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MINUTES

JOIDES Planning Committee Meeting
21-23 May, 1984
Paris, France

PCOM Members

J. Honnorez, Chairman (Rosenstiel School of Marine and Atmospheric Science)
J. Aubouin (France)
H. Beiersdorf (Federal Republic of Germany)
K. Bostrom (ESF Consortium) for K. Hsu
W. Bryant (Texas A & M University)
R. Buffler (University of Texas)
J. Cann (United Kingdom)
D. Hayes (Lamont-Doherty Geological Observatory)
H. Kagami (Japan) for K. Kobayashi
R. Larson (University of Rhode Island, PCOM Chairman Designate)
J. Malpas (Canada)
R. McDuff (University of Washington)
R. Moberly (University of Hawaii)
M. Purdy (Woods Hole Oceanographic Institution) for R. von Herzen
H. Schrader (Oregon State University)
E. Winterer (Scripps Institution of Oceanography)

Liaison Observers and Guests

B. Biju-Duval (France)
M. Cheminee (France)
J. Clotworthy (JOI)
J. P. Cadet (France)
D. Fornari (for R. Anderson, Logging Services Contractor)
L. Garrison (ODP/TAMU)
Y. Lancelot (DSDP)
T. Mayer (NERC, UK))
A. McLerran (ODP/TAMU)
L. Montadert (France)
D. Reudelheuber (SEDCO)
H. Zimmerman (NSF)

JOIDES Office Liaison

J. Johnson
D. Marszalek

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ACTION ITEMS

<u>Page</u>	<u>Responsibility</u>	<u>Subject</u>
12	ODP	Give PCOM yearly a draft of proposed ODP budget.
13	L. Garrison	Send each PCOM member more data on day rates of SEDCO/BP 471.
15	T. Mayer, R. Larson, H. Honnorez	Discuss and report on staff and management needs for site surveys plus location of staff (JOIDES Office or IPOD Data Bank) at Sep. 84 PCOM meeting.
17	PCOM Chm.	Advise Working Group chairmen of need to attend their parent panel meetings.
17	PCOM Chm.	Write panel chairmen clarifying their duties.
18	L. Garrison/ JOIDES Office	Define drilling limits of new vessel and make available to PCOM at Sep. 84 meeting. JOIDES Office to distribute this information to advisory panels.
20	PCOM Chm.	Get drilling and logging input re. ENA-3 from ATL-RP and logistics data from ODP/TAMU. Contact PCOM members by mail for final planning of the leg.
21	PCOM Chm.	Contact panel chairmen to prioritize the 10 potential legs to fill Legs 111, 112, and 113.
21	L. Montadert	Poll ATL-RP for co-chief scientist nominations for Galicia leg and inform PCOM chairman. ATL-RP to submit proposal for Galicia no later than end of July.
22	H. Beiersdorf, R. Moberly, R. Larson	Report at Sep. 84 PCOM meeting on need for a COSOD or similar meeting.
22	PCOM Chm.	Staff TEDCOM and organize first meeting.
22	PCOM	Examine disciplines of advisory panel members at Sep. 1984 PCOM meeting
24	PCOM Chm. L. Garrison	Ask D. Appleman to write IHP-SP mandate; L. Garrison to search for SS-SP mandate.

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470 OPENING REMARKS & BUSINESS

Several additional items were added to the tentative agenda; the agenda was then approved by a motion introduced by R. Buffler and seconded by R. Larsen.

The minutes of the 6-7 March meeting in Washington, D.C. were approved after minor corrections, by a motion introduced by R. Larsen and seconded by J. Malpas.

471 OCEAN DRILLING PROGRAM REPORT

L. Garrison (ODP) reported.

Staffing:

ODP staffing at TAMU is about 50% completed. Three or four staff scientists have been hired and 2 or 3 offers are out and are now being considered. Several European scientists will be interviewed over the next few weeks for staff scientist positions. Interviews are also underway at TAMU for marine technicians. The Manager of Science Operations position has yet to be filled. Publications staff will be hired in the near future.

