

MEETING OF JOIDES TECTONICS PANEL

Paris, France

1-3 November, 1990

EXECUTIVE SUMMARY,

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Ans'd.....

1. PACIFIC PROSPECTUS TECP's votes for the Pacific Prospectus FY 1992 were:

1. Chile I,
2. Chile II,
3. Cascadia,
4. Hess Deep,
5. Atolls II,
6. N. Pacific,
7. EPR II,
8. Sedimented ridges,
9. Bering Sea,
10. Peru,
11. Atolls I.

Other comments on the Pacific Prospectus:

A. TECP voted almost unanimously (11 to 1) in favor of an integrated 2 leg Chile Triple Junction program.

B. There is a large gap (49 points to 22) between TECP's third (Cascadia) and fourth (Hess Deep) ranked programmes.

C. Because the Cascadia drilling leg recommended by DPG is very full for one leg, TECP recommends that the program should be prioritized as follows:

- 1) Oregon holes plus Vancouver hydrate hole (V1-5
- 2) Vancouver holes to calibrate porosity-depth-seismic velocity relations.

2. The meeting included a joint meeting with SGPP, during which issues discussed included Cascadia, Chile Triple Junction, and Deep Drilling.

A. TECP expressed scepticism about the validity of assumptions in the Vancouver margin diffuse flow model, and questioned the need to drill the Vancouver margin at all.

B. TECP felt that the BSR problem can be approached effectively, if cautiously in Chile, obviating the need to drill Peru or Vancouver solely to address the problem.

C. SGPP expressed interest in the "hot plate" effect in the Chile Triple junction and agreed to consider the suggestion of a two-leg program to examine the margin before, during, and after collision.

D. After considerable discussion on deep drilling, the panels came to no conclusions, but they agreed to keep in touch on the issue of Deep Drilling.

3. TECP's liaison with TEDCOM, Dale Sawyer, discussed the need for specific examples of deep drilling sites; he will prepare a generic example using a past drill site on the Atlantic margin.
4. TECP discussed PCOM's request for input on the question of focus of the future ODP. TECP felt strongly that a more focussed program should not eliminate consideration of proposals by individual scientists with bright, new ideas.

#### 5. Offset Drilling Planning Group

TECP wishes to stress for that optimum utilization of the possibilities of offset sites, the tectonic setting of the sites must be fully documented. A variety of tectonic settings should be investigated, including both fast and slow spreading regions, areas near and away from transform faults, and regions of amagmatic extension on slow spreading ridges away from transform fault zones.

#### 6. Previous drilling results

TECP agreed to develop by mid-November a document evaluating the current status of COSOD I themes of tectonic content:

- 1.B.2 a-d Origin and evolution of oceanic crust,
- 2.B.3-5, Tectonic evolution of continental margins and oceanic crust,
3. Early rifting history of passive continental margins,
- 4 Dynamics of forearc evolution,
- 5, Structure and volcanic history of island arcs, and
- 11.F.4-5 Plate Motions and reversal time scales.

#### 7. Implementation of Long-Range Plan

TECP made a start by agreeing to appoint watchdogs to keep track of each thematic area of TECP's White Paper, within the framework of ODP superthemes.

#### 8. Hole 504B

TECP recommends that if the hole is clear, it be logged to the extent possible. If another hole must be drilled, then the full range of measurements should be done. The scientific party involved in deepening the existing hole or drilling a new one would benefit by the presence of an expert in identification and interpretation of structural features in cores.

9. Add-ons. The Watchdogs planned for implementation of the long-range plan will look for opportunities for appropriate "add-ons".

