MINUTES OF THE WESTERN PACIFIC PANEL

14 - 16 AUGUST, 1985

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

Members Present:

Eli A. Silver UCSC

Chair

Brian Taylor

Jim Natland SIO

Margaret Leinen URI Lith Liason

HIG

Kazu Nakamura U. Tokyo TECP Liason

Jim Ingle Stanford

Reinhard Hesse McGill U.

Jacques Recy ORSTOM

Claude Rangin IFP

Hans Schluter BGR

Marcus Langseth LDGO

Asahiko Taira ORI PCOM Liason

Audrey Meyer TAMU (Rapporteur) ODP Liason

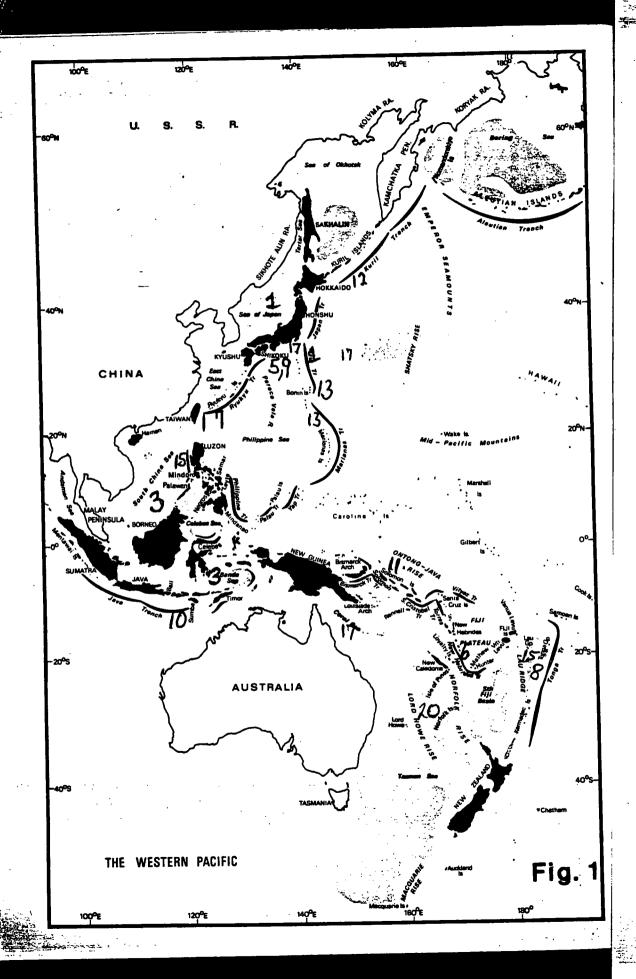
Absent: Kagami

Visitors: (None)

Executive Summary of WPP Meeting in Santa Cruz August 14-16, 1985

The panel prepared a list of 20 potential drilling legs, based on all the proposals that we have received up to the start of the meeting. Each leg is focused on a scientific topic, but many represent amalgamations of several proposals and many sites. Voting was done as follows: Each voting member (11 total) had 3-3's, 3-2's, and 3-1's to distribute among the 20 potential legs. Members were not allowed to vote on proposals for which they were co-authors. To help alleviate the situation in which several members were excluded from voting on a given proposal, we divided the total vote from each leg by 11 minus the number of excluded voters for that leg. The results, presented below, fairly represents the feelings of the panel as a whole on the drilling priorities in the western Pacific region.

Leg name	Total Vote	Normalized Vote	Rank
Japan Sea	22	2.0	. 1
Bonin Transect	20	2.0	1
South China Sea	16	1.78	· 3
Banda-Sulu	16	1.78	3
Nankai Toe	18	1.64	5
Vanuatu Transect	15	1.5	6
Okinawa-Ryukyu	16	1.45	7
Lau-Tonga Transect	14	1.27	8
Zenisu Ridge Area	9	0.9	9
Sunda	8	0.8	10
Solomon Arc	8	0.73	11
Kurile-Japan Trench	7	0.64	12
Serpentine Diapirs	5	0.5	13
Northern Marianas	5	0.5	13
Valu Fa	5	0.45	15
Taiwan-Manila	5	0.45	15
Coral Sea Sagami Trough W Pac Downhole Expt	3 3 3	0.27 0.27 0.27	17 17 17
Lord Howe/Norfolk/et	c 0	0	20



The first 8 legs are generally agreed by all to be of high priority, though slightly different relative rankings might result from a different method of voting. We were also aware that political aspects of the Okinawa Trough could eliminate that as a priority. We decided that as a panel we would concern ourselves only with the scientific and not the political aspects of the proposals. Legs 9-12 are also considered very important, though each contains some uncertainty, such as data availability or some question concerning drilling objectives. The minutes will expand on these aspects.

