

Sedimentary and Geochemical Processes Panel
Fall Meeting, September 27-29, 1995
Geological Institute, University of Copenhagen, Copenhagen, Denmark
Executive Summary

1. Review of Proposals: The proposals were reviewed in two groups: first the 11 proposals included in the FY97 Prospectus, and then remaining 17 proposals. After discussion, the Panel voted to add several proposals to the Prospectus.

1.1 Summary of Ratings of Proposals included in the FY96 Prospectus: The following table presents a summary of the ratings of proposals included in the FY97 Prospectus, sorted by category of thematic interest level to SGPP. The order within each category is by proposal number and is not a ranking.

| Proposal No. | Abbreviated Title | A | B1 | B2 | C | D | E | F |
|--------------|----------------------|----|-------|------|----|----|----|----|
| 300-Add2 | Return to Site 735B | A5 | | | | | | F4 |
| 348-Rev | U. Paleo./Neog. | A1 | B1.1 | B2.1 | C1 | D1 | | F1 |
| 354-Add4 | Benguela Current | A2 | B1.2 | B2.1 | C1 | D1 | | F2 |
| 404-Add2 | NorthAtlantic Drifts | A3 | B1.2 | B2.1 | C1 | D1 | | F3 |
| 447 | Western Woodlark | A5 | | | | | | F4 |
| 457-Rev2 | Kerguelen Plateau | A5 | | | | | | F4 |
| 461-Rev | OCT west of Iberia | A5 | | | | | | F4 |
| 462-Rev | Blake Plateau/ Nose | A5 | | | | | | F4 |
| 464-Add | Southern Paleocean | A3 | B1.2* | B2.1 | C1 | D1 | | F3 |
| 468-Rev | Romanche FZ | A5 | | | C4 | D4 | E8 | F4 |
| 480 | Caribbean Basalt | A5 | | | C4 | | | F4 |

* = with reference to SGPP inerests

1.1.1 Special Motion regarding LWD proposed in 348Rev: The Panel discussed the Logging While Drilling proposed in the Revision to Proposal 348 for dilling the sea level transect on the New Jersey Margin

Garrison made the following motion, seconded by Baker:

SGPP believes that LWDas proposed 348Rev is a very important modification that will greatly add to the likelihood of success of the scientific program and should be accepted as an integral part of the drilling plan.

The vote of the panel was unanimously in favor of the motion.

1.2 Summary of Ratings of Other Proposals: The following table presents a summary of the ratings of other proposals, sorted by category of thematic interest level to SGPP. The order within each category is by proposal number and is not a ranking.

| Proposal No. | Abbreviated Title | A | B1 | B2 | C | D | E | F |
|--------------|---------------------|-----------------|------|------|------------------|-----------------|-----------------|----|
| 334-Add | Galicia Margin | A5 | | | | | | F4 |
| 355-Add | Peru Margin | A2 | B1.2 | B2.1 | C2 | D3* | | F2 |
| 426-Rev | Australia-Antarctic | A5 | | | | | | F4 |
| 431-Rev | W. Pacific Geophys. | A5 | | | | | | F4 |
| 445-Add | Nankai Trough | A1 | B1.1 | B2.1 | C1 | D3** | | F1 |
| 448-Add2 | Ontong Java | A5 | | | | | | F4 |
| 450-Add | Taiwan Collision | A3 | B1.2 | B2.1 | C1 | D3** | E8 | F2 |
| 455-Rev | N.W.A.M.P. | A2 | B1.2 | B2.1 | C1 | D5 ^s | | F2 |
| 473-Add | Saanich Inlet | A5 | | | | | | F4 |
| 473-Add2 | High Res. Saanich | A1 | B1.1 | B2.1 | C1 | D1 | | F1 |
| 474 | Engineering Leg | A3 | | | | | | F4 |
| 475 | PhysProps.Accret. | A1 | B1.1 | B2.1 | C1 | D1 | | F1 |
| 476 | Hudson Apron | A1 | B1.1 | B2.1 | C1 | D1 | | F2 |
| 477 | Okhotsk/Bering | A4 ^x | B1.3 | B2.1 | C2 | D3** | D5 ^s | F3 |
| 478 | Eastern Nankai | A1 | B1.2 | B2.1 | C3 ^{aa} | D3* | E8 | F2 |
| 479 | E. Manus Back-Arc | A2 | B1.3 | B2.1 | C3 | D4*** | F3 | |
| 481 | Red Sea Deeps | A1 | B1.1 | B2.1 | C1 | D3*/? | D4*** | F2 |

* = Pressure Core Barrel

**= In-situ Pore Fluid Sampler

*** = Sampling hot fluids

^s = PPSP

^x = with major revision

^a = 3D multichannel, heat flow data, fluid flow model

1.3 Additions to the FY97 Prospectus: After rating the proposals not included in the Prospectus, the panel voted to add the following proposals to the FY97 Prospectus.

Proposal 476 - Hudson Apron

Proposal 475 (part) - LWD at Barbados

Proposal 481 - Red Sea Deeps

2. Ranking of Programs in the FY97 Prospectus: The Panel ranked the programs in the FY97 Prospectus, including the proposals the Panel had voted to add to it. The program with the highest average is ranked 1, as the Panel's highest priority.

| RANK | PROP. NO. | AREA | SCORE | STD. DEV. | NOTE |
|------|-----------|---------------------|-------|-----------|-------|
| 1 | 348 | New Jersey TTE | 13.21 | 0.97 | |
| 2 | 481 | Red Sea | 11.38 | 1.61 | Added |
| 3 | 354 | Benguela | 11.31 | 1.80 | |
| 4 | 476 | Hudson Apron | 11.00 | 1.62 | Added |
| 5 | 464 | South Atlantic | 9.57 | 1.99 | |
| 6 | 475 | LWD Barbados | 9.15 | 3.18 | Added |
| 7 | 404 | NW Atlantic Drifts | 8.71 | 1.94 | |
| 8 | 447 | Woodlark Basin | 6.86 | 2.96 | |
| 9 | 457 | Kerguelen/Broken R. | 5.57 | 0.65 | |
| 10 | 462 | Blake Plateau/ Nose | 4.79 | 1.72 | |
| 11 | 480 | Caribbean Basalt | 4.50 | 1.51 | |
| 12 | 461 | OCT Iberia | 3.71 | 1.86 | |
| 13 | 300 | Return to 735B | 2.79 | 2.72 | |
| 14 | 468 | Romanche FZ | 1.79 | 1.12 | |

3. Summary of Ratings of LOIs: The following table presents a summary of the ratings of the LOIs, sorted by category of thematic interest level to SGPP. The order within each category is by proposal number and is not a ranking.

| L.O.I. # | Subject | Rating |
|----------|--|--------------|
| 54 | Water Circulation & Sediment History: Indian Ocean | A5 |
| 55 | Drilling in a non-accretionary convergent plate margin | A2 |
| 56 | A Paleogene Equatorial Pacific APC Transect | A5 |
| 57 | "Abyssal Anoxic Basins, Southwest Pacific" | A3 |
| 58 | Slow-spread lith: Mid-Atlantic Ridge/ Kane Fr. Zone | A5 |
| 59 | Monsoon History in the South China Sea | A3 |
| 60 | Return to TAG Hydrothermal Field | A2 (C4, D4)* |
| 61 | Seychelles Microcontinent | A5 |
| 62 | Drilling on the U.S. Middle Atlantic Continental Rise | A3 |

* needs high temperature in-situ fluid sampler.