10. The next meeting of TECP is tentatively set for March 21-23.

**JOIDES TECTONICS PANEL MEETING NOVEMBER 1-3, 1990  
PARIS, FRANCE**

**DRAFT MINUTES**

- PRESENT:** Ian Dalziel, UTIG, Chairman  
Tanya Atwater, UC Santa Barbara  
Jan Behrmann, FRG  
Jacques Bourgois, France  
Roger Buck, L-DGO  
Mike Etheridge, Australia  
Hans-Christian Larsen, Denmark  
J. Casey Moore, UC Santa Cruz  
Yujiro Ogawa, Japan  
Mike Purdy, WHOI  
Dale Sawyer, Rice University  
Graham Westbrook, UK
- LIAISONS:** Asahiko Taira, PCOM
- APOLOGIES:** Shirley Dreiss, SGPP Liaison  
David Engebretsen, U. of Western Washington (prevented from attending by terrorist threat)  
Kim Klitgord, USGS  
Eldridge Moores, UC Davis, (prevented from attending by terrorist threat)  
Catherine Mevel, LITHP Liaison  
Laura Stokking, ODP
- AGENDA** Welcome and Introductions  
Minutes of March 5-7, 1990 Meeting, New Orleans, LA  
Report of Liaisons - ODP - Deep Drilling Working Group, Cascadia Detailed Planning Group  
Proposal Review  
Joint Meeting with SGPP  
PCOM Action Requests —  
• Options for 504B  
• Evaluation of COSOD I Results  
• Pacific Prospectus  
• Implementation of Long-Range Plan  
• Offset Drilling Group  
• Add Ons  
Panel Membership  
Next Meeting  
Appreciation

**WELCOME AND INTRODUCTION**

Ian Dalziel opened the meeting, Jacques Bourgois welcomed TECP to Paris and the Société Geologique de France.

## MINUTES

The Draft Minutes of the meeting in New Orleans, Louisiana, March 5-7, 1990 were unanimously approved.

## REPORT OF LIAISONS

- Asahiko Taira reported on the recent deliberations of PCOM. He emphasized the need for TECP input to the FY 1992 Pacific Prospectus and discussed at some length the efforts of STRATCOM with regard to the renewal of ODP and PCOM's need for TECP input on the question of whether or not the program should be more focussed. There was considerable discussion. TECP felt strongly that a more focussed program should not eliminate consideration of proposals by individual scientists with new, bright ideas.
- Dale Sawyer reported on the recent meeting of the Deep Drilling. He emphasized TEDCOM's need for specific examples of likely deep drilling sites, or at least of possible examples, with specifics on the type of lithology and environment likely to be encountered. He informed TECP it was his understanding that holes significantly deeper than 2000 m were unlikely to be drilled with the present platform. He volunteered to use a past drill site on the Atlantic margin of North America as a generic example to pass on to TEDCOM in this regard.
- Casey Moore and Graham Westbrook reported on the results of the Cascadia margin DPG. TECP discussed this matter with the specific proposals.

## PROPOSAL REVIEW

233/E Rev.3 - Fluid Process and Structural Evolution of the Central Oregon Accretionary Complex and;

317/E Add. 2 - A Test of a Model for the Formation of Methane Hydrate and Seafloor Bottom Simulating Reflectors by Drilling on the North Cascadia Subduction Zone

TECP heard a presentation from Casey Moore (233/E proponent) and Graham Westbrook on these two proposals. It is clear that the new seismic and submersible results from the Oregon-Washington margin have resulted in the clarification and refinement of the program planned for that margin that had been hoped for by the Panel. The available data were judged to assure success in studies of the microtectonic evolution of the wedge and confined fluid flow along fault surfaces. Proposal 233/E Rev. 3 was therefore judged to be of high thematic value with deficiencies that could be corrected with "add ons." These involved the need for studies of the seismicity of the margin with seismometers and tilt meters.

TECP checked Box #4 with the above comments.

There was prolonged discussion of the Vancouver margin proposal. It was agreed to consider the report of the DPG with SGPP at the upcoming joint meeting and to leave further consideration until prioritization of the FY 1992 Pacific Prospectus after that meeting.

265/D Add. - Proposal to Drill the Western Woodlark Basin

TECP re-expressed its interest in reviewing a complete proposal.

355/E Rev. 2 - Formation of a Gas Hydrate - Its Effect on Pore Fluid Chemistry, Its Modulation of Geophysical Properties and Fluid Flows

TECP appreciated the importance of investigating the formation of gas hydrate in relation to studies of heat flow in forearc regions. Heat flow can provide constraints upon modes of deformation and stress. The Panel did not, however, feel sufficiently confident of this issue to be able to give it a very high priority. It felt hydrate investigation need not necessarily be undertaken off Peru and could be combined with objectives of high priority to the tectonic panel elsewhere. Subsidence of the Peru margin associated with subduction of the Nazca Ridge, although of interest, was not of enough interest to make the Peru region of high priority to the Panel.