The low ranking of Valu Fa does not necessarily imply a strongly negative statement on the part of the panel concerning the general suggestion of drilling zero aged crust in a backarc spreading environment. Valu Fa was thought to be located on atypical crust and therefore would not necessarily solve defined problems of backarc basin evolution, as presented in the Hawkins workshop.

These rankings are similar to those of our previous meeting, considering that we used a very different method of grouping proposals, proponents were not allowed to vote on their own proposals, and many new proposals (and discoveries) were presented to this panel.

Silver has resigned as panel chairman. The panel unanimously recommends that Brian Taylor be nominated as the next chairman. Silver urges JOIDES to allow panel chairmen to claim actual expenses involved in copying, mailing, and phone costs that exceed the \$1000, one-time stipend.

The panel was asked to present time requirements and leg distributions to the January PCOM. We were authorized to have another meeting this year to accomplish that task. We feel that we have accomplished that task already, and do not feel the need for another meeting before January. We recommend two meetings for 1986. The first would be February 17-19 in Miami. If approved soon it would allow the panel to make travel plans long in advance for minimum costs.

We also recommend a meeting in mid-August of 1986 in Singapore, associated with the Circum-Pacific Energy and Mineral Resources conference. We have always felt that this panel should be accessable to western Pacific countries within whose waters we are planning a drilling program. Singapore is central to those countries. We plan (and have been granted space to do so) a poster session on the plans for western Pacific drilling at that conference. We are aware of the expense involved for US participants in Singapore, as opposed to Washington, D.C. or San Francisco. However, we also feel that this panel has met only twice a year since it began, and we are saving the cost of a San Francisco meeting in December.

MINUTES

Wednesday August 14

The meeting began at 0845.

DISCUSSION OF MEETING FORMAT

Panel moved to accept all proposals for consideration.

The plan will be to discuss proposals regionally, from North to South, because of the new major influx of Japanese proposals.

To evaluate and rank proposals, we will attempt to group them as drilling legs. We are free to change our earlier set of priorities, but if drastic changes are made we should explain why.

REPORTS OF OTHER PANELS AND PCOM

Report of PCOM meeting (Taira)

Comments on last Tectonics Panel meeting (Nakamura)
No changes from last meeting.

Comments on earlier SOHP objectives, relating to WPAC (Ingle)

Comments on Lith Panel (Leinen) - LithP favors zero age crustal drilling in a backarc basin. EPR drilling cancelled due to lack of development funds for high Temp equipment. Thus they have a strong interest in a backarc natural lab.

Comments and slides of the RESOLUTION on leg 103 (Meyer)

DISCUSSION OF JAPANESE PROPOSALS

Initial discussion of potential political problems with Okinawa. Could risk Japanese contributions to ODP. The panel decided to avoid decisions based on political considerations and leave those to PCOM, EXCOM, and TAMU.

Many proposals dealt with:

- 1. Jump of North American-Eurasian plate boundary from central Hokkaido to Fossa Magna-eastern Japan Sea about 1 Mabp forming a new trench-trench triple junction off central Japan. These were interesting proposals but generally complex and in an early stage of development.
- 2. Clockwise rotation of SW Japan during Cenozoic (prior to 15 Ma, Japan $^{45^{\circ}}$ rotated) quick rotation (<1 m.y.) [evidence for $^{20^{\circ}}$ clockwise rotation of NE Japan at $^{\circ}$ same time]. Plate reconstruction of opening of Japan Sea is problematic.

-Klein's Toyama Fan proposal is related to Tamaki's Japan Sea proposal because source of Fan sediments = (uplift along Fossa Magna). The panel was generally excited about the problem of opening and history of the Japan Sea, and support proposals related to this problem or ones that can be accomplished using the same sites.

-Problems with getting Japan industry lines available - Industry often does not trust IPOD data bank "proprietary" nature of data.

-Potential of safety problems in Japan Sea - high heat flow, previous drilling problems. The Tamaki proposal indicates that they have located sites without gas problems. This will certainly be a major issue, and we will need to see documentation soon.

