## JOIDES SITE SURVEY PANEL MEETING

November 11 - 14, 1996 Lamont-Doherty Earth Observatory, Palisades, New York, USA

Members:

Srivastava, Shiri (GSC Atlantic, Canada) -- Chair

Casey, Jack (U. Houston, USA)
Diebold, John (L-DEO, USA)
Enachescu, Michael (Husky, Canada)

Flood, Roger (SUNY, USA) Hinz, Karl (BGR, Germany)

Lykke-Andersen, Holger (U. Aarhus, Denmark)

Peterson, Larry (RSMAS, USA)

Sibuet, Jean-Claude (IFREMER, France) Tokuyama, Hidekazu (ORI, Japan)

Liaison:

Acton, Gary (ODP/TAMU)
Ball, Mahlon (PPSP)

Ellins, Kathy (JOIDES Office)

Quoidbach, Daniel (ODP Data Bank) -- Host Mountain, Greg (PCOM) -- Host

Apology:

Malfait, Bruce (NSF)

Paull, Charles (*U. North Carolina, USA*) Scrutton, Roger (*U. Edinburgh, UK*) Toomey, Douglas (*U. Oregon, USA*)

#### **AGENDA**

JOIDES Site Survey Panel Meeting November 11 - 14, 1996 Lamont-Doherty Earth Observatory, Palisades, New York, USA

#### 1. PRELIMINARY MATTERS (Srivastava)

- 1.1 Introduction of members, liaison, guests and meeting logistics.
- 1.2 Charge and procedures for the meeting
- 1.3 Watchdog assignments
- 1.4 Feedback to proponents
- 1.5 Action items from July 1996 LDEO meeting

#### 2. REPORTS

- 2.1 PCOM (Mountain)
- 2.3 JOIDES (Ellins)
- 2.3 PPSP (Ball)
- 2.4 Data Bank (Quoidbach)
- 2.5 TAMU (Acton)

## 3. SITE SURVEY IMPLICATIONS OF RECENTLY DRILLED LEGS

- 3.1 Leg 168: Juan de Fuca (Casey/Acton)
- 3.2 Leg 169: Sed. Ridges II (Casey/Acton)

## 4. SITE SURVEY STATUS OF UPCOMING SCHEDULED LEGS\*

- 4.1 Leg 173: Iberia II; 461 (Enachescu)
- 4.2 Leg 174A: New Jersey II; 348 (Flood)
- 4.3 Leg 176: Return to 735B; 300 (Casey)

## 5. POTENTIAL FUTURE DRILLING: TECP

- 5.1 447: Woodlark Basin (Enachescu) PPSP
- 5.2 431: Western Pacific Seismic Network (Peterson)
- 5.3 450: Taiwan arc-continent collision (Sibuet) PPSP

## 6. POTENTIAL FUTURE DRILLING: SGPP

- 6.1 452-502: Antarctic Glacial History and Palmer Deep(Lykke-Andersen) PPSP
- 6.2 445: Nankai Trough Accretionary Prism (Diebold) PPSP
- 6.3 367: Great Australian Bight Carbonate (Enachescu) PPSP
- 6.4 LOI-69: Barbados Corking (Srivastava)

## 7. POTENTIAL FUTURE DRILLING: OHP

- 7.1 464: Southern Ocean Paleoceanography (Flood)
- 7.2 441: SW Pacific Gateway: Paleoceanography (Peterson)
- 7.3 503: Weddell Sea (Hinz) PPSP
- 7.4 485: Southern Gateway-Australia and Antarctic (Casey) PPSP
- 7.5 482: Wilkes Land Ross Sea, Antarctica: Paleoceanography (Flood) PPSP

## 8. POTENTIAL FUTURE DRILLING: LITHP

- 8.0 DCS Drilling 735B (Srivastava)
- 8.1 457: Kerguelen Plateau (Tokuyama)
- 8.2 508: Ninety East Ridge Observatory sites (Peterson)
- 8.3 451: Tonga Forearc (Diebold)
- 8.4 472: Mass Balance: Izu Mariana (Diebold)
- 8.5 426: Australian Antarctic Discordance: (Sibuet)

## 9. OTHER BUSINESS

- 9.1 JOIDES new structure: Meeting schedule and transition year (Srivastava, Ellins)
- 9.2 SSP meetings for 1997
- 9.3 Report of SSP subcommittee on Phase IV of ODP (Diebold, Casey)
- 9.4 Panel Membership (Srivastava)
- 9.5 Other business Data requirement of previously drilled Legs in new proposals.
- 9.6 Suggested Co-Chiefs for future legs from SSP

## 9.7 Items for PANCH. meeting

\* --- For Legs 171A, 171B, 172, 174B, and 175 data sets were approved at previous SSP meetings and no changes have taken place since.

PPSP - items in the proposal of concern to PPSP

#### **Executive Summary**

## Charge and procedures for the meeting (Srivastava)

The goals for this meeting were to: (1) to evaluate the site survey readiness of proposals in the prospectus for FY98 drilling, including those proposals which were added to the prospectus (i.e. highly ranked) by the thematic panels at their fall meetings; (2) to evaluate the site survey readiness of legs scheduled for drilling; and (3) to assess any site survey issues arising from legs that were drilled since our July meeting. The main customer for the output of this meeting is PCOM, who uses the evaluations resulting from item (1) above as input into designing the drilling schedule for FY'98 at their December meeting.

The discussion during the meeting resulted in SSP making the following recommendation to PCOM, action items and point of consensus.

SSP Recommendation to PCOM for the use of GI guns on board JOIDES RESOLUTION: SSP recommends that PCOM should direct JOI to request TAMU to explore the possibility of carrying out an evaluation on the superiority of GI guns over water guns for acquiring seismic data at speeds greater than 5 knots on board Joides Resolution during one of its Legs in the coming year. These guns can be acquired on loan from interested participant(s) on a particular leg where the guns are to be used or from institutions like Lamont or IFREMER who have been using these guns on a regular basis. If such guns can be obtained, appropriate time and funds will need to be budgeted during that particular leg where this evaluation will be carried out.

#### Explanatory note:

SSP appreciates the efforts being made by TAMU in procuring a new seismic system for use on board J/R. As part of this development work SSP wondered if TAMU would like to explore the possibility of using GI guns on board J/R during one of the forthcoming legs. We ask that GI guns be assessed because they have been shown to give superior results at many locations, while towed at speeds of up to 10 knots by IFREMER. One of the difficulties with the current J/R water guns is that they need to be towed at speed of about 5 knot to give reasonably good records. Owing to tight time constraints on most Legs, collection of seismic data on approaches to drill sites is, therefore, not possible, or when it is done, takes valuable time away from drilling operation. Our request has the potential to enhance the quality of seismic data collected by J/R, to reduce the time it takes to collect the data, and to provide a source that can be used on a regular basis if so proven without excessive modification to existing hardware on board J/R. We realise that getting superior quality seismic records at any speed is not merely depended on the type of guns used but also depend on many factors like, the ship's noise level, the recording streamer and the weather conditions. Ideally this evaluation should be carried out using not only GI guns but also the 6 channel streamer used by IFREMER where superior quality data have been obtained at speeds of up to 10 knots. The use of such a complete system would involve a lot of preparatory work and perhaps can be left to a later time if the presently proposed evaluation turned out to be negative.

In our opinion Leg 172 (Sediment Drift) provides an ideal opportunity for such a comparison to be made because of the requirement on this leg to acquire a lot of seismic data on approaches to the sites. Furthermore, this data is to be acquired in varying water depths making this evaluation more complete. Also Roger Flood, one of the participants on this Leg and a SSP member, is a very knowledgable worker on seismic systems and would be a valuable asset during the evaluation process. We realise that it does not provide too much time to make necessary preparation for this evaluation to be carried out on Leg 172, and for that reason we would suggest Leg 175 (Benguela Current) as a possible alternative. If this evaluation can not be done on either of these legs then we suggest that it be scheduled for the earliest possible Leg.

Action item #1: All watchdog to write to lead proponents of all programs discussed, reporting the sense of SSP discussion and enclosing the relevant section of the minutes. A copy of this letter must be sent to the DB. The letter can be sent by e-mail.

Action item # 2: Data Bank manager, Dan Quoidbach, to write to the Co-Chiefs of designated legs, reporting the sense of SSP discussion and enclosing the appropriate section of the minutes.

Action Item #3: Dan Quoidbach to circulate the new forms to all members for comments etc.

Action item #4: SSP Chair Srivastava to write to PCOM asking for their permission to hold their spring meeting in Japan from April 1 to 4, 1997.

Action item #5: SSP Chair to write to PCOM advising them of the decision taken by SSP to hold one of their meetings outside North America and asking for their permission to do so.

Action item #6: Srivastava to write to PCOM about the extension in Jean-Claude Sibuet's term of appointment with SSP panel.

SSP Consensus #1: All sites for Leg 173 are completely documented from Site Survey readiness point of view. A comprehensive set of migrated MCS lines, intersecting the approved sites and a recontoured basement map, constructed from interpreted migrated sections, have been submitted to the DB.

SSP Consensus # 2: We request that the positions of all sites for Leg 174A that have new coordinates be submitted to the JOIDES office on ODP Site Summary Forms, that shelf sites be prioritized, and that justification be provided for the newly designated slope sites. SSP Consensus # 3: SSP reiterates that all the required data is now available in order to deepen Site 735B. However, SSP continues to request that the proponents submit a survey map of JOIDES Resolution video tapes to show the distribution of sediments, slopes and potential alternate sites near Site 735B. The proponents have promised to reconstruct the video track from the audio portions of the tape because the original JR track map cannot be located. This is important given the potential of selection of alternate sites if difficulties in deepening 735B are encountered (see PCOM MOTION 95-3-11). Drilling on Leg 169 has clearly demonstrated the usefulness of such maps when locating sites from video tapes. These should be submitted prior to the April, 1997 SSP Meeting. Offset sites proposed for the second Leg were not considered by SSP because the proposal is not ranked.

SSP Consensus # 4: SSP acknowledges that a complete data package supporting drilling in the West Woodlark Basin (447-rev3) now exists in the Data Bank. The reviewed proposal contains four feasible, well-documented sites. Site Survey Readiness Classification: 1A.

SSP Consensus # 5: Data in support of all four western Pacific seismic network sites (431), including preliminary results from a recent survey, were hand carried to our meeting and examined for the first time. These data indicate the potential viability of all four sites for seismometer installation, but vital data types and information are still lacking, and further processing of the recently collected MCS data is required. Proposed sites WP-2, JT-1, and JT-2 are classified as 2A in terms of present site survey readiness, while site WP-1 is currently ranked as 2B in anticipation of further survey efforts in early 1997.

SSP Consensus # 6: As the remaining data requested during the July 1996 meeting have been deposited in the DB, the proposal 450 (Taiwan arc-continent collision) is rated as ready to be considered for drilling in 1998. A preview of this proposal may be required, if it gets scheduled for drilling in 1998, in view of the possibility of BSR at two of the sites TC2A and TC7A. Suggestion has been made to the proponents for moving one of their sites (TC-6A) 20 km to the north to document the sediments there by drilling into the region which may have been subjected to a large scale gravity sliding. This will not change the scientific objectives of the proposal.

SSP consensus #7: SSP appreciates the efforts made by the proponents of **Antarctic Peninsula proposal (452-502)** to complete the site survey package, and to clarify questions concerning previously deposited data. High-resolution data for the sites APSHE-13A and -14A are still needed to make the data package complete. Furthermore it is recommended that true-amplitude plots are provided for the APRISE-sites to help the safety evaluation of these sites.

SSP Consensus #8: The data package for Nankai Trough (445-Rev2, Add 2) is very nearly complete. Much of the work needed to bring the package to this stage has been provided by the Data Bank, especially in the form of detailed navigation plots for each site. These plots cannot be completed, however, until digital navigational data is delivered as promised within the coming month. The proposal is now rated 1B.

SSP Consensus # 9: A complete set of site survey data for proposal 367 (Great Australian Bight) are in the DB. Migrated lines, isochron maps constructed by interpreting migrated sections and seismic derived velocity information with hole plots including total depth, were reviewed and found adequate. Site survey readiness: 1A.

SSP Consensus # 10: The proposal (LOI-69) requires refurbishing of two of the corked sites in this region during 1997 drilling. It does not require any additional site survey data. It is therefore regarded as ready.

SSP Consensus # 11: The data package for proposal 464 (Southern Ocean Paleoceanography) is nearly complete and is designated 1A. Deepening some of the holes is best done after consideration of the deeper seismic structure; this may involve the proponents working more closely with a seismic stratigrapher. The impact of deepening any holes on overall leg timing also needs to be considered. If any sites are moved or deepened, they will need to be re-evaluated by SSP and will need good velocity control.

SSP Consensus # 12: SW Pacific Gateway (441) proponents have submitted a corrected and revised data package which supersedes all previous data submissions and addresses SSP concerns from the last meeting. Their recent addendum (441-ADD2) summarizes plans to drop two sites (SWPAC-3A and -4A) in order to fit the remaining seven into a single leg of drilling. A scheduled (February 1997) site survey cruise aboard the R/V Tangaroa will collect additional required survey data at all seven SWPAC sites. Site survey readiness for this program stands at 2B, with the expectation that the upcoming site survey cruise will collect all requisite data and make this program a strong candidate for 1998 drilling.

SSP Consensus # 13: It is almost certain that the site survey requirement for the Weddell Sea proposal (503) can be satisfied by the existing data. However, the proponents must supply a large scale track plot of all existing MCS and SCS lines at the proposed sites together with the revised/upgraded version of this proposal so that all the supplied data can be evaluated systematically by SSP. The proponents should keep SSP posted of the plans to acquire additional data at proposed prime and alternate sites.

SSP Consensus # 14. Most of the data for proposal 485 (The Southern Gateways between Australia and Antarctica) is now submitted to the DB or will be submitted in the next two months. The proponents are strongly encouraged to submit the processed and migrated ARSO Cruise 125 sections and velocity information for all the sites as soon as possible in order to complete the data package before the April 97 SSP meeting. Pertinent data for gas shows at some sites must be assembled if a preview of this proposal is required by the safety panel. A ranking of 1B is assigned to this proposal because a few required items are missing from the data bank, but the data are believed to exist and to be readily available.