374/A - Mantle Heterogeneity Deep Hole at the Oceanographic Fracture Zone

TECP is interested in offset oceanic drilling proposals focussing on the coevolution of seismic horizons with lithologic transitions, observations of microfabrics in oceanic lithosphere, and understanding of the tectonics of the deep crust or upper mantle exposure.

In order to maximize TECP interest, any hole of this type should be in a region adequately constrained using appropriate seismic methods.

A weakness of this proposal (discussed by the proponents) is the position of the hole only 4.4 km from the fracture zone. Although we feel it is relevant to sample crust produced both near the fracture zone end and middle of each segment, this proposal seems to say that the middle is most important and then proposes a hole near the fracture zone. This needs to be made consistent one way or another.

We did not consider this proposal as exciting as at least one other offset drilling proposal.

We look forward to the report of the DPG on offset oceanic drilling and expect to be able to provide at least secondary support for some of this type of drilling.

TECP checked Box #1.

375/D and 387/E Rev. - Deep Drilling in Fast-Spreading Crust Exposed in the Hess Deep

375/D is an earlier version of 387/E and was therefore regarded by TECP as moot. TECP's interests in this proposal focused on the correlation of seismic horizons with lithologic transitions, observations of microfabrics in oceanic lithosphere, and understanding of the tectonics of the propagating rift.

While we generally concur that the petrologic objections can be met without additional seismic data acquisition, in that circumstance we would not be nearly as interested in supporting the drilling. The seismic acquisition may be difficult, requiring non-traditional seismic methods.

The Panel was more excited about this offset drilling proposal than others that we discussed. We consider it advantageous that the oceanic crust being rifted here is not initially unusual (as may be the case near fracture zone exposures).

We look forward to the report of the DPG on offset oceanic drilling and expect to be able to at least provide secondary support for some of this kind of drilling.

TECP checked Box #5.

376/A and 382/A - Drilling the Layer 2-Layer 3 Boundary (and the Crust-Mantle Boundary) on the South Wall of the Vema Fracture Zone — and A Proposal for Drilling into the Upper Mantle-Lower Crustal Uplifted Section at the Vema Fracture Zone in the Atlantic

Both proposals are very similar. They describe a special opportunity to sample fundamental boundaries in the oceanic crust, the locations of which are well constrained by NAUTILUS observations. Although many of the objectives are not of direct interest to TECP, the Panel does see potential for a supportable program, especially if the Bonatti and Auzende proposals are combined, a means of using this location to ground-truth seismic observations of the Layer 2/3 boundary is devised, and a convincing case is made that the lineations can indeed reveal the rate and timing of the vertical motion of the transverse ridge.

TECP checked Box #3.

377/E Rev., 385/E and 385/E Add. - A Global Network of Permanent Ocean Floor Broad-Band Seismometers; A Test Site North of Oahu, Hawaiian Islands; and, Paleomagnetic, Sedimentary and Stratigraphy Studies of an ODP Hole off Oahu

TECP understands that the program is going ahead as proposed. The Panel welcomes the decision to core this hole. An exciting proposal to examine the time-dependent aspect of lithospheric flexure around the Hawaiian Islands had to be dropped for the present because of uncertainties regarding temporal control. The proposed coring program, piggy-backed on the highly-rated proposal to conduct a test of an ocean floor seismometer, will provide valuable information regarding the biostratigraphic and magneto-stratigraphic controls that are available in the Hawaiian flexural work.

378/A Rev. - Growth Mechanics and Fluid Evolution of the Barbados Accretionary Wedge

This is a very broadly-based proposal to achieve a more-or-less complete description of the Barbados accretionary complex in a four-leg drilling program. Principal goals are: 1) Follow-up work on Legs DSDP 87A and ODP 110; 2) Dynamics of frontal accretion and fluid processes in the south of Barbados Ridge; 3) Large-displacement thrusting south of Tiburon Rise; 4) Accretionary wedge-forearc basin interaction. The proposal is geared at achieving a "complete" description of accretionary wedge processes, but in its present state seems to suffer from a lack of prioritization of scientific goals. Many of the individual scientific goals are possibly too "site specific." Fundamental processes are addressed, but are not converted into a drilling program specific enough to be manageable in a limited amount of time. The proposal addresses thematic objectives, but with deficiencies.