In general, we see the need for a more complete data base for many of these proposals - especially better seismics. Zenisu ridge is a prime example, where the interpretation of contraction seems reasonable but not sufficiently documented. The question there is what exactly will drilling tell us about intraplate thrusting?

WEDNESDAY P.M.
Sagami Trough (Ogawa et al.)

Trench-trench-triple junction: requires a very deep hole to answer the basic question. The problem is interesting but the proposal is very preliminary.

Japan - Kurile trench triple junction: This problem is exceedingly difficult to resolve, even with excellent seismics. Panel needs to see data to be convinced of its viability.

Shikoku Basin (Chamot-Rooke & LePichon) - Did it open 15 Ma also?

BRIAN TAYLOR: Can we work out how to get at this 15 Ma series of events by drilling?

Synchroneity of these events might be good thing for drilling - magnetic anomalies not good enough to do this.

NATLAND - why do we care about time synchroneity anyway? Key thing is PROCESSES involved.

JAPAN TRENCH

Japan Trench forearc: Slump on lower slope; evidence of subduction erosion, but difficult to drill that deep.

BONINS-MARIANAS (Brian Taylor discusses proposals by Fryer, Ishii, Taylor and Hawkins workshop proposals)

Proposals focus on arc rifting, arc basement, forearc stratigraphy and sedimentation, and structure/tectonics and outer forearc serpentinous diapirs.

Brian notes that three alternative views exist on the nature of oceanic forearcs:

- 1. Forearc is constructed on oceanic crust.
- 2. Forearc comletely represents an Arc Province.
- Young Oceanic Crust (forearc spreading).

Eli adds:

4. Some combination of (1) and (2) might be hard to differentiate by drilling a single hole.

Vertical tectonics - need transect to study flexural loading.

Izu - Bonin Transect (Okada) - dominantly paleoceanographic objectives. Brian's holes would meet these objectives/proposals are compatible, except that Okada also includes reference holes on either side of arc.

The Mariana forearc, Ogasawara Paleoland and Bonin forearc represent three different end members of the serpentine diapir association: large diapirs on the forearc outer ridge, uplifted diapirs due to plateau collision, and the more usual lower slope diapirs.

THURSDAY A.M.

Okinawa Transect (Letouzey et al.); Okinawa Trough (Kimura et al.)

CLAUDE: We need data from Japanese for Ryukyu forearc to compare with Okinawa work.

-BRIAN: "The French proposal doesn't have any data in it, only models".

-JIM INGLE: "Unique area because of availability of reports containing geologic information on adjacent Ryukyu islands. More complicated geology than just limestones and volcanics".

-ASAHIKO: "No political problem getting data on Ryukyu forearc".

-BRIAN: "The 2 proposals have different sites. Can that be reconciled?" Answer: yes.

-Kimura also proposes many deep holes/many with deep BASEMENT

-Northern area needs deeper drilling because of higher sedimentation rates.

Probably best to focus on the southern part.

-MARCUS- Both proposals are <u>preliminary</u> and would be hard to rate versus other more mature proposals.

JIM INGLE: Okinawa trough is also unique because of its Taiwain association and unique because of continental crustal rifting.

BRIAN: Best place to look at a piece of continent rifting off a backarc. How would this be different from continental rifting in a passive margin setting?

ELI: That is just the question that drilling might resolve.

NANKAI DISCUSSION

Karig's proposal mainly physical properties and structural fabricoriented in thick turbidite sequence.

Taira et al. proposal is mega-multi-leg affair.

Differences between Nankai and Barbados?

- 1. slope basins in Nankai
- 2. deeper processes potentially available in Nankai.

-How do you get at deeper processes with the drill? You need to image them. Perhaps w/3-D seismics.

-Justification for looking at both Barbados & Nankai - Nanaki has turbidite sequence entering the wedge; Barbados is all hemipelagic. Most importantly, Nankai is beautifully imaged by excellent seismic reflection data, whereas Barbados is not.

BRIAN: Is it possible to drill in non-structurally-controlled canyons to get at deeper section (e.g. Shiono-misaki Canyon)?

-Shiki proposal - 8 km holes!

-Best season for Bonin-Nankai area: May-June. Spring to fall okay, summer best.

SOUTH CHINA SEA DISCUSSION Schluter:

-More advanced basin (than Okinawa Trough) developed by continental rifting.