SSP Consensus # 15: Not all data necessary for drilling sites in the proposal 482 (Wilkes Land) is thought to exist, but is expected to be collected during an approved site-survey cruise. Additional data may also be available through JNOC. The proposal is ranked as 3A.

SSP Consensus # 16: A nearly complete data package has been provided in support of proposed drilling in the Ross Sea (proposal 489). Some required items are missing although they are thought to exist. Also needed is a drilling plan that identifies alternate sites should ice conditions not allow some sites to be drilled.

SSP Consensus # 17: Except for a navigation map to be used with the video data for this region no additional site survey data is needed for a DCS leg in region of hole 735B.

SSP Consensus # 18: SSP acknowledges the efforts made by the proponents of **Kerguelen Plateau proposal (457)** to acquire additional MCS and other site survey data at most of the proposed sites during the forthcoming cruises. SSP recommends that the proponents should plan to collect seismic data along tracks which will intersect with the existing MCS lines at the proposed sites on the Kerguelen Plateau. Pending on successful completion of planned and scheduled cruises, most of the sites on the Kerguelen Plateau from this proposal should be ready for drilling in 1998. The data quality of the existing data on the Broken Ridge could not be assessed because of the unavailability of data at the time of the meeting. However, efforts should be made to collect additional data at this site. The proposal is ranked as 2B (for sites 3A/6B/7A/12A) and 2C (for sites 2A and 9A).

SSP Consensus # 19: This proposal calls for installation of a broadband ocean seismometer into a borehole drilled into basement on the **Ninety East Ridge** (508). Plans call for reoccupation of either ODP Site 756 or 757. Since site survey data for these previously drilled sites are already on file with the ODP Data Bank, SSP requires no further evaluation and considers the site survey readiness status to be 1A.

SSP Consensus # 20: The greater part of the required site data for **Tonga Forearc proposal** (451) now resides in the DATA BANK. Since the July meeting, much of the data from the R/V Melville "Boomerang" site survey has been submitted to the data bank, including underway geopotential data, larger-scale reproductions of site-crossing SCS profiles along with swath mapping and sidescan data. Some of the data are still "in the mail," however. Velocity information in the area has been synthesized, and revised drilling time calculations have also been submitted, as have site maps and thermal gradient information. The proponents are to be congratulated for their response to SSP demands. The data package for drilling these sites is very nearly complete, and we await only large scale plots of DCS (dual channel seismics) from the Melville cruise for a few sites, and migrated sections of one older MCS line, currently being prepared under the direction of David Scholl, and this is an enhancement, not a requirement. The proposal is ranked as 1B - as a few items are still missing from the DB but are believed to exist and should be ready by 1997 making this proposal a viable candidate for 1998 drilling.

SSP Consensus # 21: A good data package has been assembled for **Izu-Mariana Convergent Marin proposal (472)**. The package is now complete and the proposal is ready for drilling. If any paleoceanography objectives are intended, a good quality SCS profile through the BON site must be collected by the JOIDES Resolution.

SSP Consensus # 22: During our July meeting the proposal 426 (Australia Antarctic Discordance) was judged not to be ready for 1998 drilling because of the poor quality of seismic and 3.5 kHz data collected onboard Melville at most of the proposed sites. On SSP recommendation, the proponents examined existing VEMA data and prepared a data report in which they document presence of sediment pockets in the vicinity of the proposed sites. It seems that four of the sites, sites 1, 13, 14 and 16 can now be considered as drillable sites. This, however, is not enough to meet the objective of this proposal. It was realised at the meeting that some additional seismic data exist in the region of the proposed sites which the proponents are advised to look before planning to collect any additional data in the region. However, in view of the difficulty in imaging the sediments from 3.5 kHz system only in this region, SSP

recommends that 3.5 kHz system must be supplemented by single channel seismic system if additional data is to be collected in this region. The uncertainty in consideration of this proposal as a viable candidate for 1998 drilling still remains and the proposal is classed as 2C.

#### **Minutes**

JOIDES Site Survey Panel Meeting November 11 - 14, 1996 Lamont-Doherty Earth Observatory, Palisades, New York, USA

#### 1. PRELIMINARY MATTERS (Srivastava)

## 1.1 Introduction of members, Liaisons and meeting logistics.

SSP Chair Srivastava welcomed all those present, especially the old TAMU liaison member Gary Acton, who after an absence of a few of SSP meetings, was able to join the panel again. Dan Quoidbach, the host for this meeting, welcomed the members, outlined the logistics and provided information about the various facilities at LDEO which members needed to use during the meeting. He was followed by Greg Mountain who outlined some of the social activity he was able to organise for the panel during the meeting. The minutes of July 96 meeting and the agenda for this meeting were approved unanimously. Suggestions were made on the ways of reducing the size of the minutes of the meeting. As the meeting was spread over four days, the first day was devoted to examination of data by the panel members.

## 1.2 Charge and procedures for the meeting (Srivastava)

The goals for this meeting were to: (1) to evaluate the site survey readiness of proposals in the prospectus for FY98 drilling, including those proposals which were added to the prospectus (i.e. highly ranked) by the thematic panels at their fall meetings; (2) to evaluate the site survey readiness of legs scheduled for drilling; and (3) to assess any site survey issues arising from legs that were drilled since our July meeting. The main customer for the output of this meeting is PCOM, who uses the evaluations resulting from item (1) above as input into designing the drilling schedule for FY'98 at their December meeting.

#### 1.3 Watchdog assignments

The new watchdog assignments as listed in the Appendix A for this meeting were discussed and agreed upon.

## 1.4 Feedback to proponents

SSP Chair Srivastava stressed the need for the panel members to send their watchdog letters to the lead proponents as soon as preliminary minutes have been sent to the members for corrections and comments. Appendix B gives a list of things to be include in the letter.

Action item # 1: All watchdog to write to lead proponents of all programs discussed, reporting the sense of SSP discussion and enclosing the relevant section of the minutes. A copy of this letter must be sent to the DB. The letter can be sent by e-mail.

Action item # 2: Data Bank manager, Dan Quoidbach, to write to the Co-Chiefs of designated legs, reporting the sense of SSP discussion and enclosing the appropriate section of the minutes.

## 1.5 Action items from July 1996 Lamont meeting

All action items were taken care of by those responsible. Action item where TAMU was involved are described in TAMU's report.

## 2. REPORTS

#### 2.1 PCOM (Mountain)

PCOM met last in Townsville, Australia Aug. 19-22. Malfait reported that the ODP Council requests a final science management plan and a 5-yr science and budget plan by Feb. 97. The planners ought to anticipate flat funding through 98, then modest annual increases; new funds will have to be found for the JR refit in 98/99.

Falvey reported on new and anticipated memberships: KIGAM has signed on as a 1/12 member in the CanAus consortium; the status of the Taiwan Universities is unresolved; China is discussing plans to enter as a 1/6 member. RFPs for the Wireline Services and Data Bank contracts in post-98 are being prepared. Both will seek to incorporate innovative technologies and computer-based database handling capabilities. JOI and JAMSTEC have, in principle, agreed upon an international management structure of the new post-98 program. JOI is taking over the responsibility of the Co-Chiefs' annual review, and is also heading an ad hoc curation policy review.

Goldberg reported on the successful deployment of a new triple tool combination on legs 167 and 168. Log data were transmitted ashore, fully processed, and sent back to the ship before the end of leg 167. In the future, a similar system of log and core data will be put in place permanently. CLIP splicer is now tested and running; the SLIP module is still in test mode. Downhole magnetic susceptibility, density and natural gamma ray measurements are approaching the vertical resolution of shipboard lab measurements. The archiving of old log data is on schedule; the user interface and data handling capabilities of raw log data retrieval is complete; WLS programmers are working on the same with TRACOR for processed data, assuring smooth interface with the Oracle-based system under development at TAMU.

Mix reported on his July presentation to ExCom and the ODP Council. He received approval of the general science

management structure prepared by PCOM and its sub-committee; ExCom endorsed the thematic balance in the SciCom design; PCOM was tasked with developing mandates for the various science advisory panels; ExCom agreed that the exact membership of the PPG's should not be fixed, but that all member countries had a right to representation; and 1/97 was set as the time for beginning the new structure. OPCOM will be a sub-committee of SciCom; it will be chaired by the SciCom chair, contain several members of the latter, and will not be bound by a formula of international representation. Distribution of expertise will be the most important criteria for member selection. ExCom expanded beyond the PCOM sub-committee descriptions the role of the SSEP's. Not just review-these panels will advise SciCom on developing themes and will aid proponents not affiliated with a PPG.

PCOM chose to include proposal 79 (Somali Basin) when discussing potential proposals for the prospectus; it had inadvertently been omitted from the list of active proposals. Though not ranked by the thematic panels, Somali Basin drilling has a history of SGPP support, and addresses long-sought aspects of Tethyan history. From an engineering standpoint, Francis commented that as a location for deep drilling, this was preferred over others on active margins.

Ellins reviewed SSP's data readiness table. She noted that proposal 426 (Antarctic-Australia Discordance) did not get the required survey data that was hoped for, perhaps the JR could do the necessary search for suitable sediment cover. The Red Sea Deeps (481) data package is still in disarray; all reasonable efforts at getting clearance for drilling have been exhausted, and regrettably the proponents and the program are running out of hope for being able to drill this region. The SSP criteria of data readiness were reviewed and it was decided that proposals ranked as 2A, 1B or 1A would be automatically in the prospectus; others would be considered one at a time.

The prospectus was determined after much discussion to include 15 proposals spanning a very wide region. Despite the fact that none of the Antostrat-generated proposals had yet been ranked by thematic panels, PCOM chose to include them in the expectation that fall panel meetings would narrow the field. This large prospectus was not perceived as an especially large burden for SSP because many of the proposals under consideration were fairly well prepared already; furthermore, PCOM was willing to task additional help to the fall SSP meeting at the request of the SSP chair, if needed.

In response to NSF's request, PCOM members broke up into 5 groups to begin work on text outlining 5-yr science plans. These were to include the science themes, likely outcomes at the end of 5 years, technological requirements, and links to other programs. The themes are climate change, sea level change, sediments-fluids-bacteria as agents of change, the transfer of heat and materials, and deformation. Several PCOM members expressed concern at the lack of sediment process studies plus, no monitoring of ridge processes.

Falvey reviewed the status of the publications issue. After much discussion and polarized opinions, PCOM passed a motion to end the hard-bound issue of Scientific Results with leg 168; instead, a CD-ROM and website postings will be distributed 48-months postcruise to include all material formerly in the SR vol., as well as now to include reprints from outside publications. The IR vol. will be maintained in an abbreviated format - barrel sheets and core photos will be published on a CD-ROM and via the web. The remaining shipboard hole summaries, processed logs, and introductory chapter will comprise a less-expensive, more quickly distributed IR. Annual review of this arrangement will be led by JOI; when cost-effective and when at no risk to losing either readership or archiving stability, ways will be sought to move the IR to entirely electronic distribution.

JAMSTEC representatives discussed plans for a meeting in fall '96 to provide design engineers understanding of drilling environments to be encountered with the OD21 vessel. Plans were discussed for an international meeting on OD21 science; nominations for the steering committee and a tentative schedule leading to a Sept 97 meeting were discussed.

#### 2.3 JOIDES (Ellins)

- 1. The JOIDES Office moved from Cardiff to WHOI on October 1, 1996. The new PCOM Chair is Susan Humphris. Maria Mutti (ESF) is the international liaison, Kathy Ellins is the Science Coordinator, and Shirley Wascilevecs is the Staff Assistant. The following contact information was provided: Email: JOIDES@WHOI.EDU; Office telephone: 508-289-3481; Kathy's telephone: 508-289-3440; Kathy's personal email: kellins@WHOI.edu
- 2. Maria Mutti attended OHP and SGPP in the Fall. Kathy Ellins attended LITHP in Japan and also visited ORI and JAMSTEC.
- 3. At the end of October, Susan Humphris attended the JAMSTEC Science and Engineering Workshop on Riser Drilling. Paired presentations were made on model holes in different environmental settings by JOIDES and Japanese participants. JAMSTEC has indicated that when the OD21 Riser Ship is completed in 2003, it will not be immediately available to the international community. JAMSTEC believes that since the ship and technology are untested, it will be necessary to keep the ship in the vicinity of Japan to facilitate any maintenance or development work that is required. The ship may be available to the wider community after about two years of testing. JAMSTEC has also indicated that design of a riser that can function in 4000 m water depth will not begin until about 2005. Development will follow between 2008 and 2012. Operation of such a system is not expected before 2012.. During the design and development phase, JAMSTEC will continue to evaluate new technologies for deep ocean drilling that may become available.

  4. Susan also attended the first CONCORD Steering Committee meeting. Concord is the Conference on Riser Drilling to be held in July of 1997 (exact dates uncertain, but it is likely to be mid-July) in either Hawaii or Japan. Approximately 100 scientists will be invited to attend. This conference will be jointly sponsored by JOIDES and Japan. Thus, there are two co-chairs for the steering committee: Ikuo Kushiro and Hans Christian Larsen.

- 5. Susan has just returned from a UK ODP symposium in the UK.
- 6. A subcommittee of PCOM, DMP, SMP, and IHP have just met in order to develop mandates for the proposed Measurement Panel (MP). These will be presented to PCOM for their consideration in December.
- 7. Kathy Ellins attended the September USSAC meeting at WHOI. USSAC, in response to a request from NSF, will produce a position paper on the type of science that the US marine science community wants using a riser system. This is required by late March. ODP -NSF will use this document as a key component when they go before the NFS Board to request a ramp-up in funding for ODP, as the program is slated to end in 5 years.
- 8. Dan Quoidbach met with the JOIDES Office staff in late October regarding the joint development of a database. The JOIDES Office will continue to use 4th Dimension as their database management application. As a first step, the SSDB will be set up as a client user of 4th Dimension and provided with remote access to the JOIDES database.