TECP checked Box #3 (but in so doing noted, not for the first time, the short-comings of the "Box" system, as this is clearly a superior proposal).

379/A - Scientific Drilling in the Mediterranean Sea: New Prospects

TECP noted once again the potential value of the Mediterranean area for executing drilling to examine tectonic processes. Once again, however, the Panel expressed concern at the lack of specific information and lack of focus in a proposal for drilling in that area.

There is no indication of the structural setting of the peridotite in the Tyrrhenian Sea. Is it exposed in extension, intruded, or old basement?

TECP has previously expressed interest in supporting drilling on the Mediterranean Ridge. This new proposal, however, is still deficient in specifics as to the value of drilling there compared with other accretionary wedges in the world. The fact is that an incipient collision does not in itself make this a compelling target and seismic data are still not available.

TECP checked Box #3.

380/A Rev. - Drilling into the Clastic Apron of Gran Canaria: A Linked System Volcanic Ocean Island-Sedimentary Basin

This is a proposal to do a case history study of an oceanic volcano. While some of the secondary goals (e.g., lithospheric response to heating and loading, refining of island chain age progression) are of tectonic interest, they are not particularly well-addressed for this area. Thus, the proposed work was judged as not addressing high priority themes of TECP.

The panel did note that this was an especially clear, well-written proposal with straight forward goals and that it offers a chance for exceptionally good dating of the sections to be drilled. But it would have to be recast in terms of major tectonic processes (lithospheric response to load, age progression, plate kinematics, etc.) to gain high rating from TECP.

TECP checked Box #1 or, marginally, Box #2a.

381/A - Scientific Objectives for Drilling on the Continental Slope of Argentina

TECP noted the potential of the Argentine margin for interesting drilling results, particularly in the area of paleoceanography and paleobiogeography. While interested in seeing a more mature proposal, the Panel nonetheless noted the absence of clear relevance to thematic TECP goals.

TECP checked Box #2.

383/A - A Case Study of Extension Within a Continental-Continent Collision: Preliminary Proposal for ODP Drilling in the Aegean Sea

TECP has strong interest in the tectonics of the Aegean. The proponents make a good case for why the area is a good place to study continental extension in a collisional setting. The strategies are only given in sketch form. However, the third strategy did not have any interest for TECP while possibilities were seen in the first two strategies. Detailed MCS work is necessary to develop realistic strategies and identify targets. The strategies should be specific about models that would be tested by drilling.

TECP did not check a Box for this preliminary proposal.

384/A - An ODP Proposal to Study the Connection Between the Pacific and Atlantic Oceans: The Venezuela Basin and Aruba Gap

TECP is excited about the potential to characterize and date layers in the anomalously thick Caribbean ocean crust and to test the model that it originated in the Pacific basin and was inserted, after formation, into the Caribbean region.

A widespread region of anomalous crust in the old core of the Pacific plate is often attributed to voluminous, wide-spread intraplate volcanic events. If (as is often speculated) the anomalous Caribbean crust is a part of the Farallon plate and was thickened by the same event(s), this implies an amazingly broad multiplate volcanic event.

The insertion model is interesting, if true, for its own sake as an interesting plate tectonic phenomenon.

The timing of the insertion is interesting, in part because of its possible relationship to Laramide events in North America. The Laramide orogeny is postulated by many to have been caused by interaction with a flat subducting slab and the flattening of the slab, in turn, is postulated to have been caused by the subduction of anomalously thickened oceanic crust. A close correlation in time could strengthen this hypothesis.

Site A1 appears to offer the easiest location in which to reach the old ocean crust, but the panel found the presentation of its structural context confusing and were unsure how well the results from drilling of A1 could be linked with the principal areas where a rough basement reflector from the old ocean crust had been identified.