(Hayes) LDGO vs. French proposals - Answer questions about age and history of spreading (one vs. two periods of spreading) - MAGNETIC RECORD seems to show two periods. Drilling could calibrate the magnetics.

-Good place to test subsidence history of continental crust.

The informal South China Sea working group is putting together coordinated French/German/LDGO proposals for:

1. S. China Sea rifting process

2. Sulu Sea/Palawan etc. proposal.

Much new data arriving soon: LDGO has survey this fall. Both German and French are working up recently acquired data.

Could combine rifted margin and central drilling in S. China Sea in 2 legs? Maybe vote separately on each process/region to address.

- 1. Rifting problem
- 2. Central basin could be a couple of shallower sites, \overline{OR} much larger number of deep sites (Chinese proposal).
- 3. Palawan/Sulu

BRIAN: Ask S. China Sea group to have a \underline{real} proposal" (w/ \underline{data} and \underline{sites}) by next meeting.

-Letter from Ken Hsu - who is working w/Chinese. Need: to involve Chinese Requests S. China Sea working group be set up.

BRIAN: Already is "Informal Working Group" in LDGO-Chinese 2-ship experiment.

DECISION: Already have relationships with Chinese scientists, and should do things to encourage informal working groups. Get Ken to involve himself with these scientists.

-Northern margin of S.C.S. could stand alone (subsidence problem), but southern and central areas are tied together (southern also couples w/northern as conjugate margin).

-Major unconformities tie roughly with Vail curves, but Vail curves are under discussion.)

Final Decision: Treat South China Sea as one leg, realizing that some important trade offs will have to be made.

SULU SEA/NEGROS TROUGH

CLAUDE: Origin of Sulu Sea debated.

French proposal objectives:

- 1. age of regional unconformity in N. Sulu Basin
- 2. look at ridge itself don't have much data from islands
- 3. transition between volcanic rocks and southern Sulu Sea.

JIM INGLE: The Sulu Sea and Sea of Japan offer two of the best paleoceanographic targets among Western Pacific marginal basins, with drilling supported by SOHP.

CELEBES - don't get as much as either Banda or Sulu - Hilde et al. hypothesis doesn't depend on drilling Celebes; could do it in other basins.

ELI: Site Sulu 5 (Rangin proposal) solves a lot of questions.

MANILA TRENCH

STEVE LEWIS - 5 sites, not yet co-ordinated with trench. Should be ready for next meeting of this panel. Trench cruises in area still ongoing.

INDONESIA - update by Eli Silver

Banda Sea - drilling between ridges important - Hardi putting together all existing Banda Sea data - will need better seismic data before drilling.

Snellius update - no one has seen their data yet? Don't think they got much in the Banda Sea. No MCS.

MINIMUM DRILLING PROGRAM

1st priority - one hole between ridges (400-500 m. pelagic/seds). S. Banda Basin hole (< 1 km. hole)

2nd priority - N. Banda Basin Need high resolution survey to find shallower, acceptable South Banda Sea site.

The combination of Banda Sea 1st priority sites and Sulu 5 site could largely answer the question posed by Hilde et al., concerning the breakup of an initially continuous Indian ocean plate segment in this region. They would also answer significant questions concerning the timing of major collision events in southeast Asia.

Sunda Arc - update by talks at Hawkin's meeting - summarized in Hawkin's report.

-Karig would like to look at:

- 1. Slope basin problem off Nias
- 2. HPC's in slumps at toe for recycling.

Greg Moore - Beck and Lehner line. Off Java, Greg is now migrating seismic lines. Well-defined landward-dipping reflectors - are they bedding planes or thrusts or zones of high-fluid pressure.

Feedback to Greg - his sites are all very tentative, and are located on the poorer seismic line (HIS line, rather than SHELLS).

- -Eli says "wait for well-processed lines" can only pick best after lines are processed.
- -This is more pelagic than Nankai good comparison?

Timor -

Karig's proposal is Makran-type proposal to determine sequence of accretion.

Sumba transition zone

Here the transition is from continental margin collision to oceanic subduction across a narrow zone. It eliminates differences in convergence parameters.