4. Discussion of Rating/Ranking Procedures: The panel discussed the rating and ranking procedures, and makes the following suggestions:

Review Criteria for Thematic Panels:

- 1) add a new category "A5. Could be relevant with major revisions" and renumber the present A5 "A6."

- 2) add a new category "D6. Possible safety problems recommend early review by PPSP"
- 3) add a new category "E0. No deficiencies"
- 4) add a new series of criteria describing the Quality of the Proposal, perhaps with categories such as:
 - X1. Very well-written, answers all of the panels questions clearly
 - X2. Generally well-written but leaves some questions to be answered.
 - X3. Proponents have good idea but text is difficult to understand.
 - X4. Poorly written, difficult to judge

Forms: The Panel felt that the forms used by the JOIDES office should be designed to use a minimum of paper. The Panel used copies that had been reduced to half size, so that two pages in original size could be printed on one page and found this no inconvenience. It was recommended that everything be printed double-sided when this would save paper.

Proposal Guidelines: The proposal guidelines should request that oversize illustrations and color illustrations cannot be copied. They should also be request not to bind the proposals or to use cover sheets that cannot be readily copied. To facilitate copying, it would be helpful if the pages of the proposals were simply clipped together, not stapled.

Other: Centralized copying and mailing of the proposals from the JOIDES Office would save money and speed up distribution of the proposals for review.

5. Use of LWD on Leg 170: The panel discussed the proposed use of LWD on Leg 170 although the Co-Chief Scientists have not yet been contacted; the following motion was passed

SGPP strongly supports the proposed addition of LWD at three sites during Leg 170, including the use of the sonic velocity tool as requested.

6. VSP Experiment on the Bahamas Transect: The panel discussed the Vertical Seismic Profile (VSP) Study proposed for ODP Leg 166 (Bahama Transect), passing the following motion:

SGPP endorses the VSP experiment assuming that hole conditions in the Neogene are appropriate.

7. ODP Publication Policy: SGPP discussed the proposed draft changes to the publication policy discussed at the PCOM meeting in August 1995.

Item 2: The Panel expressed concern about the proposal that papers published elsewhere would be included in the Scientific Reports volume only as citations and abstract. The Panel would like to see PCOM explore the possibility of including reprints of all of the papers published elsewhere (in any language) in the SR volume.. It should be possible to include addenda as data reports, etc. in the SR volume.

Item 5: The Panel urges that the Editorial Review Board should be arbiters for every paper (not just those in which authors use data produced by others) up to a specified moratorium date.

8. Nominations of Co-Chief Scientists

The following are the Panel's nominations for Co-Chief Scientists for Legs that may develop from projects in the FY97 Prospectus

New Jersey - 1) Christie-Blick, 2) Surlyk, Miller, Mountain, Austin

Saanich Inlet - Scientific Coordinator - Whiticar, Calvert, Pederson

Red Sea - Ludden, Haymon, Hemleben, Rihm

Benguela - Wefer, Summerhayes, Berger, Reimers, Isaacs, Calvert, Pederson

Hudson - Scientific Coordinator - Wonn Soh + same as New Jersey

South Atlantic Paleooceanography - Hodell, Charles, Gersonde, Froehlich

LWD Barbados - Scientific Coordinator - Shipley, Ogawa

NW Atlantic Sed Drifts - Flood

9. Nomination of new US Members

Three U.S. members are scheduled to rotate off the Panel this year, Garrison, Sarg, and Underwood. In addition, the ESF, German, and Japanese membership will rotate. In order to avoid loss of continuity with so many members being replaced at the same time, the Panel urges that Underwood be retained for an additional year, and proposes replacements for Garrison and Sarg.

10. Time and Place of Future Meeting

Kastner will host the spring meeting March 7-9, 1996 at Scripps in La Jolla, California.

Sedimentary and Geochemical Processes Panel Fall Meeting, 1995

Draft Minutes

Date: Wednesday-Friday, September 27-29, 1995

Place: Geological Institute, University of Copenhagen, Copenhagen, Denmark

Host: Finn Surlyk, Panel Member

Attendees:

SGPP Members:

Barbara Bekins (USA)
Kay Emeis (G) (Sept. 27-28)
Bob Garrison (USA)
Miriam Kastner (USA)
John Parkes (UK)
Wonn Soh (J)
Mike Underwood (USA)

Paul Baker (USA) (Sept. 27-28)
Christian France-Lanord (F)
William Hay (Chair, at large)
Steve Macko (USA)
Rick Sarg (USA)
Finn Surlyk (ESF)
Michael Whitarcar (Can-Aus)

SGPP Liaisons:

Greg Blake (OHP)
David Goldberg (BHR)(Sept. 28-29)

Peter Blum (ODP/TAMU)
Judith McKenzie (PCOM)

Guests:

Bjørn Buchardt (ESF)
David Falvey, JOI (Sept. 27)

Paul Dauphin (NSF)

SGPP Members unable to attend:

Pat Shanks (USA)

1. Welcome, Introductions, and Logistics: Finn Surlyk welcomed the participants to Copenhagen and to the University. He explained the logistical arrangements for the meeting, and how e-mail could be read. Hay welcomed panel members, liaisons and guests to the meeting. The attendees then introduced themselves and gave their affiliations.

2. Agenda: The agenda was discussed and revised. The following items were added: Report on the EXCOM (Falvey), Discussion of the Long Range Plan, Discussion of the Publication Policy, Discussion of the Bahamas transect, Discussion of the ODP Stratigraphic Network.

3. Approval of the Minutes of the last Meeting: Hay asked for corrections or additions to the minutes of the last meeting. Corrections were suggested by Bekins, Kastner, and Mako. The minutes were then approved.

4. Reports: Representatives of JOI, NSF, ODP and its Subcontractors, liaisons to and from other Panels, and participants on recent Legs were asked to present reports on activities since the last meeting of the SGPP.

4.1 EXCOM and JOI Report: David Falvey reported the last few months have been particularly busy, and reported on the major activities of the JOIDES EXCOM and JOI..

4.1.1 The fourth Performance Evaluation Committee (PEC IV): Performance evaluation reviews of operational program performance are mandated by JOI and carried out every three years. PEC IV identified 45 concerns, recommendations and suggestions. Most have been, or are being addressed. Major concerns were:

- (a) Need for improved communications: This has resulted in a new "communications strategy" being formulated by JOI
- (b) Conflict of Interest in JOIDES: The ODP Conflict of Interest Policy has been updated by JOI. The new policy has been communicated to the panels (see item 4.1.5).
- (c) Perceptions of general performance of TAMU: A new Director has been appointed.
- (d) Importance of the JANUS database project: A JOI steering committee is monitoring progress.
- (e) Publication rights of staff scientists: This remains unresolved, an issue to be solved by TAMU
- (f) Coordination problems within TAMU: These are to be solved by introduction of Project Management, mandated by JOI

4.1.2 International Initiatives: The concept of "Associate" membership has been accepted by EXCOM on the basis of units of 1/6th of a full membership. Benefits are to be proportional to the contribution. Current targets include Brazil, China, and Russia. It is hoped that Korea and Taiwan will fill out the gap in the Australia/Canada consortium.