Movement on the Pecos Fault was not considered to be a problem of sufficiently high general importance to justify drilling.

The proponents are encouraged to demonstrate to the Panel in more detail (preferably with better imaging) the potential for successful drilling into old Caribbean crust.

TECP check Box #3.

386/E Rev. - California Margin Drilling: Neogene Paleogeography of the California Current and Deformation of the Gorda Plate

The bulk of this proposal is paleoceanographic and, thus, is outside the mandate of TECP. Indeed, most of the information that might be obtained concerning ocean-continent interactions is scrupulously avoided in search of hemipelagic sections that exclude turbiditic continental input. (This is appropriate.)

The possible tectonic results mentioned in the Summary (northward movement of the Mendocino triple junction and nature of the continental shelf basement) are not addressed in the bulk of the proposal.

Of considerable interest to TECP, however, are two sites on the Gorda plate, CA3 and CA4. With oriented coring and paleomagnetic measurements, the amounts and rates of crustal rotations may be determined and may help us distinguish among competing models for the internal deformation of the south Gorda plate. This is of great interest for local tectonic understanding (plate geometries, Mendocino fracture zone tectonics, triple junction tectonics, geometry and condition of the slab beneath northern California). It is also of global significance (not mentioned by the proponents) because the flexural slip model tested here is proposed as the likely deformation mechanism within shear zones of propagating rifts, both those presently active on ridge crests and those commonly found preserved as oblique disruption zones in older seafloor isochron patterns. The proponents are encouraged to pursue this aspect of their proposal at greater length.

TECP checked Box #2a.



362/E Rev. - Proposal for Scientific Ocean Drilling, Chile Margin Triple Junction, Southern Chile Trench

TECP reviewed this updated proposal and noted with enthusiasm the improvement of the images and refinement of the proposed program. Final consideration was postponed until review of the FY 1992 Pacific Prospectus and prioritization of the programs and legs presented therein.

286/E Add/2 - Layer 2/3 Transition at Hole 504/B

TECP reviewed the material available. The Panel is anxious to see logging undertaken at the site before the hole is disturbed but has no specific recommendations to put forward.

**JOINT MEETING WITH SGPP**

The meeting took place at 0830 hours on Saturday, November 3, 1990 at L'Université de Pierre et Marie Curie. It was jointly chaired by Erwin Suess (Chairman, SGPP) and Ian Dalziel (Chairman, TECP). The following topics were discussed:

1. Cascadia — Report of DPG

There was a wide-ranging discussion and debate regarding the relationship between the proposed Oregon-Washington and Vancouver margin drilling program. It centered mainly on the issues of confined (Oregon-Washington) vs. diffuse (Vancouver) flow. It was noted that TECP interest in the Vancouver margin drilling had declined as the proponents had shifted away from direct tectonic drilling (penetration of deep parts of the accretionary prism and tiltmeter experiments) to purely testing of a model for fluid flow. Some skepticism was expressed as to the validity of the assumptions made in the model for the Vancouver margin diffuse flow and the issue was raised as to the desirability of the "split" Vancouver-Oregon/Washington "compromise" program. For example, the question was asked as to the need to drill on the Vancouver margin at all. Could not the two types of flow be addressed more efficiently on different parts of the Oregon/Washington margin?

Discussion also covered the likely concerns of the PCSP, not only on Vancouver and Oregon/Washington, but also on the proposals to drill the Chile Triple Junction and the Peru margin where bottom-simulating reflectors (BSR) are present. The Peru program, it was noted, was specifically designed to take a cautious approach to drilling through the BSR by starting in the trough of a syncline where there is no sign of a BSR and working up-slope to areas where it is stronger. This is an area known to have a high organic carbon content. The question was asked whether this had to be done on the Peru margin where there is little tectonic interest in the drilling goals beyond overcoming the BSR "drilling barrier" in order to drill tectonic problems in forearcs elsewhere. It is felt by members of TECP that the BSR problem can also be approached in the same cautious way off Chile. Especially given the likelihood that each area needs to be treated as a separate problem, this seems to argue against spending time for tectonic drilling where there is no real scientific payoff beyond the hydrates themselves. Nonetheless the two panels concluded that the hydrate issue deserves to be investigated for its own right.