- -terrigenous overlain (Reed et al.) by carbonates.
- need good digital single-channel survey with a few well-placed MCS lines.
 - -predict high fluid pressures in diapirs off Sumba.
 - -Comparing non-accretion with accretion within narrow zone.
- -Need more seismics to know about transition between Greg Moore's area and the region immediately west of edge of Scott Plateau.
- -Sunda Straits new French proposal will be coming in by next WPAC meeting(?)

THURSDAY P.M.

SOUTHWEST PACIFIC

New Hebrides

JACQUES RECY - Early Miocene collision of Ontong-Java Plateau and associated arc reversal. Subduction began ~ 10 m.y. ago - oldest volc rocks = ~6 Ma.

Major drilling objectives:

- 1. Collision of D'Entrecasteau Zone
- 2. Arc Reversal
- 3. Backarc rifting
- 30 SITES PROPOSED
- -All sites on MCS lines.
- -Panel urges proponents (USGS) to migrate their seismic lines.

-SeaBeam swath - mapping will give 3-D view (this is upcoming).

BRIAN: Not everyone believes that the arc reversed; they still need to be convinced. This should be attacked by drilling.

ELI: Don't only prove that it happened here, but should get at the mechanisms and timing of reversal as well.

ELI: What is the feasibility of drilling in intraarc basin with thick volcaniclastic aprons?

Site 1AB-3 in Fisher et al. proposal might recover material from both interfingering wedges.

JIM NATLAND: So what if you drill lAB-3 interfingering wedges? It assumes that there are significant changes in arc magmatism due to polarity change that aren't seen in arcs with no polarity change, etc...

Proposals by Taylor/Lawver and Fisher et al. should be combined.

ELI: Which of these New Hebrides objectives can stand alone? Or is the linkage of objectives the major source of excitement?? Maybe this could be reduced to 3(?) well-placed holes in a transect that address all objectives.

DECISION: Leave them all together and consider them a transect.

TONGA

Stevenson proposal Major objectives:

- 1. Tectonic erosion
- 2. To delineate edge of old subduction zone.
- 3. Is cessation of arc activity related to backarc spreading? Knowledge of chronology of events.

-Much discussion of the number of ways an arc can split (see Fig. 5 in Hawkin's report)

JIM NATLAND/BRIAN: Very valuable to work out timing and nature of arc/backarc volcanism. Arc magma type could be function of time and space.

Lau versus Marianas: Lau is only place to find MORB (no arc signature). Mariana Basin different - contains volatiles from arc.

NATLAND: Question: What is source of "contamination"? Geochemical arguments.

-Will dredge Lau first (end of this year), which is a necessary

predecessor to drilling.

French data - SeaBeam survey in Lau Basin. Plan to do a survey to the south.

BRIAN: 3 SeaBeam surveys here w/in space of 1 year.

Which would be better place for deep lith. laboratory? Area of normal MORBS (Northern Lau Basin) or arc-contaminated (Mariana Trough) area? NO CONSENSUS...question of differing objectives.

HANS SCHLUTER: Something we need to think about - Stevenson et al. - Fig. 7 & Fig. 6. LAU-2 discussion. From <u>seismic structure</u> point-of-view, these look like passive margin dipping reflectors.

ELI: Need to see how much of this is real by migrating these profiles.

Valu Fa Ridge, Lau Basin (Morton et al.).

-Fig. 3 - Site 1 is right on axis.

-Fig. 4 - Site 2 is to EAST of axis in sediment pond site with enough sediment to spud in easily (off-axis objectives)

BRIAN: Maybe do off-axis site on bench - less sediment.

JIM NATLAND.: Nothing like this strong reflector has ever been found at a slow-spreading ridge. This is a curious feature - ridge axis w/positive axial relief. May be characteristic of a certain type of backarc basin that we need to understand.

-Panel consensus (100-200m) hole would be reasonable, with instrumentation, to be 1 leg.

JIM NATLAND. - This Valu Fa Ridge proposal is more THEMATIC than others - how do we vote on it fairly?

ELI: This is regional too. We are looking at topical problems in all other areas - toe processes, etc.

JIM N. Problem - Valu Fa is weird enough that it probably ought not stand alone, but should be drilled in framework of other holes. Assume would also need diving, dredging, etc.

BRIAN: This is a unique oddball.

JIM N. Important from magma chamber point-of-view.

PANEL DECISION: Can vote on Valu Fa separately from other Lau Basin holes. A leg in Tonga-Lau (Stevenson transect) would provide context for Valu Fa Ridge drilling.