4.1.3 Cooperation with Other Scientific Programs: EXCOM has agreed, in principle, to a new cooperative arrangement with the Nansen Arctic Drilling Program, assuming

- (a) NAD accepts ODP sampling and database protocols
- (b) NAD uses the JOI/JOIDES structure and core repositories
- (c) JOIDES establishes an "Arctic DPG"
- (d) All of the above subject to NAD obtaining funding

4.1.4 FY96 Program Plan - New Initiatives: The status of items being explored as new initiatives is as follows:

- (a) Cooperative Technology R & D is under consideration by NSF
- (b) Implementation of Project Management has been agreed, but discussions are still needed to define the depth of implementation

(c) A new "communications strategy" has been agreed upon, subject to availability of funds. JOI has advertised for a Director of Public Information.

4.1.5 ODP Policy Manual Changes

(a) Conflict of Interest: Section 11.0 has been revised. Subsection 11.04, which pertains to panels, now reads as follows:

"11.04 If any JOIDES panel or committee member has any actual, perceived or prospective financial interests, affiliations, or relationships (including being a drilling proposal or site survey proponent, or Co-Chief Scientist) that might affect his/her review of, or decisions relating to any ODP drilling proposal, the member is required to declare his or her interests to the panel chair. The member will then refrain from any discussions relating in any way to the proposal. Further, the member will abstain from any vote relating in any way to the proposal. In the specific case of drilling proponents, they should not be present during that part of any JOIDES panel meeting when their proposals are being reviewed, ranked, or when any discussion that impacts review or ranking takes place. This includes discussion of the following year's Program Plan and the indicative track of the drillship."

In the context of this revised policy, EXCOM reminds the Panels of the Terms of Reference for the JOIDES Advisory Structure for the Ocean Drilling Program regarding rules on quorum and voting:

3.6 Vote and Quorum

Within the framework of the Memoranda of Understanding with each non-U.S. participating country (or consortium designee), it is intended that the U.S. members shall constitute at all times at least a majority of members. Substantive issues decided by formal vote require the vote of a majority of all members. A quorum shall consist of at least two-thirds of the non-U.S. members and at least two-thirds of the U.S. members.

(b) Review of Safety Policy - JOI and TAMU have a review underway, and a report is being prepared on recent safety problems.

4.1.6 Long Range Plan: The plan is now with JOI for final editing. Inputs have been received from the International Review Committee. An Implementation Chapter is still being developed by JOI in cooperation with the JOIDES Office.

4.2 NSF Report: Paul Dauphin reported that budget proposals at NSF call for modest increases for FY96. However, in the ODP budget, Operations remain level funded at \$27.8 million. Funds for USSP/USSAC increase from \$5.2 to \$5.4 million, and the related Grants Program increases from \$6.3 to \$7.1 million. These figures have passed the House and Senate Appropriations Committees, but because the NSF budget is in a bill that also includes HUD and EPA, both

scheduled for major cuts, the President has threatened a veto.

The ODP target budget is \$44.9 million, assuming 6 full international partners. Partial membership is acceptable to NSF on a trial basis. The Cooperative Technology Development initiative faces problems with respect to contractual agreements and MOUs. A review of the program by the ODP Council is underway.

4.3 PCOM Report: Judith McKenzie reported that the April meeting of PCOM set a long-term drilling schedule. The ship is to sail into the North Atlantic, then into the South Atlantic, then the Indian Ocean, and then into the western Pacific, arriving there by 1998. Coring at Saanich Inlet was included next year's program. However, only two proposals from SGPP are in the FY 97 Prospectus, the Mid-Atlantic Transect and Benguela.

PCOM discussed the topic of executive sessions at panel meetings and concluded that while these may occasionally be necessary, they should be kept to a minimum.

PCOM has requested that SGPP discuss and advise on LWD for Leg 170 (see item 11.). PCOM has also requested that the panels identify "Legacy holes" that should be cased to allow return for future studies (see item 13.) PCOM has also requested that the panels review the draft changes to the publications policy (see item 14.).

4.4 ODP/TAMU Operations/Science Report: Peter Blum reported on ODP operations and scientific results of recent drilling.

4.4.1. Present Schedule: The ship schedule through 1986 was presented (see Table 1 below.) There were no comments.

Table 1. Schedule for the JOIDES Resolution, September 1995 - December 1996

| LEG | TITLE | PORT OF ORIGIN | CRUISE DATES | DAYS AT SEA | EST. DAYS TRANSIT/ ON SITE | CO-CHIEFS |
|----------|-------------------------|----------------------------|------------------------------|-------------|----------------------------|---|
| 163 | SE Greenland Margin | Reykjavik 3-6 September | 7 September - 28 October | 51 | 9/42 | Robert Duncan Hans Christian Larsen |
| 164 | Gas Hydrates | Halifax 28-31 October | 1 November - 19 December | 48 | 6/42 | Ryo Matsumoto Charles Paull |
| 165 | Caribbean Ocean History | Miami 19-23 December | 24 December - 18 February | 56 | 11/45 | Marck Leckie Haraldur Sigursson |
| 166 | Bahamas Transect | San Juan 18-22 February | 23 February - 11 April | 48 | 8/40 | Gregor Eberli Peter Swart |
| 166 T | Transit | Panama 11-13 April | 14 -20 April | 6 | 6/0 | |
| 167 | California Margin | Acapulco 20 April | 21 April - 16 June | 56 | 11/45 | Itaru Koizumi Mitchell Lyle |

| | | | | | | |
|-----|--|--|-----------------------------|----|-------|-----------------------------------|
| 168 | Juan de Fuca Hydrothermal Circulation | San Francisco 16-20 June | 21 June - 16 August | 56 | 4/52 | Earl Davis Andy Fisher |
| 169 | Sedimented Ridges II | Victoria 18-22 August | 23 August - 28 October | 56 | 6/50 | Yves Fouquet Robert Zierenberg |
| 170 | Coasta Rica Accretionary Wedge | San Diego 18-22 October Panama 188-22 December | 23 October - 18 December | 56 | 11/45 | Gaku Kimura Eli Silver |

Caribbean Ocean History and Bahamas transect may be switched if currents in Santaren Channel are more favorable for Bahamas Project on Leg 165. 15 December 1994

4.4.2. Potential Future Leg Issues: New Jersey Margin Drilling - Processing of the hazard survey data acquired during the summer is being processed at LDEO and UTIG (PIs Greg Mountain and James Austin). The PPSP will meet 16-17 November, College Station, to receive a hazard risk assessment from Peter Trabant, consultant to TAMU/ODP. Therefore, results of processing must be submitted to Trabant in October.