Chile Triple Junction

The revised proposal to drill the Chile Triple Junction was reviewed. SGPP expressed particular interest in the "hot plate" effect of the subducting ridge on the forearc wedge and the resulting metamorphism and agreed to consider the TECP suggestion of a two-leg program to examine the margin before, during and after collision.

## Deep Drilling

Reports of both SGPP and TECP liaisons to the Deep Drilling Working Group were compared. There was considerable discussion of the future of deep drilling from JOIDES *Resolution*, from alternative platforms, and from islands (Aleutians, San Salvador). The meeting adjourned with agreement to keep in touch on this issue and others of mutual interest. It was noted that a new liaison from TECP to SGPP needs to be nominated and appointed. It was agreed to await the advent of a new chairman (Eldridge Moores) for TECP and a new UK representative (Alastair Robertson) who appears to have suitable background and may be interested in serving as TECP liaison to SGPP.

The joint meeting of SGPP and TECP was adjourned at 1045 AM.

## **HOLE 504B**

TECP considered PCOM's request for evaluation of options for Hole 504B. TECP recommends that if the hole is clear, then it should be logged to the extent possible. TECP is aware of SGPP's desires in this regard. If another hole must be drilled, then the full range of possible logging and measurements should be done. TECP has no strong opinions on this hole, except to note that someone conversant with identification and interpretation of structural features in cores would be a valuable asset to any scientific party involved in deepening of the existing hole or drilling a new one.

## **PREVIOUS DRILLING RESULTS**

Resuming its own meeting, TECP, considered PCOM's request for evaluation of ODP drilling results in light of the objectives outlined in the COSOD I Report that formed the basis of the proposal to initiate ODP. It was decided that by mid-November the following members of the Panel would provide Chairman-designate Eldridge Moores with a paragraph summarizing certain COSOD I themes of tectonic content:

1. Origin and Evolution of the Oceanic Crust
  - B. 2a
  - 2b (Eldridge Moores)
  - 2c
  - 2d
2. Tectonic Evolution of Continental Margins and Oceanic Crust
  - B. 3 (Ophiolite analogy) (Eldridge Moores)
  - B. 4 (Transform faults) (Kim Klitgord)
  - B. 5 Oceanic Plateaus and Aseismic Ridges (Eldridge Moores)
3. Early Rifting History of Passive Continental Margins (Dale Sawyer)
4. Dynamics of Forearc Evolution (Casey Moore)
5. Structure and Volcanic History of Island Arcs (Yujiro Ogawa)
11. Patterns of Evolution of Organisms
  - F. 4 Plate Motions (David Engebretson)
  - F. 5 Reversal Timescales (David Engebretson)

## IMPLEMENTATION OF LONG-RANGE PLAN

With regard to PCOM's request that TECP begin to address the issue of implementing the Long-Range Plan, the Panel made the following start:

Watchdogs will be appointed to keep track of proposals in each thematic area of TECP's White Paper within the framework of the ODP superthemes. In this way the Panel will be aware of progress towards implementation of the plan and will be prepared to solicit and/or write proposals in areas that are devoid of unsolicited proposals, or merely sparsely represented. Two such areas can be identified at the present time, namely plate dynamics and plate kinematics. There are no specific proposals in the former areas, and the latter is represented only by proposals chiefly for other objectives with secondary objectives in plate kinematics.

Appointment of watchdogs was left to Chairman-designate Eldridge Moores, but Mike Purdy and David Engebretson were requested to look into the two deficient areas as soon as possible pending the new chairman's action.

## OFFSET DRILLING DETAILED PLANNING GROUP

### Offset Drilling

TECP recognizes the unique possibilities offered by tectonic exposures of deep levels of oceanic crust and shallow mantle for composite drilling of complete crustal sections including the upper mantle. TECP, however, wants to stress that: (1) good tectonic control must exist at any given survey site; (2) various tectonic scenarios should be investigated to test different tectonic developments. Concerning (2), both fast and slow spreading oceanic crust should be tested and crust formed both close to and distal to transform faults should be included, at least in the case of slow spreading ridges. The role and mechanism of non-magmatic extension along slow spreading ridges is a high TECP priority and should be addressed away from fracture zones, perhaps midway between the magmatic maximum extension and the transform.