Procurement:

Most of the effort at ODP is being spent in the area of equipment and instrumentation procurement. As requested by the Executive Committee, TAMU has sent RFPs and bid requests to non-US EXCOM members and has asked SEDCO to do the same.

Budget:

The final budget will not be known until after the costs for ship conversion are known. The plan at this time is to go ahead with the purchase of shipboard equipment and to defer the purchase of some shore-based equipment. The 1984 budget for ODP (TAMU) is \$19.1M and \$1.1M for the logging subcontract (LDGO).

Program Plans:

Plans for the early ODP legs are underway. Co-chief scientists for the first two legs have been invited and have accepted. They are:

- W. Schlager and J. Austin for Leg 101 - Bahamas
- G. Westbrook and R. Speed for Leg 102 - Barbados N.

Staffing for Leg 101 will begin immediately upon return to TAMU from the PCOM meeting.

All scientific personnel who participated in DSDP Challenger cruises have been contacted and requested to fill out forms if they are interested in ODP and wish to be involved in ODP drilling legs and shorebased science. The response so far has been very good. Similar forms will be sent to PCOM members.

Shipboard Laboratory Layout:

The laboratory layout plan presented to the Planning Committee at the last meeting (3 levels below and 4 levels above the main deck) has since been changed to 3 levels below and 3 levels above the main deck. Two days before the final plans were due SEDCO informed ODP that 4 levels above the main deck would have to be reduced to 3. Reasons for eliminating one level were cost, station keeping ability, and stability. Total lab space in the 6 levels, however, exceeds the 10,400 ft² RFP requirement. (A plan of each level was then shown to the PCOM and are included here as Appendix A).

Bare Rock Drilling:

Bare rock drilling will not be ready for Leg 103 - Mid Atlantic Ridge/Kane FZ. Even if adequate funds were available, insufficient time remains to complete the development of bare rock drilling.

A. McLerran (ODP) reported on the status of riser drilling and of bare rock drilling.

The schedule below indicates time requirements to gear up for riser drilling:

RISER DRILLING SCHEDULE

<u>Month 0</u>	<u>Month 12</u>	<u>Month 24</u>	<u>Month 36</u>	<u>Month 48</u>
Start initiative for riser drilling	Submit preliminary science plans and planning budget	Final cost estimate for riser drilling to NSF	Start final well design and equipment procurement	Spud riser hole

The main advantages of riser drilling are: easy reentry; improved hole stability; pollution prevention; and increased drilling efficiency by using circulating drilling fluids.

It is projected that riser drilling will increase ODP operating costs by about 60 %. Recent riser drilling off New Jersey by Shell Oil produced a 4.5 km hole at a cost of \$36M. Time required was 152 days; coring was minimal.

Site survey requirements for riser drilling differ from conventional drilling survey requirements. In general, better and more detailed survey will be required. It is important to know as much as possible about the physical properties of the sea floor and subsurface sediments before drilling. An assay of 10 m piston cores would help to define the physical properties of the upper sediments.

Bare rock drilling is under development. About 18 months are required before the concept can be tested. TAMU has been working on development for about 2 months so another 16 months work are needed before testing is feasible.

Bare rock drilling poses two major problems:

- a) the design of a suitable platform structure to stabilize the bit on the sea floor, and
- b) actual drilling.

We envision a tripod platform capable of providing a vertical cone on sea floor slopes of up to 10° . The base of the structure will be about 6-7 m diameter.

Discussion:

(Procurement)

H. Beiersdorf (FRG) - The FRG experienced a problem concerning the procurement of equipment. The telex from TAMU was sent on a Friday afternoon with a closing date the following Wednesday. The telex was not received in Germany until 1 or 2 days before the closing date.

L. Garrison (ODP) - We were aware of the lack of time to respond and therefore delayed the closing date for 1 week. We have since requested that a list of planned equipment purchases be distributed so that vendors have more lead time.