4.4.3. Project Updates:

4.4.3.1. JANUS Project: Tracor's and ODP/TAMU's principal effort to date has been devoted to User Group 1 (UG1) applications, which include "corelog", curation, and operations. The UG1 user requirements document summarizes numerous meetings and discussions. Furthermore, the Oracle development database server has been installed (ship-shore dual system), hardware and software of all servers has been connected, functional descriptions of screens and data has been accomplished, and on-line help files are under development. Other initial user group meetings took place or are scheduled to take place this fall. Minutes of initial UG2a and UG3 minutes are available, many issues still need to be addressed in detail by the user community. Quality assurance procedures have been developed and put in place at Tracor and ODP/TAMU to ensure that the products meet the customer's need. At the 15 September meeting in Austin, Texas, the Steering Committee and UG1 representatives acknowledged and endorsed Tracor's progress with the project.

The ship database server is to be installed at Leg 165 port call. Testing of various elements of the new data management system will take place on Legs 165 to 167. The system is to come into production for Leg 168 (when the S1032 system will be shut down). Integrated system testing can only occur on board the Resolution. Tracor will be sailing personnel on Legs 165 to 169. The entire Tracor team will probably sail on the 166 transit.

4.4.3.2. Publications: The new format for the Initial Reports (IR), mandated for budgetary reasons by PCOM, will be implemented with Leg 164. It will consist of not more than 100 pages of text, the content of which is subject of discussions. In addition, core photographs and barrel sheets will be produced at half the present size. The format of the Scientific Results will change marginally compared to the IR volume. Leg prospectuses and preliminary reports are now being distributed electronically and are available at a WWW site. Hard copies are now distributed only to participants and PCOM and PPSP members. Site summaries are available electronically now

(no more hard copy mailings).

4.4.3.3 DCS: Work on Phase II of the controller development began in August as scheduled. Much work has been done on configuring the development environment and doing initial design analysis work. Piston seals have been changed in a test stand to better represent friction behavior. Improvements to electrical wiring to reduce noise are planned for this month. Phase II will involve testing of the primary heave compensator seal design; etc. The compensator instrumentation project has been delayed due to manpower limitations. The instrumentation will now be reinstalled in Miami (December) instead of Halifax (October). Sea tests are beyond the 1997 schedule.

4.4.3.4 PCS: The PCS project was handed over to Matt Stahl as a high-priority project last spring. Visiting engineer Masayuki Kawasaki assisted with the project. Three new cutting shoes are being built and will be ready for Leg 164. One is a shortened version of the existing shoe with several modifications. The second type is an "auger" shoe which will have large, continuous, spiral grooves running the length of the shoe. The third, entirely new design is a push-in shoe which is conceptually similar to the APC cutting shoe. The entire coring system would be placed lower in the BHA, placing the shoe as much as 86 cm ahead of the main bit. The BHA would be lowered slowly until the main bit hits bottom, without rotation or circulation. There will also be two new core catchers ready for Leg 164, a basket type and a two flapper core catcher. Furthermore, the inner core barrels have been coated with "xylan" to prevent jamming of the core inside the barrel. Land tests for all components except core catchers are planned to take place in early October in Salt Lake City.

4.4.3.5. Fisseler Water Sampler: A new water sampler has been developed by Fisseler (M. S. thesis). The new design includes a sampling coil which is being filled under the pressure potential between formation and hydrostatic pressure rather than the full difference between atmospheric and formation pressure, as with the WSTP tool. The probe geometry is tapered so as to reduce cracking of the formation. The modular design will allow simpler turnaround. The tool will be tested on Leg 164.

4.4.3.6. Davis/Villinger Temperature Tool: Earl Davis and H. Villinger are working on new temperature tool (8-channel data logger, 2 thermistors), with geometry similar to the Fisseler fluid sampler. This third party tool is in development stage and will be tested on Leg 164. The target for operational use is Leg 169.

4.4.4. Personnel: Jeff Fox has started in June as the new Director of ODP/TAMU. John Coyne, who had been manager of Information Services and the JANUS Project, left last spring. Russ Merrill has taken over these functions while maintaining his previous function as Curator and vacating the position of Publications Manager. Ann Klaus, previously Chief Editor, became Publications Manager this month. Two new staff scientists joined ODP last spring: Paul Wallace and Mitch Malone. This brought Science Operations to full staffing level after years of understaffing. An additional staff scientist, Gary Acton, will join us in October.

4.5 Wireline Logging Services: The report from Wireline Logging Services was postponed until Friday morning, when David Goldberg would be present (see item 10.).

4.6 Lithosphere Panel Report: Robert Zierenberg has been replaced by Andy Fisher as LITHP liaison to SGPP. Fisher is unable to attend our meeting because of other commitments. Pat Shanks is SGPP liaison to LITHP, with Wonn Soh as alternate. Neither will be able to attend the LITHP meeting to be held October 9-11 in Cyprus.

4.7 Ocean History Panel Report: Greg Blake (OHP Liaison to SGPP) reported that the OHP meeting will take place October 6-8 in Halifax, Nova Scotia.

4.8 Tectonics Panel Report: Underwood (SGPP Liaison to TECP) reported that he will attend the next TECP meeting, to be held 19-21 October in Antalya, Turkey.

4.9 Downhole Measurements Panel: The DMP is meeting at the same time as SGPP, in College Station, so no liaisons are attending.

4.10 Information Handling Panel: Hay is SGPP liaison, but was unable to attend the recent meeting in Hawaii. Greg Blake reported that the IHP met last week in Hawaii. Most of the meeting devoted to a discussion of JANUS.

4.11 TEDCOM: Hay attended the TEDCOM meeting held March 20-21, 1995, in College Station. TEDCOM reviewed the status of engineering projects underway, and made several recommendations to PCOM. They urge that reorganization of the ODP Engineering bring all projects, including the DCS under a single Engineering Development Supervisor. They suggested that individual TEDCOM members would be willing to stay one or two extra days to meeting with ODP engineers concerning specific projects. TEDCOM expressed support for joint and co-funded Engineering and Technology Development Projects between ODP-TAMU and appropriate partners. TEDCOM urged that tools for offset drilling be tested on a dedicated engineering leg. TEDCOM recommended that the Motor Driven Core Barrel (MDCB) be improved as an interim solution for the DCS.

Finally, TEDCOM has suggested that it might have a new relationship to panels, learning from them about their needs for sample acquisition and then advising ODP-TAMU on possible solutions.

4.12 Report on the ad-hoc OHP-SGPP Sea Level Meeting: Underwood and Surlyk reported on the ad hoc meeting on sea level held in Houston after the spring meeting of SGPP. Members of both panels want to emphasize the significance of sea level research and the appropriateness of ocean drilling for resolving many sea-level related research issues. They believe that the ODP Long Range Plan significantly undervalues the importance of sea level research. A comment on the significance of sea level research was drafted at the meeting and forwarded to the LRP committee meeting in Cardiff.

The significance of sealevel studies extends far beyond the specific objectives being tackled by ODP drilling through FY96 (testing the eustatic model, testing the sequence stratigraphic model,

demonstrating the facies architecture response to sea level variations, magnitudes and rates of sea level) and includes changes in material flux and processes that result from sea level change. There is a much larger geological and non-geological audience that is interested in the following:

1) Burial of organic carbon (on sea level rise) removes CO₂ from the ocean atmosphere system (and increases atmospheric O₂). High production of CaCO₃ at sea level highstands releases CO₂ to the atmosphere. These processes reverse on sealevel falls. These competing processes play a large (if not the controlling) role in the global carbon cycle over the short and long term.