### 2.3 PPSP (Ball)

Mahlon Ball reported that at its September 19-20, 1996 meeting, the Safety Panel conducted reviews through Leg 176 (Return to 735B). Some difficulties were experienced in approving all sites in the Angola Basin part of Leg 175 (Benguela Current). Review of Angola Basin sites will therefore be completed at a PPSP meeting tentatively scheduled for February 20-21, 1997. The safety panel feels that reasonably safe sites, to penetration depths of 100 m, could be chosen based on data presented at its September meeting. Additional information concerning hydrocarbon occurrences in this heavily explored and produced oil province are necessary to choose sites with penetration depths greater than 100 m.

PPSP asks for assistance from SSP in advising drilling proponents of the need for information concerning hydrocarbon occurrences in and adjacent to proposed drilling areas. Ideally, this advice should be given at the initial SSP watchdog's contact with drilling proponents. Locations of commercial wells, ODP-DSDP holes, shows in shallow cores and slopes should be included on maps showing the proponents seismic networks and proposed sites. These data will be required by PPSP AT PREVIEWS OF HIGHLY RANKED PROPOSALS. Early proponent awareness of the need for oil and gas information accompanying successful drilling proposals will facilitate subsequent safety considerations.

#### 2.4 Data Bank (Quoidbach)

Since the last meeting the Data Bank has received 475 data items for active proposals, prepared operations data packages for Legs 169S, 169, and 170, and distributed PPSP reports for Legs 174A, 175, and 176. Dan Quoidbach represented Data Bank at the September PPSP meeting in College Station.

In August the Data Bank staff attended the class in project management hosted by the Borehole research group at LDEO. The Data Bank is looking to use project management principals to help organize the data base upgrade and web development projects, as well as to help systematize recurring data bank activities.

The Data Bank is upgrading its computer systems to standardize on Power Macintosh computers and recent late versions of system and application software. A large format inkjet plotter has been purchased to allow in-house production of colour maps and graphics. A colour flatbed scanner for digitizing colour graphics has been purchased as well.

Quoidbach met with Kathy Ellins at the JOIDES Office to discuss collaboration on database development. It was concluded that 1) the JOIDES Office should continue to use 4th Dimension as their database system, 2) in order to stay with 4th Dimension, a consultant should be hired to clean up, write documentation for, and enhance the existing database, 3) the Data Bank should obtain a client license to the JOIDES 4D server, which will allow them to access the JOIDES Office database over the Internet, 4) a better Data Bank database needs to be built, possibly in 4D, but perhaps using another product, and 5) the staff who use 4D should receive training so that they can utilize it fully, as well as enhance, maintain and document changes to the database.

The RFP for Data Bank services has not yet been published. JOI indicates that it will probably be issued by the end of the week.

Quoidbach will attend the Co-chief review to be held at JOI November 20-22. Co-chief input on operations packages and site survey requirements will be solicited.

## 2.5 TAMU (Acton)

#### 1. ODP/TAMU Reorganization:

The ODP director (Jeff Fox) initiated the reorganization to (I) address budgetary constraints imposed by a continuing flat budget, (ii) foster project management within ODP/TAMU, (iii) enhance communication between departments and eliminate redundancies, (iv) streamline activities, and (v) improve services to the community. The reorganization plan has been drafted by Jeff Fox and Jack Baldauf and submitted to TAMU for approval. Details of the plan will be released between 15 November and early December.

## 2. ODP/TAMU 5-Year Budget

The 5-Year Budget Plan, requested by JOI and NSF, is complete, but may need to be revised based on the reorganization within ODP/TAMU. The plan attempts to estimate the budget for the Science Operator for the next 5 years in light of the Science LRP, expected Special Operating Expenses (SOEs), and the projection of a continuing flat budget for the program overall.

## 3. ODP Publications

A new publication policy is in effect as of September. The main changes are (I) starting with the Leg 169 Initial Reports (IR) volume, prime data (core descriptions, photos, thin-section and smear slide descriptions) will be moved to CDS, (ii) starting with Leg 176, the entire IR will be produced electronically (WWW and CD) pending approval, (iii) beginning with Leg 160, scientists can publish in outside literature at 12 months post-cruise, (iv) starting with the Scientific Results (SR) volume for Leg 169, only a CD and WWW version of the SR will be produced pending approval, and (v) beginning with Leg 164, the manuscript submission deadlines for the SR are:

Initial submission, specialty papers: 28 months post-cruise Revised submission, specialty papers: 33.5 months post-cruise Initial submission, synthesis papers: 34.5 months post-cruise Revised submission, synthesis papers: 39 months post-cruise Volume Publication deadline: 48 months post-cruise

The new publication policy can be found at: http://www-odp.tamu.edu/publications/PUBPOL.HTML

#### 4. JANUS update

Coding and testing of several units (User Group [UG] 1 applications: corelog, operations, curation, sampling; UG 2a applications: MST and logging; and UG 2b applications: palaeontology) have been completed by programmers, but not by scientists. Other units to be completed before Leg 171B include colour reflectance & palaeomagnetic (UG 2a); physical properties, which includes moisture density, thermal conductivity, sonic velocity, shear strength, ADARA, and WSTP (UG 3); and chemistry (UG 4a).

Several units, including Underway Geophysics and Seismics, will not be completed in Phase I. Funding for Phase II is still pending.

Janus will be deployed on Leg 171B (9 Jan -14 Feb, 1997), with two TRACOR programmers on board. Further testing and acceptance will take place during Leg 172. Warranty support for Janus continues from mid-April until mid-July 1997.

5. WWW

Access is continuing to expand. The following are available

- (a) Leg 172 Scientific Prospectus + Leg 168 Preliminary Report
- (b) New HOMEPAGE design (Testing Phase/Release Within A Week)
- © New Staffing Application Form
- (d) The Drilling/Coring Time Estimator

http://www-odp.tamu.edu/dsd/drillest.html

- (e) New Downhole Measurements Lab homepage
  - http://www-odp.tamu.edu/techlog/downhole
- (f) A new publication search engine

http://www-odp.tamu.edu/publications/search\_3k.html

(g) Abstracts for SR volumes (Leg 149 & 150 completed)

## 6. dGPS Report

At SSP requests, PCOM examined the need for differential GPS (dGPS) on the Joides Resolution at their August 96 meeting. ODP/TAMU was to report on the status and options. Randy Current and others put together a summary that was presented by Tim Francis at this meeting.

While there are several regional dGPS services in operation, only two are available for global coastal coverage. The current service to which ODP subscribes is Omnistar, which works around the continental USA. The two systems with global coastal coverage (Fugro Starfix and Racal Survey Skyfix) have small additional equipment costs, but both have annual subscription fees of ~\$50,000. They are accurate to 1-2 m (95% probability) within 1000 km from a ground station, ~3 m within 2000 km, and ~5 m within 4000 km.

P-code receivers or some combination of GPS+Glonass receivers have been considered as alternatives. P-code is not available to the Joides Resolution because it is not a USA flag ship. The GPS+Glonass offers ~30 m accuracy from a 1-minute sample, versus 100 m accuracy for GPS with selective availability turned on. Over several hours, both systems have accuracies better than 10 m, which is about the uncertainty in the position of the end of the drill string. The cost of the GPS+Glonass receivers is between \$10,000 to \$20,000.

From Tim's notes, the assessment was that the current system provides position with an accuracy that has never adversely impacted a leg. Leg 168 and 169 both took advantage of the Omnistar dGPS system to which ODP currently subscribes. This system will also be available for Leg 174A. No other scheduled leg appears to require positioning more accurate than what the Joides Resolution already provides, and thus the extra cost to get the system is not warranted for now. If we were to buy a global system, the GPS+Glonass receivers would probably be the best solution. The outcome was that no recommendation was made to purchase additional positioning instruments or services for now.

It was agreed by the panel that the watchdogs will be required to flag those proposal where dGPS would be required if the proposal get to the drilling stage so that suitable measure could be taken by TAMU in ensuring the use of such system on board J/R.

8. Diamond Coring System (DCS)

Several changes in direction have occurred over the past two months. Most recent changes were discussed at the TEDCOM meeting

in Japan (Nov 96). The main concerns are with reducing heave. Two methods are being investigated: (i) Low Friction Seals (LFS): These could potentially reduce heave from 5000-8000 lbs to around 2000 lbs. Installation depends on roughness of the surface finish on the inside of the primary heave compensator cylinders. The options are: (a) No LFS possible owing to very rough surface finish, (b) Surface finish slightly rough, seal installed that will moderately reduce heave, (c) Surface finish smooth, highest quality seal install with maximum reduction in heave. If the heave is reduced, overall core recovery should improve. The surface finish will be measured at the Leg 172 portcall in Charleston and seals will be installed if possible.

(ii) Active heave compensation (AHC): A system has been developed by RETSCO that actively monitors the motion of the ship and attempts to compensate to keep the weight on the bit constant.

Possibly both systems together could reduce heave to a level at which the DCS could be used (less than about 500 lbs of heave). More likely the secondary heave compensator will need to continue to be developed. The addition of the low friction seals and the AHC should, however, improve the performance of the primary heave compensator and thereby improve the coring performance of all types of ODP coring. The question of using DCS system on an engineering leg were discussed and are described in section 8.0.

## 9. Hammer Drill

The current hard rock base design is not optimum for establishing boreholes in fractured hard rock environments with moderate slopes, especially on thinly sedimented slopes covered with debris or rubble. ODP Engineering department is investigating new hardware and techniques for establishing a borehole in these environments in order to meet the scientific objectives of hard rock legs.

Hammer drill-in casing system has the most promise of dramatically increasing the ability to establish a borehole in a hard rock environment. There are 5 basic components to a hammer-in casing system: a drill bit, a percussion-driven hammer at the bit, a casing string, a second hammer above the casing, and the drill string. The hard rock hammer punches a hole while the upper hammer widens it for insertion of a casing string with a reentry funnel guide. No core is recovered with this system.

Tests conducted in August 1996 in Australia indicated that the hammer drill was capable of spudding into hard rocks (granite) with slopes up to 45 degrees. Casing (7" diameter) was installed in one test to a depth of 21 m.

PCOM recommended JOI's approval of adding \$400,000 to the project to meet hydraulic hammer development costs with SDS Digger Tools, the company developing the tool. Negotiations are underway with SDS Digger for design of a larger hammer compatible with 16" diameter casing. A 13 3/8" diameter casing for a 12 1/4" hammer exists and may be used on Leg 174B (CORK/Engineering).

#### 10. Paleomagnetism Lab

New LabView software was written for cryogenic magnetometer. The graphic user interface is a significant improvement over past software. Measurement accuracy and precision on new magnetometer was assessed during San Diego portcall. The magnetometer has twice the along-core resolution of the older magnetometer. The magnetic moments of standards measured on the new magnetometer and on the long-core magnetometer in the paleomagnetism lab at Scripps were indistinguishable. A new D-Tech AF demagnetizer has been order to replace a faulty GSD-1 unit.

## 11. Split-Core MST (GEOTECH instrument)

This instrument was purchased and is being used on Leg 170, after which it will be returned to shore for further development. The split-core MST will be available for use in the repository during sample parties and on the ship, if requested.

#### 12. Underway Geophysics Lab

The new 6-channel streamers were tested on Leg 169. No problems were encountered during data collection. Data have been returned to shore for assessment of quality. A direct comparison to single channel streamers planned for Leg 170 if co-chiefs/time permit.

The Solaris upgrade will be delayed until ODP receives a working version of Analog-to-Digital data acquisition software from SOEST. An ODP student programmer is debugging the current version.

Four new Chart Recorders (EPC/Analog) arrived at ODP/TAMU. A statement of work is being written for Pelagos to develop automated location/time/leg-ID annotation.

## 13. Outcome of one of SSP's recommendations.

Leg 172 has intersecting seismic lines planned over all sites. Prospectus is now on the WWW at the URL: http://www-odp.tamu.edu/publications/SCIPROSP.HTML

Subsequent to TAMU's report of activity some discussion took place on the adequacy of present seismic system on board J/R. The general consensus was that even though the present system does produce seismic records which on the whole are satisfactory that TAMU should be thinking of collecting such data at higher speeds and therefore, perhaps in acquiring GI guns which seems to have proven better for such jobs. This resulted in formulating the following recommendation to PCOM.

SSP Recommendation to PCOM for the use of GI guns on board JOIDES RESOLUTION: SSP recommends that PCOM should direct JOI to request TAMU to explore the possibility of carrying out an evaluation on the superiority of GI guns over water guns for acquiring seismic data at speeds greater than 5 knots on board Joides Resolution during one of its Legs in the coming year. These guns can be acquired on loan from interested participant(s) on a

particular leg where the guns are to be used or from institutions like Lamont or IFREMER who have been using these guns on a regular basis. If such guns can be obtained, appropriate time and funds will need to be budgeted during that particular leg where this evaluation will be carried out.

Explanatory note:

SSP appreciates the efforts being made by TAMU in procuring a new seismic system for use on board J/R. As part of this development work SSP wondered if TAMU would like to explore the possibility of using GI guns on board J/R during one of the forthcoming legs. We ask that GI guns be assessed because they have been shown to give superior results at many locations, while towed at speeds of upto 10 knots by IFREMER. One of the difficulties with the current J/R water guns is that they need to be towed at speed of about 5 knot to give reasonably good records. Owing to tight time constraints on most Legs, collection of seismic data on approaches to drill sites is, therefore, not possible, or when it is done, takes valuable time away from drilling operation. Our request has the potential to enhance the quality of seismic data collected by J/R, to reduce the time it takes to collect the data, and to provide a source that can be used on a regular basis if so proven without excessive modification to existing hardware on board J/R. We realise that getting superior quality seismic records at any speed is not merely depended on the type of guns used but also depend on many factors like, the ship's noise level, the recording streamer and the weather conditions. Ideally this evaluation should be carried out using not only GI guns but also the 6 channel streamer used by IFREMER where superior quality data have been obtained at speeds of upto 10 knots. The use of such a complete system would involve a lot of preparatory work and perhaps can be left to a later time if the presently proposed evaluation turned out to be negative.

In our opinion Leg 172 (Sediment Drift) provides an ideal opportunity for such a comparison to be made because of the requirement on this leg to acquire a lot of seismic data on approaches to the sites. Furthermore, this data is to be acquired in varying water depths making this evaluation more complete. Also Roger Flood, one of the participants on this Leg and a SSP member, is a very knowledgable worker on seismic systems and would be a valuable asset during the evaluation process. We realise that it does not provide too much time to make necessary preparation for this evaluation to be carried out on Leg 172, and for that reason we would suggest Leg 175 (Benguela Current) as a possible alternative. If this evaluation can not be done on either of these legs then we suggest that it be scheduled for the earliest possible Leg.