T. Mayer - The short response time also caused problems for the UK. The one week extension may also be a potential problem because the UK has already requested that a specific vendor (one having a US office) respond to the RFP, under the assumption that an immediate response was required. Thus some UK vendors were not contacted.

L. Garrison - The initial problems in the procurement process are temporary and were caused in part by the fact that the ODP contract with TAMU was signed only about 2 months ago. In general, the procurement process is working smoothly and will improve.

H. Schrader (OSU) - The Sediments and Ocean History Panel (SOHP) recommended that a working group look into shipboard requirements for paleomagnetic instrumentation.

L. Garrison - An order for a cryogenic magnetometer has been placed, but the instrument has a 14 month lead time and therefore will not be available for the early ODP legs. A spinner magnetometer will be on board. It is possible that a cryogenic magnetometer may be loaned to ODP for the early legs.

(Shipboard lab layout)

E. Winterer (SIO) recommended that the ODP check on vibration characteristics of the SEDCO/BP 471 and the effects of vibration on the microscopes. A report to JOI from W. Hay on the vibration/microscope problem exists and should be consulted. He also recommended that two light tables be provided in the drafting room, and a small size light table be located in the co-chief's office.

(Bare rock drilling)

E. Winterer (SIO), R. Moberly (HIG), and J. Aubouin (France) felt that bare rock drilling should have been in a more advanced stage of development. They noted that the PCOM has repeatedly identified bare rock drilling as a highest priority development of the new drilling program, and that without bare rock drilling, the ODP is more or less a continuation of the DSDP. NSF and ODP (TAMU) were at fault for not following PCOM's advice.

L. Garrison (ODP) - Development of bare rock drilling could not begin until the ODP contract was signed, and TAMU is proceeding with development as quickly as possible.

W. Zimmerman (NSF) - The delay of bare rock drilling is not related to any cuts in the ODP budget; the budget is intact, but too much was planned for ODP. PCOM may have to make some decisions to establish priorities within the existing budget.

J. Honnorez (PCOM Chairman) - Bare rock drilling will not be available for Leg 103 because of a lack of time, even if sufficient funds for development are available.

R. Larson - ODP does not appear to understand the nature of the bottom environment. Relatively flat area (less than 10° slope) are likely to be rare and rubble may be a problem.

E. Winterer - Does ODP-TAMU have an advisory group to consider bottom type, survey requirements, etc.?

A. McLerran - An advisory group of 2 or 3 scientists is needed. ODP intends to select a subcontractor for development of bare rock drilling by the end of July.

J. Honnorez (PCOM chairman) - Keep PCOM informed of progress on bare rock drilling. An ODP engineer should attend the 10-11 June Lithosphere Panel meeting to ensure communication between the scientific and engineering groups.

(Riser drilling)

Several PCOM members asked A. McLerran to define the limits (time, water depth, etc.) of riser drilling so that the advisory panels can begin to consider potential sites for riser drilling.

A. McLerran responded that the actual limits of riser drilling vary considerably with the type of sediments being drilled. Experience, however, indicates that 400 ft/hr is about the maximum penetration rate to be expected, 10-14 days are required to "set the hole" and 3-4 days to set up the riser. About 3 weeks on site are needed before drilling can begin. Riser drilling is probably limited to less than 10,000 ft string length, unless new (stronger) drill pipe is developed. The use of multiple casings may allow drilling in overpressured or unstable sediments.

J. Cann (UK) - One year should be added to the 4 year lead time for riser drilling to allow partner countries to plan for increased funding of ODP.

472 LOGGING SUBCONTRACTOR REPORT

D. Fornari reported for R. Anderson (Logging Subcontractor chief scientist).

Negotiations leading to subcontracts with Schlumberger for standard logging services and with the USGS for specialized tools are in progress.

Staffing is completed with 8 persons associated with the ODP logging services at LDGO.