2) Rapid sea level rise results in the drowning of coastal areas, formation of estuaries and other specialized marine environments. Species diversity appears to increase with sea level rises. It may be that sea level change is a major driving force behind evolution. If this is true, it makes the current loss of biodiversity during a stable sea level stand all the more significant.

3) Resources associated with sea level movements, such as coal and hydrocarbons, mineral deposits trapped by organic rich reductants, base metal deposits sourced from marine organic rich rocks, placers, sand and gravel deposits, and ground water.

The group reaffirmed the importance of shallow water drilling for sea level studies.. They expressed concern that the current emphasis on the proponents finding all the funding for shallow water sea level investigations is ineffective. The group thought that a concerted effort by senior officials of JOI and NSF and proponents would be able to locate alternative sources of funds.

The group questioned whether TAMU or JOIDES can provide the technology necessary to achieve the scientific objectives of the sea-level theme, especially in light of the decrease in net funding expected over the next few years. The group believes that external groups will need to be approached for funding and/or technology to achieve the objectives.

The ad hoc group made the following recommendations:

- OHP and SGPP communicate through JOIDES with the TAMU engineering department about the technology required for sea-level research.
- The TAMU engineering group should form strategic alliances with industrial contractors concerning drilling technology and other engineering needs required for sea-level research.
- The TAMU engineering group should be encouraged to form alliances with groups in other countries to develop drilling technologies and other engineering needs for sea-level research.

5. Reports on Recent Drilling Legs:

Kay Emeis reported on the results of drilling for sapropels in the Mediterranean. In the spring of 1995, Ocean Drilling Program (ODP) Legs 160 and 161 operations in the Mediterranean recovered over 7000 m of sediments that reach back more than 5 million years to the Miocene/Pliocene boundary. One of the most important paleoceanographic results was the discovery of sapropels in the westernmost Mediterranean. Prior to Leg 161, sapropels were known to exist in the western Mediterranean only in the Tyrrhenian Sea. In the eastern Mediterranean, more than 80 individual discrete sapropels up to 50 cm thick were recovered which occur in packets that can be correlated between sites up to several hundred kilometers apart. Here, the sapropels can be extraordinarily rich in organic carbon, up to 30%. In the western Mediterranean, they contain between 0.8 and 2.5% organic carbon; maximum concentrations of >6% organic carbon are found in the Tyrrhenian Sea. In the western

Mediterranean, sapropel formation was apparently minor during the Pliocene and started in the earliest Pleistocene, at about 1.8 Ma. In the eastern Mediterranean, sapropel deposition started in the earliest Pliocene, but became less frequent after 2.4 Ma. Several factors may account for this asymmetric time distribution. The eastern Mediterranean sapropel record is more susceptible to precession-driven changes of freshwater input, deep water formation, and nutrient supply. Since the development of major ice sheets on the Northern Hemisphere around 3 million years ago, progressive intensification of glacial boundary conditions may have caused a decrease in the moisture reaching the eastern Mediterranean. At the same time, enhanced seasonal contrasts in temperature and precipitation may have invigorated deep water formation and prevented the formation of anoxia. Accordingly, the frequency of sapropel formation has decreased considerably since the Pliocene. The western Mediterranean is more affected by fluctuations of North Atlantic climate. With the onset of larger-scale, glacial-interglacial cycles during the Pleistocene, the Atlantic inflow likely started to vary at a rhythm imposed by ice-sheet growth and decay.

Peter Blum reported on the results of Legs 160-162:

5.1 Leg 160 (Mediterranean): The Leg had four objectives:

5.1.1 Objective 1, Sapropels: As noted by Kay Emeis, sapropels were investigated at seven Sites 963-969, with 3-5 holes cored at each site. These form an E-W Mediterranean transect to reconstruct gradients and patterns in depositional, paleoceanographic and climatic conditions, and to study origin of sapropels. More than 80 Plio-Pleistocene sapropels were found, some have up to 30% TOC, others are oxidized "ghosts". The sapropels are up to 0.5 m thick, laminated or bioturbated beds and packets correlated over several 100 km. Preliminary shipboard data appear to confirm that sapropel occurrences mark periods of increased humidity and high temperatures. The results also confirm the orbital cyclicity found on land (minima in precession cycle, stronger N hemisphere insolation, more intense summer monsoons, enhanced discharge of the Nile). Before 2.6 Ma, sapropels are synchronous and frequent at all sites, independent of paleodepth; after 2.6 Ma, they are less frequent and the TOC concentration varies with paleodepth. The shipboard party favored the preservation model (anoxic conditions) over the enhanced productivity model.

5.1.2 Objective 2, Eratosthenes Seamount: Eratosthenes Seamount (ES) was investigated by drilling at four Sites (965 to 968). The purpose was to provide insight into the earliest stages of mountain building, determining age and nature of seamount and the timing and mechanism of its collapse. ES is breaking up and subsiding beneath the margin S of Cyprus. Land studies have shown that Cyprus has been uplifted (up to 2 km) during the past 2 m.y. due to subduction. A 600 m deep hole was drilled at Site 966, from the crest down to Upper Cretaceous deep water limestones deposited on a crustal fragment that was subsiding at the time. ES was uplifted during the Miocene and shallow water limestones (corals, algae) accumulated. Ostracods, dolomite, gypsum, and paleosols are also found in the late Miocene sequence. Subsidence to a deep sea environment occurred in the early Pliocene, 4.5 to 5 Ma, as a result of crustal loading and flexure-induced faulting.

5.1.3 Objective 3, Milano and Napoli Mud Volcanoes: These mud volcanoes were investigated at Sites 970 and 971. They lie on the northern margin of the Mediterranean Ridge. Regional tectonic shortening drives the mud volcanism. Drilled sections at both sites extend from hemipelagic sediments to clast-rich, matrix-supported, more silty/sandy muds at the crests. The presence of halite was indicated in pore fluids. Hydrocarbon gas venting is known from Napoli MV. Milano MV is at least 1.5 Ma old, and is now dormant. Napoli MV was initiated 1.5 to 1.2 Ma, and is still active.

5.1.4 Objective 4: Structural History: Sites 972 and 973 were drilled on lower slope of the Hellenic accretionary prism on the Mediterranean Ridge to infer structural history of the prism toe. Site 972 reached only 100 mbsf due to mechanical problems and time constraints; Site 973 was too shallow to reach objectives, and the Leg ran out of time.

5.2 Leg 161: On Leg 161 the objectives were to continue study of the sapropels and to investigate extensional tectonics in the western Mediterranean.

5.2.1 Objective 1, Sapropels: As mentioned by Kay Emeis, sapropels were cored at five western Mediterranean Sites 974-977, 979. There were up to 40 layers, with organic matter dispersed over intervals up to 3 m thick, or occurring as discrete layers up to 0.3 m thick. TOC ranges up to 6%, but is typically 0.8 to 2.5%. In the western Mediterranean sapropel formation is minor during the Pliocene, but becomes significant in earliest Pleistocene, at 1.8 Ma. The asymmetric distribution of sapropels in Mediterranean in time suggests that the E was more influenced by Nile river discharge, which controls productivity; while the W was more influenced by fluctuations of North Atlantic climate which controls Atlantic inflow.