## 3. SITE SURVEY IMPLICATIONS OF RECENTLY DRILLED LEGS

## 3.1 Leg 168: Juan de Fuca (Casey/Acton)

Leg 168 had no problems with site survey data package as they did not have to use it. Co-chiefs had brought copies of their own seismic lines.

## 3.2 Leg 169: Sed. Ridges II (Casey/Acton)

Leg 169 data package was adequate, but used very little during the leg. The place it was used was in selecting a site along an existing SCS line ~500 m away from the proposed site. The change in position resulted from a MCS line collected roughly 1 month prior to the cruise, which showed a fault at the proposed site. The main data used were dGPS positions, which were based on prior coordinates from drill sites and from submersible dives. Video from submersible dives were extremely valuable for locating sites in sulfide mounds, but would not have been as valuable without having a scientist who collected the data onboard.

## 4. SITE SURVEY STATUS OF UPCOMING SCHEDULED LEGS\*

4.1 Leg 173: Iberia II; 461 (Enachescu)

Watchdog: Enachescu/Quoidbach

SSP Proponent: Sibuet was a participant on a past site survey cruise.

Target Type(s): B (Passive margin)

SSP acknowledges that a complete set of required data now exists for this leg. The new items received in the DB since our last July meeting are: post-stack and one pre-stack migration of part of line CAM 144 across the recently designated alternate site 08B, paper displays for all MCS migrated lines collected during the last Discovery cruise and a revised depth-to-basement map. From the inspection of data we conclude that there are no problems with the placement of the altered site Iberia 08B on the CAM 144 migrated section. Site readiness ranking 1A.

SSP Consensus #1: All sites for Leg 173 are completely documented from Site Survey readiness point of view. A comprehensive set of migrated MCS lines, intersecting the approved sites and a recontoured basement map, constructed from interpreted migrated sections, have been submitted to the DB.

4.2 Leg 174A: New Jersey II; (348) SSP Watchdog: Flood/Quoidbach

SSP Proponent: PCOM liaison Mountain Target Type(s): All sites A (paleoenvironment)

SSP received no communications from the proponents or Co-Chiefs since our July meeting; however, a safety package was

presented to PPSP and discussed at their September, 1996, meeting. PPSP approved all sites after requesting one site, MAT-13B-2, be moved to shot point 1650 (now MAT-13B-3). Following the PPSP meeting, the ODP-TAMU safety committee disallowed the shallowest proposed site (MAT-7B) on the basis of water depth (65-67 m). This is the first drilling proposal to have completed the shallow-water drilling site survey requirements, resulting in two approved shallow-water areas (MAT-8B at 88 m and MAT-9B at 98 m).

The Co-Chiefs designated three potential sites in each area. These three sites, designated by appending -1, -2, or -3, need now to be prioritized as a drilling program is developed. Also, we note that the document prepared for PPSP uses MAT-13B to designate two distinctly different sites. To avoid confusion, we suggest that the initial MAT-13B (as described on data sheets submitted Nov. 1, 1995) be designated MAT-13B-1, and that the more recently proposed site and the approved sites be distinguished as -2 and -3.

In preparation for the PPSP, the Co-Chiefs also proposed two additional sites (MAT-13C and MAT-13D) along high-quality lines already in the Data Bank in order to have acceptable backup sites should weather conditions make shallow-water drilling impossible. However, no discussion has been provided supporting the location or detailed objectives of MAT-13B-3, MAT-13C and MAT-13D. These sites would meet some of the objectives of Proposal 476 (Hudson Apron).

SSP Consensus # 2: We request that the positions of all sites for Leg 174A that have new coordinates be submitted to the JOIDES office on ODP Site Summary Forms, that shelf sites be prioritized, and that justification be provided for the newly designated slope sites.

4.3 Leg 176: Return to 735B: (300)

SSP Watchdog: Casey/Quoidbach

SSP Proponent: none

Target Type(s): Bare Rock Drilling

This is a two Leg proposal to: 1) deepen Hole 735B and 2) drill five offset holes along a transect across the wave-cut platform in order to penetrate gabbros and possibly peridotites. Alternate back-up sites SWIR 5 and 6 have also been selected for the second Leg. The first Leg is now scheduled as Leg 176. SSP considered only the scheduled Leg 176 to deepen Hole 735B.

The priorities for drilling on Leg 176 were defined by PCOM consensus at the Annual Meeting.

SSP regards the first Leg to deepen 735B as having all the required data, but had asked the proponents to submit a reconstructed video survey map of the JOIDES Resolution video tape with navigation. Two unedited tapes have now been deposited in the data bank. We were informed by the proponents that the original track plots for the video survey cannot be located at ODP, but that the XY positions relative to hole 735B can be located by depths and positions called out and recorded on the tapes.

At a minimum, however, the video data confirms the suggestion that there are abundant low slope outcrops along the wave cut platform that could be used for an alternate HRGB and the proponents believe that these points along the video survey can be located using the audio on the tape. The proponents will submit a track map reconstructed from the audio tapes with a descriptions of the video.

Recent site survey proposals have not yet been funded, but these are regarded as critical prior to the second Leg for HRGB offset drilling sites as the bottom video or photographic data needs to be supplied prior to a second Leg. Based on criteria established by SSP, the HRGB offset sites and conjugate sites are not considered ready for drilling.

Site survey readiness classification. By considering separate drilling legs, it is possible to rank the proposal to deepen 735B as 1A. The second Leg for offset drilling proposed remains as 2C until additional site survey data is collected.

SSP Consensus # 3: SSP reiterates that all the required data is now available in order to deepen Site 735B. However, SSP continues to request that the proponents submit a survey map of JOIDES Resolution video tapes to show the distribution of sediments, slopes and potential alternate sites near Site 735B. The proponents have promised to reconstruct the video track from the audio portions of the tape because the original JR track map cannot be located. This is important given the potential of selection of alternate sites if difficulties in deepening 735B are encountered (see PCOM MOTION 95-3-11). Drilling on Leg 169 has clearly demonstrated the usefulness of such maps when locating sites from video tapes. These should be submitted prior to the April, 1997 SSP Meeting. Offset sites proposed for the second Leg were not considered by SSP because the proposal is not ranked.

## 5. POTENTIAL FUTURE DRILLING: TECP

5.1 West Woodlark Basin (447-rev)

SSP Watchdog: Enachescu SSP Proponent: none

Target Type(s): B (passive margin)

The ODP proposal 447-rev3 was reviewed during the July 1996 and again during the November SSP meeting at Lamont. The revised proposal is a re-write of earlier versions modified to reconcile the presence of sedimentary rocks dredged from the Moresby Seamount and accommodate some of the remarks of other panels. All required data including that collected during the last winter cruise was fully processed and is deposited now in the Data Bank.

SSP acknowledges that a comprehensive set of data now exists in the DB that fulfils all the SSP requirements. Unless there are not alterations of site or new site location at request of other panels, the SSP considers this proposal ready-to-drill.

The four proposed sites are judged as passive margin targets (including, the site 3C after sampling ponded sediments on the top of the mound). All four locations are feasible and strongly documented in the revision. A dense grid of intersecting migrated MCS exists in the DB, at different display scales and with several processing variants.

All locations are now validated by SSP. We reiterate that some sub-unconformity trapping of sediments exists at ACE-1C and 7A locations; however, no hazard problems were detected on the migrated reflection lines. We recommend that PPSP preview the sites on the intersecting migrated grid to test for gas anomalies or potential closures and PPSP would most likely preview this proposal at their February meting if it makes into the drilling leg. Unless new objectives are added or sites are moved due to safety concerns we can give this proposal the green light.

Site Survey Readiness Classification: 1A.

SSP Consensus #4: SSP acknowledges that a complete data package supporting drilling in the West Woodlark Basin (447-rev3) now exists in the Data Bank. The reviewed proposal contains four feasible, well-documented sites. Site Survey Readiness Classification: 1A.

## 5.2 Western Pacific Seismic Network (431)

SSP Watchdog: Peterson SSP Proponents: None

Target Types: E (open ocean with sediment > 400m).

This proposal seeks to drill four sites into basement in the western Pacific in order to install broadband ocean seismometers and create permanent seafloor seismic observatories as part of the ION program. The first site survey data in support of this program were hand carried to our meeting by SSP member Tokuyama, including results from a recent survey effort by the R/V Hakuho Maru. Page-sized MCS profiles from cruise KH-96-3 which cover sites WP-2, JT-1 and JT-2 are of reasonable quality, but these data have only been stacked and need further processing in order to better define basement topography and the time to MOHO. As stipulated earlier by SSP, velocity-depth models also need to be developed and supplied for all sites from seismic refraction data. Required 3.5 kHz profiles of good quality have been submitted for sites WP-2 and JT-1, but are currently lacking for JT-2 and WP-1. For site JT-2, a track line showing the track of the older JT90 line needs to be supplied.

The site survey readiness status of sites WP-2, JT-1 and JT-2 is currently considered to be 2A. Most of the required data appear to be available, but further processing of MCS data and submission of other items noted above is necessary. Available site survey data for Site WP-1 from the older (1990) Hydrographic Department survey are of relatively poor quality and plans to re-survey this site in 1997 should move forward as scheduled. Site survey readiness for site WP-1 is classified as 2B in anticipation of new survey data becoming available in the near future.

SSP Consensus # 5: Data in support of all four western Pacific seismic network sites, including preliminary results from a recent survey, were hand carried to our meeting and examined for the first time. These data indicate the potential viability of all four sites for seismometer installation, but vital data types and information are still lacking, and further processing of the recently collected MCS data is required. Proposed sites WP-2, JT-1, and JT-2 are classified as 2A in terms of present site survey readiness, while site WP-1 is currently ranked as 2B in anticipation of further survey efforts in early 1997.

## 5.3 Taiwan arc-continent collision (450-rev)

SSP Watchdog: Sibuet SSP Proponent: none

Target Type(s): C(active margin for sites 1-5,7); D (open ocean for site 6)

To examine the two dimensionality of the structure at the proposed sites, SSP had requested during their last July meeting that at least 1 profile on each side of the 5 miles spaced lines on which sites are selected must be deposited in the data bank from Moana Wave cruise. In addition, stack velocity determinations of the Ewing MCS lines in the area of the sites were also requested as well as 3.5 kHz profiles across proposed sites. Since that time, all these crucial data have been deposited in the DB. SSP appreciates the efforts made by the proponents in depositing this data. This completes this high quality data package.

In anticipation of this proposal becoming a scheduled leg, we suggest to proponents that it is not too early to begin to think about eventual site safety preview which may be required by PPSP, and to start imaging the BSR reflector better which seems to be present at sites C2A and TC7A.

The ACT cruise (R/V l'Atalante) was conducted in June 1996 in the northern area of this proposal where sites TC-2A, TC-6A and TC-7A are proposed. A complete swath bathymetric map is thus available in this area and will complement preceding data. In addition, 6-channel seismic profiles were also collected together with gravity, magnetic and 3.5 kHz data.

A large scale gravity sliding nappe was identified at 22•20'N-23•N; 121•40'E-122•30'E from this data. About 400m of the sedimentary pile has been detached along a flat lying décollement. The thrust front is characterised by thin-skinned tectonics. About 1000 km³ of sediments have been displaced 8 km in the N025 direction. It could have generated a huge tsunami in Yaeyama Island (Malavieille et al., EOS, 1996 AGU Fall meeting). As transported sediments remain undeformed, proponents can look at the possibility of moving

site TC-6A about 20 miles northwards of its position, without modifying the scientific targets of site TC-6A, in order to drill through the slump down to the oceanic basement and to document this slump and associated tsunami which could be of crucial importance to the surrounding populations.

The proposal is rated 1A which means that all vital data is now available and it can be considered as a viable candidate for 1998 drilling. SSP Consensus # 6: As the remaining data requested during the July 1996 meeting have been deposited in the DB, the proposal 450 (Taiwan arc-continent collision) is rated as ready to be considered for drilling in 1998. A preview of this proposal may be required, if it gets scheduled for drilling in 1998, in view of the possibility of BSR at two of the sites TC2A and TC7A. Suggestion has been made to the proponents for moving one of their sites (TC-6A) 20 km to the north to document the sediments there by drilling into the region which may have been subjected to a large scale gravity sliding. This will not change the scientific objectives of the proposal.

## 6. POTENTIAL FUTURE DRILLING: SGPP

6.1 Antarctic and Palmer Ridge Glacial History and Sea-Level Change . (452-502)

SSP Watchdog: Lykke-Andersen

SSP Proponents: None Target Type: B (and A)

The proponents efforts to clarify questions related to the evaluation of the site survey data and the drilling strategy, and to complete the data package in the Data bank is much appreciated by the SSP. At the previous meeting (July 1996) some deficiencies in the data package was pointed out. One issue was the apparent lack of required grids of seismic lines at some of the sites classified as "Passive Margin"- sites. The panel reevaluated the data in the light of Peter Barkers suggestion that SCS-data (PD88) and MCS-data are regarded as being equivalent. The panel found that the quality of the SCS-data is sufficiently good to be part of the seismic grid. The density of lines is low in the vicinity of the sites APRIS-04A and -05A, but considering the large horizontal extension of the drift deposits and acknowledging the very good quality of the data, SSP accepts the available data coverage to fulfill the requirements for a grid at these sites.

It is noted that 3.5 kHz data is not available at sites APRIS-01A and -04A. As the architecture of the drift deposits at the proposed sites appears quite regular with no signs of disturbances (as seen on the available high-quality MCS-profiles), and the fact that 3.5 kHz data will be acquired aboard Joides Resolution on approach to the sites, the panel finds it acceptable that 3.5 kHz data is not deposited in the Data Bank. Concerning the Palmer Deep (Sites APSHEL-13A and -14A): the deep tow data (PD92-2) is accepted as valid 3.5 kHz data required for these paleoenvironment sites. It is pointed out that a map showing the location of the alternate site (APSHE-14A) is still to be provided to the Data Bank. As the intended drilling depth (50 m) exceeds the depth to which the DP92-2 profile images the subsurface, SSP strongly recommends that an attempt is made to acquire high-resolution (e.g. SCS-data) with penetration down to a few hundred msec.