The budget reduction has impacted the logging phase for ODP. We intend to accommodate the cut by:

- 1) No logging on Leg 101 (Bahamas) - cost savings = \$220K.
- 2) No wireline packer development in FY 1985 - savings = \$75K.

(On July 6, 1984 Dr. Fornari sent the following addendum to the above report:

"In presenting the ODP logging program and budget to the PCOM, Fornari expressly stated that the program and budget were geared to fulfilling our contractual mandate to provide both standard and specialty logging for ODP drilling holes. Because of serious budget cuts, up to the time of the meeting (late May), we had to make compromises and trade-offs throughout the entire logging program. We presented our program to PCOM with the express idea of getting direction from that group as to how best to serve the various technical and scientific interests of the ODP.

Since the May meeting, NSF and JOI have reinstated some funds to the logging budget so that we can log Leg 101 with standard logs and purchase some special tool equipment items which we had initially deferred to FY 85 and beyond."

Discussion:

(The Planning Committee voiced strong objections to the proposed cuts in logging and packer development).

H. Beiersdorf (FRG) - The Planning Committee has decided in the past to log every ODP leg. Who made the decision not to log Leg 101?

D. Fornari - The decision was made at LDGO by the logging subcontractor.

J. Clotworthy (JOI) - The announcement of no logging on Leg 101 and delayed packer development is being made at this meeting so that it can be considered by PCOM. The Planning Committee should decide on priorities.

J. Cann (UK) - On what basis does NSF and JOI decide if the logging budget is acceptable or not?

J. Clotworthy (JOI) - JOI considered the budget and is satisfied that it is sufficient to maintain the program.

H. Zimmerman (NSF) - The final budget decisions will be made on the basis of PCOM recommendations.

J. Clotworthy - PCOM is reminded that the two year ODP budget was established before the program was in place. No cuts have taken place. The logging budget reflects a change in the way the funds are distributed within the final budget.

J. Aubouin (France) - The IPOD program had a direct contract for standard logging. Now LDGO is interposed between JOI and the logging contractor and has decided to eliminate logging on Leg 101.

E. Winterer (SIO) - The logging subcontractor should have consulted with JOIDES before making any decision to cut logging. At the very least, the chairman of the Downhole Measurements Panel (DM-SP) should have been consulted.

(The PCOM later made recommendations concerning logging; see JOI Report, Motion 475A.)

473 NATIONAL SCIENCE FOUNDATION REPORT

H. Zimmerman reported.

The status of ODP membership is as follows:

European Science Foundation signed as a candidate member. Spain and Greece have expressed interest in joining the ESF consortium.

Federal Republic of Germany has joined as the first full member.

United Kingdom is considering full membership.

France has accepted the language of the MOU as a candidate member.

Japan is ready to sign as a candidate member (S. Toyé of NSF is in Japan at this time).

Canada has signed as candidate member and is now discussing full membership.

Other countries which are showing a strong interest in the ODP are Brazil, Australia and New Zealand. NSF will present the ODP to Brazilian marine geologists at a meeting in July (in Brazil).

An environmental impact statement (EIS) for the ODP is being written. A new EIS is required primarily because of the high latitude drilling and riser drilling planned for the new program.

The estimated ODP budget for 1985 is \$30.4M (JOI, TAMU, LDGO).

DSDP phasedown budget is \$5.55M through 1987.

FY 1985 = \$2.77M FY 1986 = \$2.33M FY 1987 = \$0.75M

The DSDP phasedown includes such items as scientific staff, publications, data base, Initial Reports index, and administration.

The only part of the DSDP phase-down that might be deferred is the index. The cost for the index is \$300K in 1984 for part 1 with a total cost of about \$500K. The contract for part 2 has not yet been signed. The contract for part 1 could be cancelled for a penalty of about \$50K. PCOM may wish to consider cancellation of the index to make the funds available elsewhere (e.g. logging). Estimated ODP budget is shown in Fig. 1.

Discussion:

R. Larson (URI) - The FY 1984 budget shows a short-fall of about \$3.2M. What are the consequences if a similar short-fall occurs in FY 1985?