5.2.2 Objective 2: Extensional tectonics in the western Mediterranean: A buried basement high was drilled at Site 976 (1108 m water depth). Basement was encountered at 670 mbsf, below middle Miocene to Pleistocene sediments. The extensional basins have formed since the late Oligocene, 27 Ma. The regional, intracontinental setting is N-S convergence (at least 300 km shortening) and continental collision throughout Tertiary. The Alboran Basin is underlain by rocks of continental origin that have undergone high-T metamorphism and melting at exceptionally low pressure. The rocks resemble early Miocene rocks in adjacent Betic Cordillera. The results confirm the hypothesis that metamorphism at low p and high T involved removal of lithospheric mantle from beneath the collision zone, accompanied or followed by extension.

5.3 Leg 162: Leg 162 objectives were to examine the causes and consequences of global climatic change by studying the paleoceanography of the globally important and sensitive North Atlantic - Arctic gateway region. The Leg 162 results were intended to tie into results of Leg 151, Leg 104, and some DSDP sites. The strategy was two-fold:

1) Five North Atlantic drift/plateau sites (Sites 980 to 984) with sedimentation rates of 10 to 30 cm/kyr were cored to study orbital (Milankovitch) and millennial-scale components of climatic variability, and to achieve a NW-SE surface water transect across the area of polar front movement on G-I cycles as well as to form a depth transect.

2) Four Nordic Sea Sites (985, 907, 986 and 987) were drilled to study onset of glaciation, history of initiation and growth of surrounding ice sheets (E Greenland and Svalbard sites), and to complete an E-W (Norway-Greenland) transect. Continuous Miocene to Pleistocene sequences were recovered from all but the margin Sites 986 and 987, where coring was less complete. Composite sections were constructed based on MST data with temporal resolution of hundreds of years. The magnetostratigraphy is good to excellent. These continuous records will allow monitoring of major components of the climate system at unprecedented temporal range and resolution in this important region. From Sites 986 and 987 it appears that glaciation has been continuous on Greenland since late Miocene, while the Barents/Svalbard ice sheet initiation is apparently much younger (late Pliocene?). Pore water profiles from Leg 162 sites show sulfate reduction/depletion as function of sedimentation rate and severe chloride anomalies (pore water freshening) with depth (particularly at Site 986) or as spikes (Site 985). There is evidence of reactions with volcanic material in sediment and shallow (oceanic) basement.

6. Review of Proposals: The proposals were reviewed in two groups: those that were included in the FY97 Prospectus were discussed on the afternoon of September 27; all remaining proposals were discussed on September 28. After discussion of the other proposals, the Panel voted to add several of them to the Prospectus.

As in the past, proponents were requested to leave the room during discussion of their proposals. It was also noted if Panel members belonged to the same institution as the proponents, in which case the Panel members abstained from participation in the discussion to avoid any appearance of conflict of interest. The "Review Criteria for Thematic Panels Review" were used for the ratings. Proposals rated A5 were given no further rating except F4. If no E rating is listed, the Panel considered the proposal to be complete.

6.1 Proposals in the FY96 Prospectus: The proposals, along with earlier and new revisions and addenda included in the FY97 prospectus were discussed in the context of the complete proposal. Ranking of the programs in the FY97 Prospectus was postponed until after all of the proposals, including those not in the Prospectus, had been discussed, and is reported as item 7 of these minutes. The Panel's comments on each proposal are listed in Appendix A.

6.2 Summary of Ratings of Proposals included in the FY96 Prospectus: The following table presents a summary of the ratings of proposals included in the FY97 Prospectus, sorted by category of thematic interest level to SGPP. The order within each category is by proposal number and is not a ranking.

SGPP Ratings of Proposals in the FY 97 Prospectus

| Proposal No. | Abbreviated Title | A | B1 | B2 | C | D | E | F |
|--------------|----------------------|----|------|------|----|----|---|----|
| 300-Add2 | Return to Site 735B | A5 | | | | | | F4 |
| 348-Rev | U. Paleo./Neog. | A1 | B1.1 | B2.1 | C1 | D1 | | F1 |
| 354-Add4 | Benguela Current | A2 | B1.2 | B2.1 | C1 | D1 | | F2 |
| 404-Add2 | NorthAtlantic Drifts | A3 | B1.2 | B2.1 | C1 | D1 | | F3 |

| | | | | | | | | | |
|----------|---------------------|----|-------|------|----|----|----|--|----|
| 447 | Western Woodlark | A5 | | | | | | | F4 |
| 457-Rev2 | Kerguelen Plateau | A5 | | | | | | | F4 |
| 461-Rev | OCT west of Iberia | A5 | | | | | | | F4 |
| 462-Rev | Blake Plateau/ Nose | A5 | | | | | | | F4 |
| 464-Add | Southern Paleoccean | A3 | B1.2* | B2.1 | C1 | D1 | | | F3 |
| 468-Rev | Romanche FZ | A5 | | | C4 | D4 | E8 | | F4 |
| 480 | Caribbean Basalt | A5 | | | C4 | | | | F4 |

* = with reference to SGPP inerests

At 7 PM, after reviewing and rating the proposals in the FY97 Prospectus, the Panel adjourned for the day

September 28, 1995

6.2.1 LWD proposed in 348Rev: The Panel discussed the Logging While Drilling proposed in the Revision to Proposal 348 for dilling the sea level transect on the New Jersey Margin

Garrison made the following motion, seconded by Baker:

SGPP believes that LWDas proposed 348Rev is a very important modification that will greatly add to the likelihood of success of the scientific program and should be accepted as an integral part of the drilling plan.

The vote of the panel was unanimously in favor of the motion.

6.3 Reviews of other Proposals: The Panel reviewed 7 new proposals, 3 revised proposals, and 7 addenda. The Panel's comments on each are listed in Appendix A.

6.4 Summary of Ratings of Other Proposals: The following table presents a summary of the ratings of other proposals, sorted by category of thematic interest level to SGPP. The order within each category is by proposal number and is not a ranking.