Earlier expressed concerns about the locations of the sites in the South Shetland Trench (APSST-01A and -02A) was based on the occurrence of side-swipes close to the sites. The swath-bathymetric contour map that has been deposited in the Data Bank clearly shows the location of the steep flanks of the trench. On this background and with the suggested relocations in direction away from the flanks, the panel accepts the absence of an ordinary seismic grid.

The panel discussed the arguments put forward in favour of a silica-diagenetic interpretation of a possible BSR observed on seismic profiles on the continental rise. Although the seismic profile newly deposited in the Data Bank (195-130A) shows clear indications of enhanced amplitude contrasts above the BSR, supporting the silica-diagenetic origin, the panel prefers to take a conservative standpoint. If the proposal becomes a leg it is recommended that the proponents provide true-amplitude plots of the pertinent profiles in order to facilitate the safety review.

SSP highly appreciates the proponents efforts to refine the estimation of interval velocities and want to encourage the proponents to extend this work to as many sites as possible.

The site survey readiness is considered to be 1B: i.e. "Presently viable proposal for FY 98 drilling, A few required items are missing from the data bank, but data are believed to exist and to be readily available."

SSP consensus #7: SSP appreciates the efforts made by the proponents of Antarctic Peninsula proposal (452-502) to complete the site survey package, and to clarify questions concerning previously deposited data. High-resolution data for the sites APSHE-13A and -14A are still needed to make the data package complete. Furthermore it is recommended that true-amplitude plots are provided for the APRISE-sites to help the safety evaluation of these sites.

## 6.2 Deformation and fluid flow, Nankai Trough Accretionary Prism (445)

SSP Watchdog: Diebold SSP Proponent: Tokuyama Target Type(s): C (active margin)

Since the last meeting some new data has been supplied to the Site Survey Data Bank, and even more has been supplied through the efforts of the Data Bank. Reports on ocean currents have been supplied, as well as low resolution maps showing all of the existing MCS coverage. Fred Moore 3.5kHz data were recovered from microfilm, and JAPEX MCS data relating to leg 131 were

located and examined. Dan Quoidbach of the Data Bank has made large scale site maps with all of the navigation currently available. Missing navigation will be supplied during the coming month by proponent and SSP member H. Tokuyama. When these data are delivered, the data package should be complete.

The panel took another look at the site ENT-03A, which lacks a crossing line. The data package includes three high quality, closely spaced and parallel MCS lines which show that the target features are continuous across the immediate vicinity of the proposed site. Thus, the panel is prepared to relax the crossing line requirement at this Site.

SSP Consensus #8: The data package for Nankai Trough (445-Rev2, Add 2) is very nearly complete. Much of the work needed to bring the package to this stage has been provided by the Data Bank, especially in the form of detailed navigation plots for each site. These plots cannot be completed, however, until digital navigational data is delivered as promised within the coming month. The proposal is now rated 1B.

## 6.3 Great Australian Bight Carbonate (367-rev3)

SSP Watchdog: Enachescu SSP Proponent: none

Target Type(s): B (Passive margin)

SSP acknowledges that comprehensive set of data exists for this proposal that is highly ranked by OHP and SGPP and was ranked 2A for site readiness at SSP August meeting. During spring 96, two successful cruises have collected an impressive volume of geophysical and geological data for site characterisation. All collected data has been processed, interpreted and displayed and now reside in the DB.

The latest package recently received at DB contains shotpoint maps, bathymetry, interpreted and uninterpreted migrated seismic sections (compressed and normal scale) for all sites surveyed, isochrone maps for the main interpreted horizons at each site and velocity analysis for each site based on stacking velocities from location and intersecting lines. The submitted package is well presented and organised and the graphics are excellent.

Several sites have been marginally moved for safety reasons, but the reallocations are well explained and documented. The reallocations are under half nm and are made on the same line as initial sites. New site summary forms with drilling time and total depth estimates are submitted. Reallocations of sites conform with the ODP renumbering policy. The shallow sites that in the past have created drilling safety concerns have been removed from the present proposal.

The latest submitted data fulfils all SSP requirements and brings the proposal to a 1A ranking from site readiness point of view. The proponents were extremely responsive of this panel concerns and observations, responded promptly by sending a high volume of required data and now SSP can give the green light for this proposal. In panel's opinion, the principal proponents (Dr. Feary) has conducted exemplary work on this proposal and deserve congratulations for setting a new quality standard in both the form of Data submissions and the detail of site documentation.

SSP Consensus # 9: A complete set of site survey data for proposal 367 (Great Australian Bight) are in the DB. Migrated lines, isochron maps constructed by interpreting migrated sections and seismic derived velocity information with hole plots including total depth, were reviewed and found adequate. Site survey readiness: 1A.

#### 6.4 Barbados Corking (LOI-69)

SSP Watchdog: Srivastava
SSP Proponent: none

Target Type(s): C (active margin)

SSP Consensus # 10: The proposal (LOI-69) requires refurbishing of two of the corked sites in this region during 1997 drilling. It does not require any additional site survey data. It is therefore regarded as ready.

## 7. POTENTIAL FUTURE DRILLING: OHP

## 7.1 Southern Atlantic Paleoceanography (464-add)

SSP Watchdog: Flood

SSP Proponent: Diebold involved in site survey

Target Type(s): all sites A (paleoenvironment) and D (> 400 m sediments in open ocean)

The proponents have provided answers to our July, 1996, comments in 464-Add3. They provided data to support drilling at DSDP Site 360 (TSO-1A), summarized existing regional velocity information (very little), provided velocity estimates for all sites, and marked the depth of penetration on seismic lines in the data base. However, we advise the proponents that the lines drawn on seismic profiles for SubSAT-1C and TSO-3C in 464-Add3 should be twice as long as they are. Also, expanding on the previous discussion of the number of APC holes at a site that should be planned, the proponents should be aware that having only one APC hole at a site guarantees that parts of the section are missed and prohibits detailed paleoclimatic analysis.

Two new sites (consisting of small shifts from prior sites) are designated. SubSAT-1C is moved slightly and deepened (from 300 to 700 m) to try and obtain a longer record. The existing seismic data suggests that this region has a fairly complex sediment structure below about 300 m, and a more detailed seismic interpretation will be needed to determine precisely where, and to what depth,

a good-quality paleoceanographic record can be obtained. For example, the strong reflectors in the buried trough might include material derived from adjacent highs. Also, SubSAT-1C is not located on the 3.5 kHz data in the Data Bank, so additional 3.5 kHz data should be supplied. An offset drilling strategy may be needed in this area to get a longer record. The proponents should work more closely with a seismic stratigrapher to resolve the deeper structure in this area. TSO-3C is moved slightly to avoid a basement high, and the seismic and 3.5 kHz records at the new position appear acceptable.

Two existing sites are deepened. TSO-7A is deepened from 200 to 730 m. The seismic data in this area show a nice reflection sequence in this area, and a good paleoclimate record is likely. TSO-4A is deepened from 500 to 800 m. The seismic data suggest that an 800 m deep hole will get into sediments with a distinctly different seismic character that needs to be more carefully evaluated. The proponents should work more closely with a seismic stratigrapher to resolve the deeper structure in this area. Also good velocity control will be needed for such deep sites.

A German cruise on an Italian ship (RV Explora), apparently scheduled for March/April, 1997, would collect additional MCS data at least at TSO-2, TSO-3 and SubSAT-1. While additional seismic (and velocity; hopefully including sonobuoy) data would certainly be welcomed in these areas, the present sites are adequately imaged with the existing data. If any sites are moved or deepened on the basis of new or existing data, they will need to be re-evaluated by SSP. The data package is rated 1A. The proponents will be advised by JOIDES Office when any additional data should be submitted to the Data Bank.

SSP Consensus #11: The data package for proposal 464 (Southern Ocean Paleoceanography) is nearly complete and is designated 1A. Deepening some of the holes is best done after consideration of the deeper seismic structure; this may involve the proponents working more closely with a seismic stratigrapher. The impact of deepening any holes on overall leg timing also needs to be considered. If any sites are moved or deepened, they will need to be re-evaluated by SSP and will need good velocity control.

## 7.2 SW Pacific Gateway: Paleoceanography (441-add2)

SSP Watchdog: Peterson SSP Proponents: None

Target Type(s): all Sites A (Paleoenvironment)

This highly ranked proposal calls for the drilling of a suite of sites in the New Zealand Plateau region to study the history and evolution of the Antarctic Circumpolar Current and the Deep Western Boundary Current system that feeds deep water into the SW Pacific Ocean. Discussion at this meeting focused on a recently resubmitted data package and a new addendum (441-ADD2) which summarizes minor changes in the proposed drilling program and reviews plans for a scheduled (February 1997) site survey cruise aboard the R/VTangaroa.

In response to SSP comments from our July meeting, proponents have resubmitted a much more carefully assembled data package which clears up earlier confusion regarding navigation inconsistencies and profile annotations. Proponents have heeded our suggestion to move Site SWPAC-1A (now SWPAC-1B) to somewhat deeper water to avoid potential problems with the 1000 foot rule of ODP, and have decided to drop Sites SWPAC-3A and -4A from the program in order to better fit the remaining seven sites into a single leg of drilling. Data are now on file in the Data Bank in support of all proposed sites, though a subset of the data remain of poor quality and key data items (mostly 3.5 kHz records) appear to be unavailable for a few of the sites. We expect, however, that all of these concerns will be remedied with an 18-day site survey cruise presently funded and scheduled for February 1997. Proponents have modified their earlier plans to resurvey only a subset of the sites, and now plan to conduct additional survey effort at all seven SWPAC sites. Survey plans call for collection of MCS data (with crossings and acquisition of velocity information), 3.5 kHz profiling, and sediment coring at each proposed location. Pending successful completion of this survey, we anticipate that all sites will be ready for final SSP approval, and that this program will thus be ready for inclusion in the 1998 drilling schedule.

SSP wishes to thank the proponents for their prompt attention to our previous questions and concerns about the earlier data submissions. In anticipation of this program's likely advance as a scheduled leg, we suggest to proponents that it is not too early to begin to think about the eventual site safety review required by PPSP, and to start the process of assembling available information on industry wells and hydrocarbon potential in the region.

The site survey readiness level for this program remains as 2B, though we consider it a "strong" 2B in light of the proponent's plans to expand their scheduled survey to encompass all seven SWPAC sites. We look forward to reviewing the new survey data when it becomes available and wish the proponents good luck on their upcoming cruise.

Site survey readiness level: 2B

SSP Consensus # 12: SW Pacific Gateway (441) proponents have submitted a corrected and revised data package which supersedes all previous data submissions and addresses SSP concerns from the last meeting. Their recent addendum (441-ADD2) summarizes plans to drop two sites (SWPAC-3A and -4A) in order to fit the remaining seven into a single leg of drilling. A scheduled (February 1997) site survey cruise aboard the R/V Tangaroa will collect additional required survey data at all seven SWPAC sites. Site survey readiness for this program stands at 2B, with the expectation that the upcoming site survey cruise will collect all requisite data and make this program a strong candidate for 1998 drilling.

## 7.3 Cenozoic Glacial History and the Evolution of Weddell Sea Basin (503)

SSP Watchdog: Hinz SSP Proponents: None

Target Types: D for site WS 01A; B for sites WS03A/04A/05A/06A

In response to SSP's comments originating at July 96 meeting the proponents have submitted 12 different data sets including MCS, SCS and Parasound data to the Data Bank in support of their five prime sites, and their new alternate sites WS07 and WS08.

In their cover letter of 30th October, 1996 the proponents mention the submission of a revised/upgraded version of their proposal by the 1st January, 1997 deadline, containing also a more extensive description and documentation of all alternate sites still to be selected. The submission of weather and ice formation was also mentioned.

SSP acknowledges the efforts of the proponents to complete the site survey data set for the proposed sites which, in its present form of documentation, is still not satisfactory. A large-scale track plot of both the existing MCS and SCS data together with newly proposed and old drilled sites is recommended for easy evaluation of the proposed sites. The proponents should also supply a more careful identification of the final depth to the proposed sites in the form of a table so that these can be identified on the submitted seismic records. SSP also noted plans to collect additional data on a scheduled cruise to this region during Jan-March 1997. It is recommended that the proponents should deposit any additional data together with the list of new prime sites to the data bank as soon as possible so that this proposal can be evaluated systematically during SSP April 97 meeting should this proposal gets included in the 1998 drilling. No safety concerns were noted from inspection of the data at the proposed sites.

Site Survey Readiness Classification: 2A

SSP Consensus #13: It is almost certain that the site survey requirement for the Weddell Sea proposal (503) can be satisfied by the existing data. However, the proponents must supply a large scale track plot of all existing MCS and SCS lines at the proposed sites together with the revised/upgraded version of this proposal so that all the supplied data can be evaluated systematically by SSP. The proponents should keep SSP posted of the plans to acquire additional data at proposed prime and alternate sites.

## 7.4 Southern Gateway-Australia and Antarctic (485)

SSP Watchdog: Casey SSP Proponent: none Target Type: B, D and G

This proposal involves drilling between Tasmania and the South Tasman Rise and Antarctica to address Cenozoic climate changes, paleo-ocean currents, the K/T boundary event, and the evolution of a transform margin. Significant new data has arrived at the data bank since the July meeting and the proponents are thanked for the high quality of the data submitted. The new data submitted include navigation, all seismic tracks, shot point data, velocity data, all 3.5 kHz data, SCS deep penetration profiles, MCS profiles (but includes only the monitor records for the ARSO Cruise 125), swath bathymetry, high resolution side looking sonar, maps of seabed sampling sites, descriptions of all samples taken during several cruises, free air gravity and magnetic profiles in the vicinity of the proposed sites. Based on data requirements for target types proposed, it appears that all of the required data is available for drilling and almost all the required and recommended data has been submitted to the DB. This data package is comprehensive and detailed.