TECP nominations for the Offset Drilling Detailed Planning Group are:

Structure	Eldridge Moores Geoff Fox Rick Sibson Gordon Wisher John Bartley
Seismology	Bob Detrick Bob White
Tectonophysics	Mark Zoback Dan Moos

## ADD-ONS

PCOM's request concerning "add-ons" was noted. The Watchdogs planned for implementation of the Long-Range Plan will look for opportunities for appropriate "add-ons."

## PANEL MEMBERSHIP-

The following were considered suitable for membership of TECP as replacements for the present members rotating off the Panel:

- I. Dalziel            Steve Cande  
                         Tom Shipley  
                         Mark Cloos
  
- II. Engebretson     Charlotte Keen  
                         Jeff Karson  
                         Ann Trehu  
                         Brian Wernicke
  
- III. Roger Buck     Don Forsyth  
                         Mark Zoback  
                         Marcia McNutt  
                         Steve Furlong

Results of the ballot will be conveyed to PCOM Chairman, James Austin, and TECP Chairman-Designate, Eldridge Moores, by retiring Chairman, Ian Dalziel.

**NEXT MEETING**

The Spring 1991 meeting of TECP will be at Davis, California. Chairman-Designate Moores will host it. It is noted that Tanya Atwater cannot attend 3/1/91 to 4/5/91, Jan Behrmann cannot attend 3/6/91-3/8/91, and Ian Dalziel cannot attend 3/25/91-3/28/91. Chairman-Designate Eldridge Moores will inform the Panel members of the final dates as soon as possible.

**PACIFIC PROSPECTUS FY 1992**

Following extensive discussion and review of the proposals, programs and legs involved, TECP voted as follows on the FY 1992 Pacific Prospectus:

	1st	2nd	3rd	4th	5th	6th	Total Score
Chile I	11	1					71
Chile II		9	2		1		55
Cascadia	1	2	7	1	1		49
Hess Deep			2	4	1		22
Atolls II			1	2	2	2	15
N. Pacific				2	2	3	13
EPR II				1	2	3	8
Sed. Ridges				1	1	2	7
Bering Sea					2	1	5
Peru Hyd.				1			3
Atolls I						1	1

**Total Score =  $\Sigma$  (7-Rank)**

(Voters)

- Notes:
1. TECP almost unanimously (11 to 1) voted in favor of an integrated 2 leg Chile Triple Junction program.
  2. There is a large gap (55 points to 22) between TECP's third (Cascadia) and fourth (Hess Deep) ranked programs.
  3. Because the Cascadia drilling leg recommended by DPG is very full for one leg, we believe that the program should be prioritized.  
Priority One: Oregon holes plus Vancouver hydrate hole (VI-5)  
Priority Two: Vancouver holes to calibrate porosity-depth-seismic velocity relations (VI-1, VI-2d)  
We rate the VI-1 and VI-2d holes as a lower priority because: 1) It is likely that the errors in existing porosity depth functions (correctable by drilling) would not make a major change in the budget of fluid loss from sediments through compaction; and 2) at both sites only the uppermost part of the section would be calibrated.

TECP Co-Chief Nominations:

Chile Triple Junction      Steve Cande  
   Steve Lewis  
   Graham Westbrook  
   Steve Scott

Cascadia                      Roy Hyndiman  
   Casey Moore

Liaisons:

Mike Purdy and Alastair Robertson are obvious choices for liaisons to LITHP and SGPP respectively. Chairman-Designate Moores will have to check on Purdy's willingness to serve (as he had left the meeting by the time this matter was taken up). Graham Westbrook will look into the willingness of his successor on TECP (Alastair Robertson) to serve as liaison to SGPP.

Proposal Presentation and Review Purpose:

Mike Etheridge provided suggestions on this subject. They will be distributed to members of TECP with the Draft Minutes of the Panel meeting for consideration at the next meeting.

The Tectonics Panel Meeting adjourned at 3:00 PM, November 3, 1990.