business. Larson noted that it also helped to reduce the redundancy of reporting from managers, etc. Briden wondered whether SCICOM had benefited from the joint meeting, but Hay had just left the room and could not comment. Hiscott suggested that it might work better to stagger the EXCOM and SCICOM meetings with one day of overlap because Hay could not attend part of his own meeting. Harrison asked if SCICOM would schedule any additional meetings this year. Beiersdorf replied that EXCOM and SCICOM would continue to hold only two meetings per year and added that we could hold another joint meeting in the future if needed, but we do not have many meetings left in the program

H. Other Business

Beiersdorf raised the issue of who should supply the International Liaison to the next JOIDES Office in the U.S. He suggested that the liaison should come from Japan. Harrison noted that the University of Miami had submitted a bid for the next JOIDES Office and had specifically requested a liaison from Japan. Beiersdorf deferred further discussion of this issue until learning more about the process for selecting the past international liaisons.

EXCOM Consensus 00-1-10: EXCOM bids a fond farewell to Jim Briden. We cannot imagine an EXCOM meeting without Jim! His dedication to ODP and his ardent support for ocean drilling have marked his nearly 15 years of extraordinary service on EXCOM. As Chair of EXCOM between 1994-96, Jim successfully navigated the program throughout the run-up to Phase 3 renewal and played an instrumental role in maintaining the U.K. as a full partner in ODP. We express our gratitude to Jim for his long service and many contributions over nearly half the history of scientific ocean drilling. We wish Jim well for the future and look forward to his involvement in some capacity in the new IODP.

Presented by Detrick.

EXCOM Consensus 00-1-11: Over the last day and a half at this unique joint meeting of the JOIDES EXCOM and SCICOM, we have focused much of our attention on the changes and uncertainties that the future will surely hold for scientific ocean drilling. Even the most visionary of our members looks to 2003 and beyond and perceives only a clouded vision of the future. In such times of flux, we always seek a strong pillar of security to brace ourselves against as the winds of change whip around us. For eleven years, Arthur Nowell has served as that pillar for the Ocean Drilling Program. His unflurried wisdom has provided a deep keel that has helped us sail many times through troubled water. But now, as the storm clouds of uncertainty begin massing on the horizon, he will leave us, just when we need him most. But Arthur apparently operates on the same time scale as the sun spot cycle; eleven years have passed and so he must move on. Arthur, we will miss your sage council in our moments of stress. But most of all we will miss your ability to see over the horizon. This program stands immeasurably better for your devoted service and we thank you for it. We all owe you a great debt.

Presented by Mutter.

EXCOM Consensus 00-1-12: Whereas Margaret Leinen has served as our esteemed colleague on EXCOM for the past 10 years, and whereas she has provided a voice of reason and an unfailing source of wisdom in our deliberations, thereby having earned our profound respect and gratitude, and whereas the National Science Foundation has, in its wisdom and uncommonly good judgement, selected Margaret as its Assistant Director for the GEO Division, and whereas Margaret must now withdraw from membership on EXCOM, EXCOM hereby resolves that her famous EXCOM motion shall remain, in perpetuity, the longest ever passed, and we anticipate that her tenure as an Assistant Director at NSF will prove as brilliantly successful as her previous career, and we hope to continue enjoying the great pleasure of her company as often as her new responsibilities permit.

Presented by Raleigh.

I. Future Meetings

Beiersdorf reminded everyone about the next EXCOM meeting scheduled for 27-28 June 2000 in College Station, Texas. He also announced that Japan had agreed to host the first meeting in 2001, as previously discussed, and noted that it should not conflict with the USSAC meeting already scheduled for 24-26 Jan 2001. Beiersdorf then suggested that the U.K. should host the second meeting in 2001.

Taira proposed the dates of 29 Jan - 2 Feb 2001 for the meeting in Japan. Larson suggested meeting in the middle of February. Taira then proposed the dates of 14-15 Feb 2001. Austin objected that mid-week dates preclude a Saturday stay-over and reduced airfares. Taira said that he would work on determining the best dates.

Beiersdorf thanked JOI for hosting the meeting and adjourned the committee at 2:45 PM.