The only required data items that remain for submission at the time of the meeting include fully processed 6 channel seismic lines from the ARSO 125 Cruise and the available velocity data for all sites. The stacked data are expected to arrive at the data bank within days of the meeting. They were sent express from Australia during the SSP meeting, but they have not arrived at the DB in time for inspection during the November meeting. The migrated lines from this cruise are expected in the DB by Christmas.

Detailed information on the velocity and depth estimates has been provided for some sites and the remaining velocity data will be sent soon according to the proponents. Drilling, transit, change over times from XCB/RCB need to be rigorously evaluated based on these results.

Data pertinent to gas shows at Sites WT1 and WT2 and other potential problem sites should be assembled for Safety Panel consideration. In particular, maps showing the position of hydrocarbon shows relative to the proposed sites should be assembled for a possible preview by the safety panel should this proposal make into a drilling leg.

SCS high resolution data is available for four of the seven sites. Intersecting seismic lines are available for most of the Sites and crossing multi channel lines are available for all sites except TFZ02, ETP1 and alternate site SET1, but there are some crossing lines nearby.

SSP Consensus #14. Most of the data for proposal 485 (The Southern Gateways between Australia and Antarctica) is now submitted to the DB or will be submitted in the next two months. The proponents are strongly encouraged to submit the processed and migrated ARSO Cruise 125 sections and velocity information for all the sites as soon as possible in order to complete the data package before the April 97 SSP meeting. Pertinent data for gas shows at some sites must be assembled if a preview of this proposal is required by the safety panel. A ranking of 1B is assigned to this proposal because a few required items are missing from the data bank, but the data are believed to exist and to be readily available.

## 7.5 Wilkes Land - Ross Sea, Antarctica: Paleoceanography (482-489)

SSP watchdog: Flood SSP proponent: None

Target Type(s): B (passive margin)

482-Add and 489-Add suggested that proposals for drilling off Wilkes Land (482) and in the Ross Sea (489) would be combined. However, the data packages for the two proposals are not at an equivalent stage, thus the proposals will be discussed separately.

No new communications have been received by the Data Bank since the July, 1996, meeting regarding 482 (Wilkes Land). Some data has been submitted to the Data Bank relevant to proposed sites, but not all needed data is thought to exist. The proponents state in 482-Add (July, 1996) that they expect to improve site locations based on data from the Japanese National Oil Company (JNOC). Also, they note approved Italian and proposed NSF site-survey cruises. Based on this, we rate the data package as 3A on the assumption that a site-survey cruise is scheduled for 97/98 and that new sites will be designated following examination of JNOC data. The proponents will be advised by the JOIDES Office when any additional data should be submitted to the Data Bank.

SSP Consensus # 15: Not all data necessary for drilling sites in the proposal 482 (Wilkes Land) is thought to exist, but is expected to be collected during an approved site-survey cruise. Additional data may also be available through JNOC. The proposal is ranked as 3A.

A variety of data was received relevant to proposed drill sites for 489 (Ross Sea). In comparing submitted maps with proposal 489, it appears that sites RSSHEL-2A and RSSHEL-7A have been moved. The moved sites are designated RSSHEL-2B and RSSHEL-7B. Updated ODP Site Summary Forms for these sites need to be submitted to the JOIDES Office. Data was submitted in support of all Ross Shelf proposed sites (RSSHEL-01A to RSSHEL-8A), but not for Ross Slope proposed sites (RSSLOP-9A and RSSLOP-10A). In additional to regional data (ANTOSTRAT CD-ROMs, gravity, sediment thickness, velocity), MCS lines were received from Germany, Italy and France, and SCS lines were received from the US.

All shelf sites (except RSSHEL-3A) are on or very near MCS lines, although no sites are where MCS lines cross. (Portions of MCS lines IT88A-34, M\_87007 and M\_89015 are close to proposed sites and should be provided. Portions of MCS lines IFP 201-B1 and/or M\_89027-B are in the region of most of the proposed sites and should be provided.) The proponents may also consider providing enough MCS data to permit correlation between sites in different areas (esp. correlating 8A with nearby sites.) All shelf sites are also on or close to SCS lines, but again only in some cases where lines cross. The proponents should consider whether or not proposed sites can be moved to locations where MCS and/or SCS lines cross (proposed penetrations ranging from 600 to 1000 m suggest that good MCS records are very desirable at drill sites). 3.5 kHz data appears to exist near most sites, but this was not systematically evaluated.

If drilling is scheduled in this region, the proponents should visit the Data Bank to properly annotate sites and cross-reference different data types for each site. Data on sediment cores will also be needed, especially where reentry is planned, and the proponents need to consider alternate sites should ice conditions not allow some sites to be drilled. Also, there will be a need for the proponents to summarize the occurrence of organic sediments in near shore drill holes (e.g., CIROS holes) and in outcrop on land should a preview safety panel meeting is called.

In summary, a data package for the Ross Sea is nearly complete, except for data relevant to Ross Slope sites, some SCS and 3.5 kHz data, and sediment core data. The existing data will support a number of different sites in addition to the ones proposed here. The missing data are thought to exist, and we are open to a discussion from the proponents of why 3.5 kHz data may not be necessary in advance of drilling at some sites. We rate this data package as 1B. The proponents will be advised by JOIDES Office when any additional data should be submitted to the Data Bank.

SSP Consensus # 16: A nearly complete data package has been provided in support of proposed drilling in the Ross Sea (proposal 489). Some required items are missing although they are thought to exist. Also needed is a drilling plan that identifies alternate sites should ice conditions not allow some sites to be drilled.

## 8. POTENTIAL FUTURE DRILLING: LITHP

8.0 DCS Drilling 735B SSP Watchdog: Srivastava SSP proponent: none Target Type(s): Bare Rock

Gary Acton described the present status with DCS drilling and pointed out the reasons why this site is favoured by TAMU engineers for a possible engineering Leg for DCS drilling. From SSP site survey requirement, 735B site does not require any additional data besides what already exists. SSP, however, recommends that serious efforts need to be made by the Co-chiefs of Leg 176 to prepare a navigation map of the area where Video data was collected by J/R on a previous leg. This is specially important if a particular location in the area is to be selected for DCS drilling when none of these scientists will be on board to offer their guidance.

SSP Consensus # 17: Except for a navigation map to be used with the video data for this region no additional site survey data is needed for a DCS leg in region of hole 735B.

## 8.1 Kerguelen Plateau and Broken Ridge: origin, growth and evolution (457-rev 4)

SSP Watchdog: Tokuyama SSP Proponent: None

Target Type: G (Topographically elevated features)

At our July 1996 meeting, all of the proposed sites in the new proposal were judged as target type G. SSP noted that some critical geophysical data such as intersecting seismic lines, to control the spatial distribution of the basement structure and of the overlying sedimentary sequence, were required. The site survey readiness of the proposal was judged to be 2C because of the plans to collect additional data at these sites during two proposed cruises, an Australian and a French.

Since then the proponents have made serious efforts in firming up the plans for these surveys. The plans for the Australian survey is now firmed up and the cruise is to take place from January to March 97. However the plans for the French cruise are not definite yet and it may take place either in early 1997 or late 1997/98 as conveyed by one of the proponents to SSP Chair after the meeting. Multichannel seismic reflection measurements, using approximately 4000 m long digital streamer and an array of guns with a total capacity of 3000 cu in, will be made during this Australian cruise together with gravity, magnetic and 3.5 kHz/12 kHz measurements along selected tracks on the southern Kerguelen Plateau covering four of the six high-priority sites (KIP-3A, 6B, 7A, 12A). An examination of the proposed tracks shows that not all sites lie where these tracks cross among themselves or with the existing MCS tracks. It is recommended that the proposed tracks be adjusted so that they will cross with the existing MCS lines at the proposed sites. The proposed French cruise will provide data for site 2A.

The panel also noted that site 9A lies on Conrad 2708 line whose data is being processed now at University of Texas at Austin. The panel, therefore, was not able to judge suitability of the data from this site. According to the proponents processed data from this site together with that from the Australian cruise should be in the Data Bank for evaluation at our July 97 meeting. No other lines exist near this site. It is also not certain if this site will be covered by the proposed French cruise. It is recommended that the proponents try to obtain additional data at this site during the forthcoming cruises.

Based on the scheduled and proposed cruises the proposal is ranked as 2B (for sites 3A/6B/7A/12A) and 2C (for sites 2A and

9A).

SSP Consensus #18: SSP acknowledges the efforts made by the proponents of Kerguelen Plateau proposal (457) to acquire additional MCS and other site survey data at most of the proposed sites during the forthcoming cruises. SSP recommends that the proponents should plan to collect seismic data along tracks which will intersect with the existing MCS lines at the proposed sites on the Kerguelen Plateau. Pending on successful completion of planned and scheduled cruises, most of the sites on the Kerguelen Plateau from this proposal should be ready for drilling in 1998. The data quality of the existing data on the Broken Ridge could not be assessed because of the unavailability of data at the time of the meeting. However, efforts should be made to collect additional data at this site. The proposal is ranked as 2B (for sites 3A/6B/7A/12A) and 2C (for sites 2A and 9A).

## 8.2 NERO - Ninety East Ridge Observatory (508)

SSP Watchdog: Peterson SSP Proponents: None Target Type: G

This new proposal, which targets objectives of the I.O.N. program, proposes installation of a broadband ocean seismometer and instrument package into a single borehole drilled into basement on the Ninety East Ridge. Plans call for reoccupation of either ODP Leg 121 Site 756 (primary target) or Site 757 (alternate target), with placement of a re-entry cone, drilling and installation of casing to basement, and penetration of basement to a minimum of 100 m to allow for installation of the instrument package. Because this proposal targets two locations previously drilled on Leg 121, and site survey data for these sites are already on file in the Data Bank, SSP requires no further evaluation of this proposal. Site survey readiness is considered to be 1A, and we wish the proponents good luck in getting this important site of opportunity into the drilling schedule.

Site survey readiness status: 1A

SSP Consensus # 19: This proposal calls for installation of a broadband ocean seismometer into a borehole drilled into basement on the Ninety East Ridge. Plans call for reoccupation of either ODP Site 756 or 757. Since site survey data for these previously drilled sites are already on file with the ODP Data Bank, SSP requires no further evaluation and considers the site survey readiness status to be 1A.

## 8.3 Tonga Forearc (451-add2)

SSP Watchdog: John Diebold

SSP Proponent: none

Target Type: C (Active Margins)

The science of this proposal focuses fundamentally on crustal generative and destructive processes and effects operating at an interoceanic arc. In this example, the Tonga-Lau backarc-arc-trench system, which is presently characterized by regional extension linked to rapid trench convergence (170-180 km/my) and eastward trench rollback. Proposal 451 places specific emphasis on

investigating the (1) nature, characteristics, and cause of supra subduction zone are magmatism and ophiolitic crustal formation above new interoceanic subduction zones, (2) subsequent crustal generation processes and changing mantle sources that nourish backare spreading (Lau Basin) and are magmatism (Tofua are) in particular as speculatively thought to be instigated by the subduction of a lengthy chain of seamounts, the Louisville Ridge, beneath the Tonga Ridge, and (3) background or long-term effects and rates of subduction erosion and the accelerated effects and rates hypothesized to be tied to the subduction of the Louisville Ridge.

The current addendum-2 incorporates the results of the recently completed site-survey cruise of the R/V Melville, May-June, 1996. The results of the gathered information served to more accurately position the coordinates of previously selected sites, move selected sites to positions at which scientific objectives could be better achieved (e.g., TONG 10A for 05B, eliminate one site (TF7) because the objectives at which were not judged achievable and basically supplied by dredge recoveries, and locate a new site, TONG 08A.

Seven sites are proposed which, together with existing drill sites 840 and 841 (Leg 135), make up three cross-arc transects at 15°, 22° and 23°S. One new site, TONG 08A was position at 26° S in response to TECP's request for a "benchmark" site south of the collision zone of the Louisville and Tonga Ridges. This site, at 3555 m along an existing 24-fold MCS line, is positioned at the inner (western) edge of a deep-water forearc terrace.

Melville 3.5 kHz system failed to recover usable data, thus site-crossing high-frequency subbottom profiles remain unavailable. High-resolution profiles exist, however, for many, but not all, of the sites selected along data-sets gathered on other cruises, and the SSP recommends that the drill ship's 3.5 kHz system be used during approach to image the upper sedimentary structure at sites 03A and 10A. The panel appreciate proponents response on many issues raised by the panel during their July meeting.

In view of the hydrocarbon exploration in the near by region, the proponents must compile all available information of the wells which have been drilled in the region, occurrence of any hydrocarbon in them, their locations on a map together with those of the proposed sites for a possible preview of this proposal by the safety panel.

Site Survey Readiness Classification: 1B

SSP Consensus # 20: The greater part of the required site data for Tonga Forearc proposal (451) now resides in the DATA BANK. Since the July meeting, much of the data from the R/V Melville "Boomerang" site survey has been submitted to the data bank, including underway geopotential data, larger-scale reproductions of site-crossing SCS profiles along with swath mapping and sidescan data. Some of the data are still "in the mail," however. Velocity information in the area has been synthesized, and revised drilling time calculations have also been submitted, as have site maps and thermal gradient information. The proponents are to be congratulated for their response to SSP demands. The data package for drilling these sites is very nearly complete, and we await only large scale plots of DCS (dual channel seismics) from the Melville cruise for a few sites, and migrated sections of one older MCS line, currently being prepared under the direction of David Scholl, and this is an enhancement, not a requirement. The proposal is ranked as 1B - as a few items are still missing from the DB but are believed to exist and should be ready by 1997 making this proposal a viable candidate for 1998 drilling.

8.4 Mass Balance: Izu-Mariana convergent margins (472)

SSP Watchdog: Diebold SSP Proponent: None

Target type: D

After a flurry of response to the SSP comments of March '96, no new items have been submitted to the data bank. However, during the November meeting, it was noted that the single piece of data still needed - a 3.5kHz crossing of alternate site BON9 - should be present at Lamont. The 3.5kHz data were located and copied by M. Giarratano of the Data Bank, and the data package is now complete.

This proposal is classified 1A.

SSP Consensus # 21: A good data package has been assembled for Izu-Mariana Convergent Marin proposal (472). The package is now complete and the proposal is ready for drilling. If any paleoceanography objectives are intended, a good quality SCS profile through the BON site must be collected by the JOIDES Resolution.