SGPP Ratings of other Proposals

| Proposal No. | Abbreviated Title | A | B1 | B2 | C | D | E | F |
|--------------|---------------------|----|------|------|----|------|---|----|
| 334-Add | G Galicia Margin | A5 | | | | | | F4 |
| 355-Add | Peru Margin | A2 | B1.2 | B2.1 | C2 | D3* | | F2 |
| 426-Rev | Australia-Antarctic | A5 | | | | | | F4 |
| 431-Rev | W. Pacific Geophys. | A5 | | | | | | F4 |
| 445-Add | Nankai Trough | A1 | B1.1 | B2.1 | C1 | D3** | | F1 |
| 448-Add2 | Ontong Java | A5 | | | | | | F4 |

| | | | | | | | | |
|----------|-------------------|-----------------|------|------|-----------------|-----------------|-----------------|----|
| 450-Add | Taiwan Collision | A3 | B1.2 | B2.1 | C1 | D3** | E8 | F2 |
| 455-Rev | N.W.A.M.P. | A2 | B1.2 | B2.1 | C1 | D5 ^s | | F2 |
| 473-Add | Saanich Inlet | A5 | | | | | | F4 |
| 473-Add2 | High Res. Saanich | A1 | B1.1 | B2.1 | C1 | D1 | | F1 |
| 474 | Engineering Leg | A3 | | | | | | F4 |
| 475 | PhysProps.Accret. | A1 | B1.1 | B2.1 | C1 | D1 | | F1 |
| 476 | Hudson Apron | A1 | B1.1 | B2.1 | C1 | D1 | | F2 |
| 477 | Okhotsk/Bering | A4 ^x | B1.3 | B2.1 | C2 | D3** | D5 ^s | F3 |
| 478 | Eastern Nankai | A1 | B1.2 | B2.1 | C3 ^a | D3* | E8 | F2 |
| 479 | E. Manus Back-Arc | A2 | B1.3 | B2.1 | C3 | D4*** | F3 | |
| 481 | Red Sea Deeps | A1 | B1.1 | B2.1 | C1 | D3*/? | D4*** | F2 |

* = Pressure Core Barrel

**= In-situ Fluid Sampler

*** = Sampling hot fluids

^s = PPSP

^x = with major revision

^a = 3D multichannel, heat flow data, fluid flow model

6.5 Additions to the FY97 Prospectus: After rating the proposals not included in the Prospectus, the panel considered whether there might be proposals that should be added to the FY97 Prospectus.

6.5.1 Proposal 476 - Hudson Apron: Kastner moved, and Underwood seconded the following motion:

Proposal 476 (Hudson Apron) should be added to the Prospectus, to be incorporated into the proposed New Jersey Leg or to another Leg in the region.

The Panel voted unanimous to add 476 to the Prospectus.

6.5.2 Proposal 475 (part) - LWD at Barbados: Underwood moved, and Kastner seconded the following motion:

LWD at the Barbados sites, described in Proposal 475, be added to the Prospectus.

The Panel voted unanimous to add 476 to the Prospectus.

6.5.3 Proposal 481 - Red Sea Deeps: Sarg moved, and Baker seconded that following motion

Proposal 481 (Red Sea Deeps) should be added to the FY97 Prospectus.

With two panel members temporarily out of the room (Emeis, Surlyk), the Panel voted 11 for, 0 against, 1 abstention

7. Ranking of Programs in the FY97 Prospectus: The Panel then ranked the programs in the FY97 Prospectus, including the proposals the Panel had voted to add to it. The results of voting were tabulated independently by Blake and Hay. The program with the highest average is ranked 1, as the Panel's highest priority. The ranking is as follows:

SGPP Ranking of Programs in the FY96 Prospectus

| RANK | PROP. NO. | AREA | SCORE | STD. DEV. | NOTE |
|------|-----------|---------------------|-------|-----------|-------|
| 1 | 348 | New Jersey TTE | 13.21 | 0.97 | |
| 2 | 481 | Red Sea | 11.38 | 1.61 | Added |
| 3 | 354 | Benguela | 11.31 | 1.80 | |
| 4 | 476 | Hudson Apron | 11.00 | 1.62 | Added |
| 5 | 464 | South Atlantic | 9.57 | 1.99 | |
| 6 | 475 | LWD Barbados | 9.15 | 3.18 | Added |
| 7 | 404 | NW Atlantic Drifts | 8.71 | 1.94 | |
| 8 | 447 | Woodlark Basin | 6.86 | 2.96 | |
| 9 | 457 | Kerguelen/Broken R. | 5.57 | 0.65 | |
| 10 | 462 | Blake Plateau/ Nose | 4.79 | 1.72 | |
| 11 | 480 | Caribbean Basalt | 4.50 | 1.51 | |
| 12 | 461 | OCT Iberia | 3.71 | 1.86 | |
| 13 | 300 | Return to 735B | 2.79 | 2.72 | |
| 14 | 468 | Romanche FZ | 1.79 | 1.12 | |

The panel adjourned for the day to a Dinner in the Geological Institute hosted by Finn Surlyk and the Danish Committee for ODP.

Friday, September 29, 1995

8. Reviews of Letters of Intent (LOIs): The Panel reviewed 9 Letters of Intent. They were rated only in terms of thematic relevance. The Panels comments on each are given in Appendix A.

8.1 Summary of Ratings of LOIs: The following table presents a summary of the ratings of the LOIs, sorted by category of thematic interest level to SGPP. The order within each category is by proposal number and is not a ranking.

| L.O.I. # | Subject | Rating |
|----------|--|--------|
| 54 | Water Circulation & Sediment History: Indian Ocean | A5 |
| 55 | Drilling in a non-accretionary convergent plate margin | A2 |
| 56 | A Paleogene Equatorial Pacific APC Transect | A5 |

| | | | |
|----|---|----|-----------|
| 57 | "Abyssal Anoxic Basins, Southwest Pacific" | A3 | |
| 58 | Slow-spread lith: Mid-Atlantic Ridge/ Kane Fr. Zone | A5 | |
| 59 | Monsoon History in the South China Sea | A3 | |
| 60 | Return to TAG Hydrothermal Field | A2 | (C4, D4)* |
| 61 | Seychelles Microcontinent | A5 | |
| 62 | Drilling on the U.S. Middle Atlantic Continental Rise | A3 | |

* needs high temperature in-situ fluid sampler.

SGPP strongly urges that LOIs rated A1 be developed into full proposals. SGPP would be interested in seeing proposals developed from LOIs rated A3 if they are of interest to another thematic panel.

9. Discussion of Rating/Ranking Procedures: The panel discussed the rating and ranking procedures, and makes the following suggestions:

Review Criteria for Thematic Panels:

- 1) add a new category "A5. Could be relevant with major revisions" and renumber the present A5 "A6."
- 2) add a new category "D6. Possible safety problems, early review by PPSP recommended"
- 3) add a new category "E0. No deficiencies"
- 4) add a new series of criteria describing the Quality of the Proposal, perhaps with categories such as:
 - X1. Very well-written, answers all of the panels questions clearly
 - X2. Generally well-written but leaves some questions to be answered.
 - X3. Proponents have good idea but text is difficult to understand.
 - X4. Poorly written, difficult to judge

Forms: The Panel felt that the forms used by the JOIDES office should be designed to use a minimum of paper. The sheer weight of paper that needs to be carried to a meeting is troublesome. The Panel used copies that had been reduced to half size, so that two pages in original size could be printed on one page and found this no inconvenience. It was recommended that everything be printed half-size and double-sided to save paper.

Proposal Guidelines: The proposal guidelines should explain that oversize illustrations and color illustrations cannot be copied. They should also be request that proponents not bind the proposals, use plastic rings, or to use cover sheets that cannot be readily copied. To facilitate copying, it would be helpful if the pages of the proposals were simply clipped together, not stapled.

Other: Centralized copying and mailing of the proposals from the JOIDES Office would save money and speed up distribution of the proposals for review.