Solomon Intraarc Basin (Vedder & Burns)
8 sites proposed

Context of proposal is to deal with arc reversal in different setting than Vanuatu.

SCHLUTER: Comments on IB-1 & IB-2 (Vedder/Bruns). Do you think we could solve many problems with piston cores, because reflectors of interest crop out?

BRIAN: doubtful...cores would have to be long to penetrate cover.

JACQUES: <u>Had</u> cores on R/V LEE cruise, so they must know why they're asking for a site!

ELI: Need drillholes to get at stratigraphy - depends on your objectives.

PANEL: Ask Vedder/Bruns to address this piston core question.

More fundamental question - would drilling here actually tell us about arc reversal?

BRIAN: SB-1 & SB-2 problems - The Woodlark rise, not rift, is colliding with the Solomons. You would have trouble getting at rift subduction with these sites. Vertical motions may be due to Woodlark Rise collision. Complicates picture. Don't have abundant MCS to shift these sites to better location.

BB sites for intraarc basin -

BRIAN: This may be the easier place to document the arc reversal.

-Dating layer B tells you something about uplift.

ELI: Can't go too much farther towards edge of basin w/out losing C layer, so you must deal with deep holes.

PROBLEM: (Main) all objectives are deep, and this is risky situation.

ELI: Can we do this in 1 leg?

BRIAN: 3 sites, probably do-able in 1 leg.

BRIAN: Let's tell them to throw away ridge subduction side of things. Tell them to condense it into 1 leg w/alternates.

-Will deal with Austrialasia super proposal tomorrow.

FRIDAY A.M.

The panel went through a process of condensing the many proposals into a series of drillable legs, though each proposed leg may have many proposed sites associated with it. We felt that one leg would solve or make significant contributions to a fundamental problem in each region:

LAU-TONGA (forearc-arc-backarc & collision with Louisville ridge) - Stevenson transect and Hawkin's backarc.

VANUATU (collision, arc reversal, rifting) - New Hebrides.

SOLOMONS (arc reversal)

N. MARIANA (rifting, backarc & arc)

BONINS (rifting + forearc)

DIAPIRS (Marianas-Bonin) - 3 different proposals.

VALU-FA (Natural Lab)

(From Australia megabook + individual proposals) CORAL SEA/G.B. REEF (passive margin + seismic strat/sealevel)

LORD HOWE/NORFOLK/3 KING'S (Exon + Eade...Regional transect)

SUNDA (collision/Subduction): Karig & Moore, Reed et al.

BANDA-SULU (Trapped marginal basin; displaced continental borderland; silled basin) - Hilde et al.; Silver; Rangin.

S. CHINA SEA (Atlantic-type passive margins + spreading) (4 proposals) - Scluter; Rangin; Hayes et al.; Xia et al.

TAIWAN - MANILA COLL/SUB (Collision/sub./forearc basin) - Lewis et al.

KURIL-JAPAN TRENCH (microplate collision - accretion, forearc basement)

TRIPLE JUNCTION-SAGAMI TROUGH (oblique subduction).

ZENISU RIDGE - SHIKOKU BASIN (intraplate deformation and NS spreading episode)

NANKAI (accretionary wedge; slope & forearc basins) - Taira et al.; Karig

JAPAN SEA (rifting, paleoenvironment, convergence) - Tamaki et al. and a cast of thousands.

RYUKYU-OKINAWA (rifting, forearc tectonics)

WESTERN PACIFIC DOWNHOLE EXP. (plate dynamics, Kinoshita) tiltmeter, gravity, magnet., heat, fluid. Includes 442

Can't deal with proposal by Marlow et al. in Papua New Guinea/Bismark Sea during this meeting - ONLY RECEIVED YESTERDAY.

Voting procedure:

- 1. No one voted on proposals they had authored or co-authored.
- 2. Total number of voters 11
- 3. Everyone had 18 points for voting, distributed as: 3 3's, 3 2's, & 3 1's.
- 4. Totaled votes and normalized to number of voters.

 Normalization process was to divide the total vote by 11 minus the number of people not allowed to vote on that topic.