8.5 Australian Antarctic Discordance: (426)

SSP Watchdog: Sibuet SSP proponent: none

Target Type(s): E (open ocean crust with < 400 m sediments)

The intent of this proposal is to locate and characterise the boundary between sea-floor basalts that were derived from the mantle of the Pacific ocean and those belonging to the Indian ocean.

During their July 96 meeting, SSP had examined the R/V Melville site survey data collected in February 96. Unfortunately the quality of seismic and 3.5 kHz data was so poor that SSP was not able to evaluate the thickness of sediments present at all sites. A retrieval search of Lamont holdings showed the possibility that some 3.5 kHZ data may be present along a Verna track through the region. It was, therefore, recommended that the proponents look at data collected on other cruises through this region and to select possible sites.

The proponents, on examination of Vema and Eltanin data, prepared a document showing the presence of sediment pockets at several locations in the vicinity of proposed sites. They also show that the unprocessed seismic data, acquired by the R/V Melville, were often of better quality than the processed data to estimate the sediment thicknesses. Judging from the Melville data supplied, sites 1, 13, 14 and 16 can now be considered as drillable sites. However, such a small number of sites are not enough to properly address the scientific objectives of this proposal. Therefore, on further examination of Lamont seismic holdings, it was found that single channel seismic data exist along VEMA and ELTANIN tracks through this region. SSP looked at these data and found several areas, in close vicinity of proposed sites, where adequate amount of sediments exist. It is, therefore, recommended that the proponents should look at this data at Lamont before making any plans for collection of additional data on forthcoming cruise on Melville.

A careful examination of Vema's 3.5 kHz data, submitted by the proponents, showed that it is very hard to judge adequacy of sediments for spudding holes at most of the sites picked by the proponents. It is thus very likely that this may be related to the characteristics of this region and not merely to the equipment used. Consequently, SSP recommends that, if an additional survey is to be conducted in this region, it must clearly show where pockets of at least 50 m of sediments exist. For that, even an operational 3.5 kHz system may not be adequate in this region to meet the site survey objective at the sites. We realise that SSP guidelines specify requirements for 3.5 kHz data for the "ocean crust <400m of sediments" category. In view of the difficulty in imaging the required amount of sediments using a 3.5 kHz system in this region, SSP, therefore, strongly recommends use of a high resolution seismic system which should be able to resolve at least top 100 m of sediment cover. One gun (water gun or Gl gun) should probably be enough with a single channel streamer or better a 2 or 6 channels streamer for this purpose. In order to increase the quality of the seismic sections, the speed of the ship may need to be decreased to 5 to 7 knots in the areas of potential sites. We, therefore, highly recommend collection of additional data at the proposed sites if at all possible.

In view of the lack of required data, which is planned to be collected on a cruise, the proposal is ranked as 2C.

SSP Consensus # 22: During our July meeting the proposal 426 (Australia Antarctic Discordance) was judged not to be ready for 1998 drilling because of the poor quality of seismic and 3.5 kHz data collected onboard Melville at most of the proposed sites. On SSP recommendation, the proponents examined existing VEMA data and prepared a data report in which they document presence of sediment pockets in the vicinity of the proposed sites. It seems that four of the sites, sites 1, 13, 14 and 16 can now be considered as drillable sites. This, however, is not enough to meet the objective of this proposal. It was realised at the meeting that some additional seismic data exist in the region of the proposed sites which the proponents are advised to look before planning to collect any additional data in the region. However, in view of the difficulty in imaging the sediments from 3.5 kHz system only in this region, SSP recommends that 3.5 kHz system must be supplemented by single channel seismic system if additional data is to be collected in this region. The uncertainty in consideration of this proposal as a viable candidate for 1998 drilling still remains and the proposal is classed as 2C.

## 9. OTHER BUSINESS

## 9.1 JOIDES new structure: Meeting schedule and transition year (Srivastava, Ellins)

Kathy Ellins outlined the new "Proposal Timeliness for the next two years (Appendix C)" and how they have taken into account most of SSP's concerns. The points raised during the SSP July meeting and how these have been taken care of in the new plans were briefly discussed and these are described below.

- 1. The timing of the data deadlines with respect to SSP meetings: The new time table has taken care of this by allowing a month between the data deadlines and SSP meetings.
- 2. The interaction of SSP with PPG's and SSEP's and the timing of this: This is still under discussion and will not be known for some time.
- 3. The need for two proposal deadlines: Still remains
- 4. The role of the Data Bank at the preliminary stage and a checklist for proponents: This was discussed at some length and a committee of five was formed to design a set of forms which the proponents will be asked to fill out during submission of their proposals. It was decided, as suggested by Dan Quoidbach, that the Data Bank will be prepared to run a search through their data holding about the kind of data which exist in the DB for a given region where previous drilling has been carried out. This information could then be passed on to the proponents either on demand or at the time when their proposal are reviewed by SSP.
- 5. The need for any site survey review before scientific peer review: According to the present scheme this could not be eliminated; at least for the time being.
- 6. The work load on SSP how to limit the number of proposals handed down by the SSEP's: It was suggested that this will be taken care of by SSEP in consultation with JOIDES Office. A maximum of 15 to 16 proposals are to be reviewed by SSP at any one time.

  7. The possibility of a proposal build-up in the system how to avoid keeping weak proposals in the system unnecessarily: Under
- 7. The possibility of a proposal build-up in the system how to avoid keeping weak proposals in the system unnec consideration by JOIDES Office.
- 8. There should be no SSP review until the science peer review has been completed: This does not seem to be possible in the new system; at least during the first year.
- 9. Following from this, site survey data should only be requested of proponents once their proposal has been favourably reviewed by SSEP's. This will limit the amount of redundant data in the system: It was decided that JOIDES Office will be notifying proponents

when to send data to the Data Bank. First, as soon as the proposals have been sent out for peer review and the second time, when favourable comments have been received and SSEP have selected the proposals for SSP review.

10. Establish SSEP liaison to SSP like PCOM at present: This is still under discussion.

# Action Item #3: Dan Quoidbach to circulate the new forms to all members for comments etc. 10.2 SSP meetings for 1997

We discussed timing for the spring meeting and it was decided to hold this meeting in Japan from April 1 to 4, 1997. Hidekazu Tokuyama will be the host for this meeting and will notify members of the details of the meeting nearer to its time.

Action item #4: SSP Chair Srivastava to write to PCOM asking for their permission to hold their spring meeting in Japan from April 1 to 4, 1997.

Kathy Ellins pointed out the need for SSP to shorten the duration of their meeting to three days because of the budgetary restrictions. However, this does not include the meeting in Japan which is to take place over four days because of a field trip taking place in the middle of the meeting. Several ways of reducing the meeting time to a three days period were pointed out and the panel decided that the best would be to reduce the time taken by the reports and to strictly control the time allotted to each item. The former can be achieved if all liaison members would send their reports ahead of time to SSP Chair for circulation. All that will be needed during the meeting then is any discussion arising from those reports. It was also decided that these meetings will start on Monday and finish on Wednesday to save on travel funds for those willing to spend Saturday night at Lamont. Arrangements can be made for access to the Data Bank for those willing to spend some time looking at the data on Sunday.

A question arose about the places to hold SSP meetings. As there will be only two meetings per year it was felt by most that it would be highly desirable to hold one of these meetings outside USA in another participating country. This is largely because this is one of the avenues by which participating countries can show their involvement in the program to their organizations and in general good public relation for the program. Meetings held in France, Britain and Canada are good examples of this.

Action item #5: SSP Chair to write to PCOM advising them of the decision taken by SSP to hold one of their meetings outside North America and asking for their permission to do so.

## 10.3 Report of SSP subcommittee on Phase IV of ODP (Diebold, Casey)

Jack Casey, one of the member of this subcommittee, mentioned that little or no progress was made on this item since our July meeting. He also mentioned his and Srivastava's attendance at the InterRidge meeting held at WHOI dealing with the Phase IV problem. Because the organisers of that meeting had sent a copy of their 29 page report only a day before this item was to have been discussed at the meeting that it was decided to defer this item to our next meeting.

## 10.4 Panel Membership (Srivastava)

SSP Chair Srivastava mentioned that terms of appointment for two of the foreign members, Roger Scrutton from UK and Jean-Claude Sibuet from France were due to expire after the November meeting. He suggested that because so many changes were going to take place in the ODP in the coming year that it would be helpful to this panel if these two members would be willing to stay on for another year with the panel. Jean-Claude Sibuet had agreed to do so but not Roger Scrutton, who was not too sure if he will be able to do so because of his heavy commitments with the Chairmanship of Geology Department. Srivastava has written to ODP France requesting a one year extension in the Sibuet term of appointment with this panel. Kathy Ellins pointed out that at the previous PCOM meeting it was decided that those SSP panel members due to retire can do so. As it was not known to SSP, Srivastava to write to PCOM explaining the circumstances for the request to France for Sibuet Extension.

Action item #6: Srivastava to write to PCOM about the extension in Jean-Claude Sibuet's term of appointment with SSP panel.

SSP Consensus # 23: SSP understands that Greg Mountain may no longer be the PCOM liaison to SSP with the start of the new program and therefore would like to thank Greg for being a most effective spokesperson for this panel to PCOM and for looking after this panel's interests whenever a need arose. The panel would also like to acknowledge the benefit it has received from his expertise in seismic stratigraphy and high resolution seismic during his association with this panel. We will miss his input into the working of this panel, which he so generously provided, and for making numerous arrangements for social and cultural activities during the meetings held at Lamont.

SSP Consensus # 24: Subsequent to the meeting Roger Scrutton informed the SSP Chair that he will not be able to continue as UK member because of his heavy commitments. SSP thanks Roger Scrutton for his services on this panel, and especially notes his contributions to the new ODP structure as it applies to the SSP. We wish him all the best in his new post as Chairman of the Geology and Geophysics Department, Edinburgh University and anticipate his continued contribution to this panel as UK alternate member.

## 10.5 Other business - Data requirement of previously drilled Legs in new proposals.

The question has been raised from time to time when a proposal is submitted to the program where it involves going back to a region where ODP or DSDP holes were drilled and the proponents assume that all data previously submitted to the DB should be adequate for new drilling. After an extensive discussion the panel decided that the following measures will be taken in such cases:

- 1. As soon as SSEP decides which proposals go out for mail review (e.g. Jan 24, 1997), then JOIDES Office or SSEP Chair will E-mail a list of these proposals to the Data Bank and the DB will begin a search of what is pertinent and available to each proposal in the data bank and tell the proponents about the DB holdings for their proposal and what they need to update and submit to the DB by the data deadline (March 1, 1996) in order for their proposal to be considered by the SSP.
- 2. The watchdogs to the use the list prepared by the DB during their evaluation of the proposals and any items sent to the DB after the notification from them to the proponents. They should also flag these proposals if extra input is needed from the proponents to assemble the required data at the DB before the next SSP meeting.
- 3. SSP together with the watchdogs must ensure that the proponents realize that their data packages must be brought up to the modern standards as outlined by SSP. In many cases old data may not be adequate to meet the stated objectives.

## 10.6 Suggested Co-Chiefs for future legs from SSP

Several names for different proposals were suggested to the JOIDES representative for the forthcoming PCOM meeting.

10.7 Items for PANCH meeting

The following items have been suggested to PANCH meeting.

- 1. Role of SSP in new ODP structure -- Liaisons with other panels
- 2. Systems for substituting absent US SSP members from other panels.

Global ranking	1. Viable	for 98	2.Possibly likely for 9		3. unlik. 98 possible 99		4.impos. 98	5. impos. 98	6.Not consid.	7.Not consid.	
Fall 96	1A	1B	2A	2B	2C	3A	3B				
T1,L6,S6	447										
T2,L2			431*	431*							
T4,L7,S9	450										
S1		452- 502									
S2,T5		445									
S3,O3	367										
S4	LOI-69										
L0, S13	DCS										
L1, T7				457							
L2	NERO		431(W.P)								
L3, T3, S8		451									
L4,S5,T6,O9	472						<u> </u>				
L5				431(J.T)			<u> </u>				
L9	<u></u>		<u> </u>		426*	<u> </u>					
O1, S7	464										
O2, S10, T10				441							
O5			503								
O6 ( <b>482+489</b> )		489				482	<u></u>				
O8,T9		485									

<sup>\* ---</sup> see detailed comments.

# Quantitative Classification of proposals Site Survey Readiness Classification Scheme.

## 1. Presently viable proposal for FY 98 drilling.

- 1A. All required data are in the data bank
- 1B. A few required items are missing from the data bank, but data are believed to exist and to be readily available.

## 2. Possibly viable proposal for FY 98 drilling; likely for FY 99

- 2A. Substantial items of required data are not in the data bank but are believed to exist and are likely to be available in time for consideration for FY 98 drilling schedule.
- 2B. Substantial items of required data are not in the data bank, not believed to exist but could be available in time for consideration for FY 98 drilling if a scheduled site survey proceeds as planned.
- 2CSubstantial items of required data are not in the data bank, not believed to exist but could be available in time for consideration for FY 98 drilling if a **proposed** site survey proceeds as planned.

#### 3. Unlikely for FY 98; possible for FY 99.

- 3A. Required data are not in the data bank, not believed to exist but are likely to be available in time for consideration for FY 99 drilling if a scheduled site survey proceeds as planned.
- **3B.** Required data are not in the data bank, not believed to exist but could be available in time for consideration for FY 99 drilling if a **proposed** site survey proceeds as planned.
- 4. Impossible for FY 98: Required data are not in the data bank and not believed to exist. Data could be available after FY 98 if a proposed site survey proceeds as planned.
- 5. Impossible for FY 98: Required data are not in the data bank and not believed to exist. A site survey needs to be conducted but is not proposed at this time.
- 6. Not considered because data in the Data Bank does not match present proposal; awaiting a new proposal.
- 7. Not considered because no data has been submitted to the data bank.