10. Discussion of Logging While Drilling and Report from Wireline Logging Services:

David Goldberg made a presentation on Logging While Drilling (LWD). The benefits of LWD are in the logging efficiency (100%), decision making, combination with MWD (Measurement While Drilling), and the acquisition of unique data (i.e. the upper 100 m below seafloor). LWD tools and engineers are in low supply and high demand. The costs of LWD are associated with the use of the downhole equipment (which varies according to the length of time and depths to which the equipment is run), the surface equipment, personnel, equipment maintenance, logistics and shipping, and insurance. Average LWD costs are equal to half the day rate of the JOIDES Resolution.

The standard tools are arranged in an array at the base of the drill string immediately above the bit. They provide Resistivity, Gamma Ray, Density, and Neutron Logs. The array makes a continuous record from the seafloor down, but requires a dedicated hole, i.e. no cores can be taken during LWD. MWD can provide additional information on the weight on the bit, but adds about 1/3 to the cost of the operation. Other tools include the ISONIC (IDEAL Sonic) Tool, which measures sonic velocity in real time and generates a synthetic seismogram as the hole is drilled, and an Azimuthal Density Neutron Tool that images bedding and fractures. He noted that the wiring logging contract is a fixed cost, and LWD cannot be substituted for it. Even if monies for wireline logging could be substituted for LWD, LWD is much more expensive.

In reporting on activities of wireline logging services, Goldberg reviewed the proposals in the Prospectus in terms of logging needs, as summarized in the table below.

Table 2. Proposed Logging and Downhole Measurements for Programs included in the FY 97 Prospectus.

| | TOOL | Return to 735-B | Woodlark Basin | Benguela Current | Iberia Margin | Caribbean Basalt | S. Ocean Paleocene | NJ Margin | Neogene Paleocene |
|----|------------------|-----------------|----------------|------------------|---------------|------------------|--------------------|-----------------|-------------------|
| | Standard | | | | | | | | |
| 1 | Sonic | X | X | X | X | X | X | X, LWD (ISONIC) | X |
| 2 | Resis | X | X | X | X | X | X | X, LWD | X |
| 3 | Density | X | X | X | X | X | X | X, LWD | X |
| 4 | Neutron | X | X | X | X | X | X | X, LWD | X |
| 5 | Geochemical | X | X | X | X | X | X | X | X |
| 6 | Gamma ray | X | X | X | X | X | X | X, LWD | X |
| 7 | Caliper | X | X | X | X | X | X | X, LWD, | X |
| 8 | FMS | X | X | X | X | X | X | LWD (RAB) | X |
| 9 | Temperature | X | X | X | X | X | X | X | X |
| | Special \$\$\$ | | | | | | | | |
| 10 | BH Televiewer | X | X(basement) | | X(basement) | X(basement) | | | |
| 11 | VSP | X | X | | | | | | X |
| 12 | MAG/SUS-GHMT | | X(sediment) | X | X(sediment) | X(sediment) | X | X | X |
| 13 | LWD | | | | | | | X | |
| | Third-Party | | | | | | | | |
| 14 | Hi-T Temperature | | | | | | | | |
| 15 | Shear Sonic Tool | X | X | | X? | X? | | | |

11. Use of LWD on Leg 170: PCOM has requested that SGPP and TECP, in consultation with Wireline Logging Services (BRG-LDEO) and the Leg 170 Co-Chiefs, evaluate and report through their Chairs at the December PCOM meeting on the impact, if any, that LWD may have on the scientific objectives and drilling priorities of this leg. The panel used the opportunity of Goldberg's presence to discuss LWD on Leg 170 although the Co-Chief Scientists have not yet been contacted.

Underwood noted that determining mass balance in the accretionary wedge is going to be difficult, and without logging it would be clearly impossible. The proposed Logging While Drilling will not impact the geochemical aspects, but will greatly improve measurement of properties needed for estimating the mass-balance.

Bekins moved, and Whitarcar seconded the following motion:

SGPP strongly supports the proposed addition of LWD at three sites during Leg 170, including the use of the sonic velocity tool as requested.

All of those present voted in favor of the motion, with one abstention (Kastner).

12. VSP Experiment on the Bahamas Transect: Hay read a message from Gregor Eberli and Flavio Anselmetti requesting that the panel consider offering its endorsement of a Vertical Seismic Profile (VSP) Study during ODP Leg 166 (Bahama Transect). The VSP would be conducted at the deepest hole (BT3) and possibly also at a second, more proximal position (BT1). The velocity structure determined from these experiments will aid in interpretation of the seismic data. Cost is estimated to be approximately \$ 10,000.

Sarg moved, and Kastner seconded the following motion:

SGPP endorses the VSP experiment assuming that hole conditions in the Neogene are appropriate.

The vote of those present was unanimous.

13. Legacy Holes: The Panel does not have specific recommendations for legacy holes for the Legs currently scheduled..

14. ODP Publication Policy: SGPP discussed the proposed draft changes to the publication policy discussed at the PCOM meeting in August 1995.

14.1 Item 2: The Panel expressed concern about the proposal that papers published elsewhere would be included in the Scientific Reports volume only as citations and abstract. The Panel would like to see PCOM explore the possibility of including reprints of all of the papers published elsewhere (in any language) in the SR volume.. It should be possible to include addenda as data reports, etc. in the SR volume.

14.2 Item 5: The Panel urges that the Editorial Review Board should be arbiters for every paper (not just those in which authors use data produced by others) up to a specified moratorium date.

15. Long Range Plan: The panel regrets that there is no final draft of the Long Range Plan available for review. Falvey had indicated that JOI was working on the final draft and that it would be available via electronic posting.

16. ODP Stratigraphic Network: Hay announced that a meeting will be held in Bremen from December 18-20, 1995, to discuss development of a stratigraphic network designed to make up-to-date, consistent, stratigraphic correlations and age-depth profiles available to the community. This would supplement the data available from ODP.

17. Nominations of Co-Chief Scientists: The following are the Panel's nominations for Co-Chief Scientists for Legs that may develop from projects in the FY97 Prospectus:

New Jersey - Christie-Blick, Surlyk, Miller, Mountain, Austin

Saanich Inlet - Scientific Coordinator - Whiticar, Calvert, Pederson

Red Sea - Ludden, Haymon, Hemleben, Rihm

Benguela - Wefer, Summerhayes, Berger, Reimers, Isaacs, Calvert, Pederson

Hudson - Scientific Coordinator - Wonn Soh + same as New Jersey

South Atlantic Paleoceanography - Hodell, Charles, Gersonde, Froehlich

LWD Barbados - Scientific Coordinator - Shipley, Ogawa

NW Atlantic Sediment Drifts - Flood

18. Nomination of new US Members: Three U.S. members are scheduled to rotate off the Panel this year, Garrison, Sarg, and Underwood. In addition, the ESF, German, and Japanese membership will rotate. In order to avoid loss of continuity with so many members being replaced at the same time, the Panel urges that Underwood be retained for an additional year, and proposes replacements for Garrison and Sarg.

19. Issues for the SGPP Spring Meeting: The following were identified as items that should be discussed during the panel's spring meeting:

- Shipboard Sampling
- Sample Distribution Policy
- Technology Development
- Investing in the Future

20. Time and Place of Future Meetings: Miriam Kastner will host the spring meeting March 7-9, 1996 at Scripps in La Jolla, California.

21. Adjournment: The meeting ended at 3:00 PM on September 29, 1995.