RESULTS OF VOTING

		Normalized	
Leg name	Total	Vote	Rank
Japan Sea	22 (7x3,1x1)	2.0	1
Bonin Transect	20 (5x3,2x2,1x1,*)	2.0	l tie
South China Sea	16 (3x3,3x2,1x1,*,	,*) 1.78	3
Banda-Sulu	16 (3x3,3x2,1x1,*,	,*) 1.78	3 tie
Nankai Toe	18 (2x3,5x2,2x1)	1.64	5
Vanuatu Transect	15 (3x3,2x2,2x1,*)	1.5	6
Okinawa-Ryukyu	16 (4x3,1x2,1x1)	1.45	7
Lau-Tonga Transect	14 (1x3,3x2,4x1)	1.27	8
Zenisu Ridge Area	9 (1x3,2x2,2x1,*)	0.9	9
Sunda	8 (2x3,2x1,*)	0.8	10
Solomon Arc	8 (2x2,4x1)	0.73	11
Kurile-Japan Trench	7 (3x2,1x1)	0.64	12
Serpentine Diapirs	5 (1x3,1x2,*)	0.5	13
Northern Marianas	5 (1x3,2x1,*)	0.5	13 tie
Valu Fa	5 (1x2,3x1)	0.45	15
Taiwan-Manila	5 (2x2,1x1)	0.45	15 tie
Coral Sea	3 (1x2,1x1)	0.27	17
Sagami Trough	3 (1x2,1x1)	0.27	17 tie
W Pac Downhole Expt	3 (1x2,1x1)	0.27	17 tie

(* indicates member who was not allowed to vote on this proposal)

-Don't interpret low downhole experiment rating at this point as disinterest on panel's part - should incorporate downhole experiments into other legs objectives - TIE IT IN WITH MAJOR PROBLEMS, rather than drill such holes exclusive of other things.

Where do we need SITE SURVEYS?

- 1. Bonins (including diapirs)
- 2. Banda single channel + SeaBeam
- 3. Sunda arc. Need high resolution digital single channel surveys and associated multichannel coverage south of Sumba, and we need the processed multichannel data south of Java.
- 4. S. China should be fine after this year
- 5. Vanuatu need more processing of existing line(s)
- 6. Solomons need additional seismic lines to pick $\underline{\text{best}}$ sites, and we need existing lines migrated.
- 7. Ryukyu-Okinawa-not enough data. Need to see data. Needs more data.
- 8. Lau-Tonga: If serious about bare rock drilling, will need much more information.
- 9. N. Marianas: Maybe better single-channel seismics; maybe coring; heatflow work. 2 cruises are planned to address that soon. Communicate w/Survey of Japan for this.
- 10. Valu-Fa: needs near bottom thermal studies.
- 11. Taiwan needs crosslines. No MCS yet. Need to see more mature proposal, even to evaluate proposal. Taiwan has new ship w/MCS capabilities.

FRIDAY P.M.

Australasian book

-Need statement in minutes re: New Britain/New Guinea arccontinental collision = exciting area & we'd like to leave door open for proposal. This should be developed. Existing proposals have great difficulties, or are not focused on the major problem.

-Lord Howe/Norfolk/3 Kings - seems like a regional problem.

JACQUES: Problem not enough data to justify drilling, but can't drill without more data - circular argument. Not much control on timing of events.

JIM INGLE: Don't remember any big push for deep site to basement in the Lord Howe Rise last time we were in area (Leg 90).

NEXT MEETING

ELI: We've answered Roger Larson's pre-January questions - re: legs & timing in W. Pacific drilling. Need to start scrutinizing actual sites and setting priorities within high-priority drilling legs. That's what we would start doing at this next meeting.

Week of February 17-19 in Miami (could move one week later) - 3 day meeting.

Next meeting agenda -

-We want data for top 12 proosals before us to STUDY.

BRIAN: August 19-21 meeting (or the 3 days just prior to it) in Singapore, to coincide with the Circum-Pacific Energy and Mineral Resources Conference. The panel unanimously approved this suggestion.

-No meeting between now and next PCOM meeting in January.

NEW WPAC CHAIR

Eli will step down after this meeting. He recommends Brian Taylor as temporary chair until PCOM chooses a new one. Panel agrees but recommends Brian unanimously to PCOM as the choice for the next panel chair.

One problem for Eli has been lack of \$\$ support. Panel chairs are given a one-time stipend of \$1000. This meeting alone cost close to \$700 in copying charges, phone and telex charges, and mailing. Perhaps we need to change chairmen every meeting, so they can claim the one-time stipend. The most straight-forward solution is to allow panel chairmen to claim actual expenses.

1630 Adjourn