## Appendix A

	SSP Watchdog Assignments Scheduled Legs														
Leg	Proposal Name	Prop. No.	April 1994 (Brest)	July 1994 (Lamont)	Nov 1994 (Lamont)	APRIL 1995 (BIO)	July 1995 (La- mont)	Nov 1995 (Lamont)	March 1996 (Edinburgh)	July 1996 (Lamont)	Nov. 1996 (Lamont)				
173	Iberia II (NARM-non-volcanic)	461, 461- add	Mountain	Mountain	Mountain	Mountain	Diebold	Enachescu	Enachescu/ Quoidbach	Enachescu/ Quoidbach	Enachescu/ Quoidbach				
174A	New Jersey Shelf II	348-add	Kastens	Farre	not in prospectus	Kastens	Flood	Flood	Flood/ Quoidbach	Flood/ Quoidbach	Flood/ Quoidbach				
174B	CORK 395A/Engine- ering	424						Toomey	Toomey/ Quoidbach	data set complete	data set complete				
175	Benguela Current	354-Rev, 354-Add	Fаrте	out of geo. area	out of geo.	Hinz	Lyle	Lyle	Paull/ Quoidbach	Paull/ Quoidbach	data set complete				
176	Return to Hole 735B	300-rev	Srivastava/ Quoidbach	out of geo. area	out of geo.	Casey	Scrutton	Casey	Casey/ Quoidbach	Casey/ Quoidbach	Casey/ Quoidbach				

							]	Highly Rai	SSP War		Proposals					
SR '94	FR '94	SR 95	FR 95	SR 96	FR 96	Title	Prop.	April 1994 (Brest)	July 1994 (Lamont)	Nov. 1994 (Lamont)	April 1995 (BIO)	July 1995 (Lamont)	Nov 1995 (Lamont)	March 1996 (Edinburgh)	July 1996 (Lamont)	Nov. 1996 (Lamont)
		T-5	_	-		Peruvian Margin /Gas Hydrate	355- Rev5				Camerlenghi	Diebold	not in prospectus			
		S-6	-	S-4, O-4	S-3, O-3	Australian Bight Carbonate	367				Enachescu	Enachescu	not in prospectus	Enachescu	Enachescu	Enachescu
L-1, O-1	O-1, L-6, S-6	L-2	L-4, T-7	L-2		Caribbean	384re v3, 408R2 , 411, 415- Rev, 480	Mountain	Hinz	Scrutton	Hinz	Scrutton	Casey	outside area of operation for 1998	outside area of operation for 1998	
L-5		L-5	-	L-8	L-9	AustrAnt- arc. Discordance	426	Kastens	out of geo- graphic area	out of geo- graphic area	Kastens	Enachescu	not in prospectus	Toomey	Toomey	Sibuet
		·		Т-3	T-2, L-2	W. Pacific Seismic Net- work	431							Toomey	Toomey	Peterson
		L-6	_	L-7, S-7	L-4, S-5, T-6, O-9	Izu-Mariana Mass Balance	(435- Add2), 472				Scrutton	out of geographic area	not in prospectus	Scrutton	Scrutton	Diebold
		S-7	-	S-13	-	Nicaragua	(435- Rev), 471				Scrutton	Scrutton	not in prospectus	ranked low	ranked low	

								Highly Ra	SSP Wanked Uns	_	Proposals					
SR '94	FR '94	SR 95	FR 95	SR 96	FR 96	Title	Prop.	April 1994 (Brest)	July 1994 (Lamont)	Nov. 1994 (Lamont)	April 1995 (BIO)	July 1995 (Lamont)	Nov 1995 (Lamont)	March 1996 (Edinburgh)	July 1996 (Lamont)	Nov. 1996 (Lamont)
O-5			_	O-2	O-2, S-10, T-10	Southwest Pacific Gateway	441	Peterson	out of geo- graphic area	out of geo- graphic area	Peterson	out of geographic area	not in prospectus	Peterson	Peterson	Peterson
T-5		Т6	-	T-5		Mariana back-arc basin	442	Tokuyama	out of geo- graphic area	out of geo- graphic area	Tokuyama	out of geographic area	not in prospectus	Kuramoto	Kinoshita	,344,444
		S-4 T-7		S-2, T-5	S-2, T-5	Nankai defor. & fluids	445- Rev				Camerlenghi	out of geographic area	not in prospectus	Paull	Paull	Diebold
T-1		T-1	T-3, O-7	T-2	T-1, L-6, S-6	W. Woodlark Basin	447	Farre	out of geo- graphic area	out of geo- graphic area	Enachescu	Enachescu	Enachescu	Enachescu	Enachescu	Enachescu
		L-3	-	L-1	_	Ontong Java Plateau origin	448				Tokuyama	out of geographic area	not in prospectus	not quite ready	out of area of oper- ation	
T-3		Т-3		T-1, S-18	T-4, L-7, S-9	Taiwan arc/- cont collision	450	Sibuet	out of geo- graphic area	out of geo- graphic area	Scrutton	out of geographic area	not in prospectus	Sibuet	Sibuet	Sibuet
		L-7	_	L-4, T-7	L-3, T-3, S-8	Tonga Forearc	451- Rev2, Rev3				Scrutton	out of geographic area	not in prospectus	Diebold	Scholl/ Srivastava	Diebold
		L-4	L-4, T-5, S-6	L-6, T-10	L-1, T-7	Kerguelen Plateau	457- Rev, Rev3				Hinz	Tokuyama	Tokuyama	Hinz	Hinz	Tokuyama

								Highly Ra	SSP Wa nked Uns		Proposals					
SR '94	FR '94	SR 95	FR 95	SR 96	FR 96	Title	Prop.	April 1994 (Brest)	July 1994 (Lamont)	Nov. 1994 (Lamont)	April 1995 (BIO)	July 1995 (Lamont)	Nov 1995 (Lamont)	March 1996 (Edinburgh)	July 1996 (Lamont)	Nov. 1996 (Lamont)
		O-3	O-3, S-5	O-1, S-12	O-1, S-7	Southern Ocean Paleoceano.	464				Peterson	Flood	Peterson	Flood	Flood	Flood
		O-6	_	O-3		SE Pacific Paleoceano.	465- Add				Peterson	Tokuyama	not in prospectus	Peterson	Peterson	not in prospectus
		T-4	T-4, L-6			Romanche FZ	468				Kastens	Diebold	Toomey	ranked low	ranked low	
			S-4	S-6		Hudson apron	476						Flood	Flood	Flood	
			L-2, S-2	S-1, L-3		Red Sea	481						Scrutton	Scrutton	Scrutton	
				O-5, S-5, T-6		E. Asian Monsoon History	484							Peterson	no data	
				O-6	O-8, T-9	S. Gateway Australia- Antarctica	485							Casey	Casey	Casey
				Ants.	S-1	Antarctic Glacial His- tory	452	-	-	-	-		-	•	Lykke- Andersen	Lykke- Andersen
				Ants.		Bransfield St., History	453	-	-	-	-	-	-	-	Lykke- Andersen	_
				Ants.	S-1	Palmer Deep	502	-	-	]-	-	-	-		Peterson	Lykke- Andersen

			•					Highly Ra	SSP Wanked Uns	_	Proposals					
SR '94	FR '94	SR 95	FR 95	SR 96	FR 96	Title	Prop.	April 1994 (Brest)	July 1994 (Lamont)	Nov. 1994 (Lamont)	April 1995 (BIO)	July 1995 (Lamont)	Nov 1995 (Lamont)		July 1996 (Lamont)	Nov. 1996 (Lamont)
				Ants.		Prydz Bay	490	-	4-	-	-	_	-		Sibuet	
				Ants.		Weddell Sea	503	-	-	_	_	-		-	Hinz	Hinz
				Ants.	0-6	Wilkes Land	482		-	-				_	Paull	Flood
				Ants.	O-6	Ross Sea	489	-	_	<b>-</b>	_		_		Casey	Flood

#### APPENDIX B

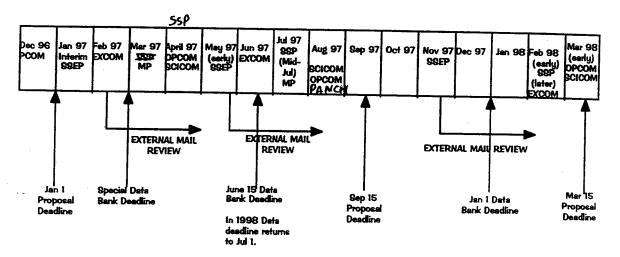
#### SSP Feedback to proponents

Watchdogs should send a letter to the lead proponent of the proposal. For proposals where the usual watchdog was not at the meeting, the acting watchdog prepares and sends the letter, with a copy to the permanent watchdog. In either case, in the letter you should identify yourself as writing in your role as SSP watchdog (or acting watchdog). For scheduled legs the letter will be sent by Dan Quoidbach in consultation with the watchdog. If Co-Chiefs for this leg have been named and are not the leading proponent, send copies of the letter and the enclosure to Co-Chiefs as well. The letter should convey the sense of the discussion, plus any additional informal advice or insight you may have to help the proposal/proponent progress through the ODP approval process. With the letter, you should enclose a copy of the section of the draft minutes dealing with the proposal, plus the SSP worksheets (if any) that you filled out for the proposal. Finally, you should send a copy of the letter to the ODP Data Bank, attention Milly Giarratano.

## List of things to include:

- o the name and contact information of the watchdog,
- o a copy of the section of the draft minutes dealing with the proposal,
- o copies of the SSP worksheets, if the data package is sufficiently mature to enable the watchdog to fill out worksheets.
- o the target types within the SSP guidelines against which each site will be evaluated,
- o for each data type classified as "X\*" or "Y\*", an indication of whether SSP will or will not require this particular data type for these particular sites,
- o an indication of additional data types that SSP might require in support of secondary or non-standard drilling objective in circumstances not well covered by SSP guidelines,
- o an indication of any potential safety issues,
- o for sites in areas of hydrocarbon exploration or production, a reminder that data from commercial wells in the area will eventually be needed for safety review
- o for sites in <200m water depth, a reminder of shallow water drilling hazard survey requirements
- o for sites in heavily travelled areas or near shore sites, a reminder that information on potential manmade hazards (cable routes, dump sites) will be needed for operational planning
- o advice on other investigators who may have relevant data in the region,
- o advice on survey ships that may be able to visit the area.
- o reminder of timing of next data deadline and next SSP meeting.
- mention about the need to place suitable markers if a HRGB is planned to be used and that the proponents should be in contact with TAMU engineers, in particular with Jay Miller, about it. Enclose a copy of the guidelines on marking these sites using submersibles as outlined by Jay Miller from TAMU.
- o Send a copy of your watchdog letter to Milly Giarratano, ODP Data Bank.
- o Send the watchdog letter to the lead proponent of the proposal. Ask Shiri for advice if there is not a single obvious lead proponent with whom to communicate.
- o Send a copy of "Quantitative Classification of proposals" with your letter.

## IMPLEMENTATION TIMETABLE FOR THE TRANSITION YEAR TO THE NEW JOIDES ADVISORY STRUCTURE 1997-1998



Dec 1996 PCOM - FY 1998 Drilling Schedule

Jan 1, 1997 - PROPOSAL DEADLINE

Jan 1997 Interim SSEP - Consider all active proposals and select scientifically mature ones to be sent out for external mail review

Feb 1997 EXCOM - Determine membership of SCICOM and SSEPS

March 1, 1997 - Special SSDB data deadline to permit proponents of proposals selected for external mail review to submit supporting site survey data to DB

Mar 1997 - SSP evaluates all scientifically mature proposals

April 1997 OPCOM - If required, will continuue the implementation and general oversight role of PCOM; Technology assessment

April 1997 - SCICOM establishes PPGs and conducts long term science and technology planning.

May 1997 - First meeting of SSEPs; consideration of previous Thematic Panel reviews and first set external reviews of ODP proposals; formulate advice to SCICOM

June 15, 1997 - SSDB Data Deadline; in 1998 the deadline reverts to July 1.

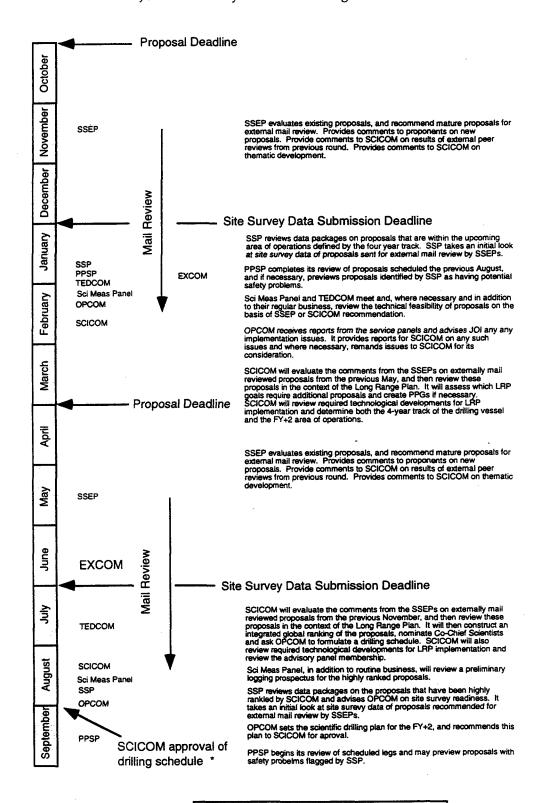
July 1997 - SSP takes a more focussed look at proposals determined to be scientifically mature by interim SSEP (January) and by the new SSEPs in May.

August 1997 - SCICOM ranks mature proposals and conducts long term science and technology planning. Note that in 1998, SCICOM and OPCOM will meetin in early September.

August 1997 - OPCOM formulates a drilling schedule from FY 1999 onward, depending on logistical and budgetary considerations.

September 15, 1997 - PROPOSAL DEADLINE

Figure 2. Annual timetable of JOIDES advisory structure meetings



NOTE: SCICOM will approve the drilling schedule with a majority vote of unconflicted members by e-mail. Failure to confirm the schedule will necessitate re-convening OPCOM.

KEY
EXCOM = Present Committee
SCICOM = JOIDES Science Committee
OPCOM = JOIDES Science Operations Committee
SSEP = Science Steering and Evaluation Panel
SSP = Stie Survey Panel
SCI Meas Panel = Scientific Measurements Panel
PPSP = Pollution Prevention and Safety Panel
TEDCOM = Technology and Engineering Development Committee