H. Zimmerman (NSF) - Sufficient funds would be available for a "bare bones" program. The ship would be converted, launched, and drilling would commence.

D. Fornari (logging) - Does NSF have a contingency plan to approach Congress for more funds?

H. Zimmerman - For various political considerations, NSF will not ask Congress for additional ODP funds.

(Several PCOM members requested a breakdown of the \$30.4M for FY 1984 for TAMU, LDGO and JOI. H. Zimmerman (NSF) responded that the detailed budget breakdown is not yet known, and will depend in part on the cost of ship conversion. The exact figures would not be known until after conversion is completed).

J. Cann (UK) - TAMU, JOI, NSF, and LDGO representatives should meet with the PCOM chairman before major budget decisions are made, to make sure that PCOM priorities are being followed.

J. Honnorez (PCOM Chairman) - The Planning Committee should be presented with alternate budgets representing various "trade-offs", and not with final and complete budgets.

D. Hayes (LDGO) - PCOM must know more of the total budget so that it can know the consequences of its decisions and recommendations.

J. Aubouin (France) - PCOM's only real function is to schedule the ship. As a rule it is informed of other planning functions by those who have access to the detailed budget. PCOM cannot make informed scientific choices unless it knows the relative costs of those choices. Is the budget a secret?

R. Moberly (HIG) - The question is put to NSF, JOI, TAMU, and LDGO. PCOM has been informed of no logging on Leg 101, no packer for the Barbados leg, and no bare rock drilling; have other PCOM priorities been eliminated?

PCOM Consensus:

The consensus of the Planning Committee is expressed in the following motion.

ODP BUDGET
ESTIMATED TO DATE

<u>Income</u>	<u>1984 \$M</u>	<u>1985 \$M</u>
U.S. Appropriation	26.3 (-.9)	27.6
International - ODP	1.2	1.875
International - DSDP	1.2	
Other Income	3.6*	
	<u>32.3</u>	<u>29.475</u>
 <u>Budget Items</u>		
JOI/TAMU/LDGO	21.7	30.4*
DSDP	7.4	2.7*
	<u>29.1</u>	<u>33.1</u>
<u>U.S. Science Program</u>	3.5*	?
	<u>32.6</u>	

*Estimate

MOTION 473A: Introduced by J. Aubouin and seconded by E. Winterer.

The Planning Committee requests that it receive each year a draft of the proposed ODP budget at a sufficient level of detail so that it may have full information for future scientific recommendations.

VOTE: 14 for; 0 against; 1 abstain.

*****ACTION*****

A meeting of a PCOM subcommittee resulted in a recommendation that budget adjustments should be made to accommodate the following PCOM priorities:

- logging on all legs.
- purchase of a wireline packer in time for modifications to be completed for the Barbados leg.
- purchase of important shipboard equipment and instrumentation.

If additional ODP funds cannot be acquired, then compilation and publication of the index for the Initial Reports should be delayed.

A PCOM "Standby" subcommittee consisting of the PCOM Chairman (J. Honnorez), R. Larson (PCOM Chairman designate) and H. Beiersdorf (FRG) will advise ODP(TAMU), NSF, JOI and the Logging Contractor (LDGO) on PCOM recommendations relating to budget cuts.

474 DEEP SEA DRILLING PROJECT REPORT

Y. Lancelot reported for DSDP.

Primary functions at DSDP are publication of the Initial Reports, transfer of data into the TAMU/ODP system, and curatorial duties.

Initial Reports:

- All outstanding Initial Reports should be completed by December 1987.
- Vol 75 - recently sent to Washington.
- Vols. 77, 78 - will be mailed soon.
- Vols. 79-81 - will be sent later this year.
- Vols. 82-86 all manuscripts are in.

The Initial Core Descriptions are again being published in hard copy, and are available for legs 86-92.

The budget (\$300K) for Part 1 of the index to the Initial Reports was probably overestimated. Actual cost is more like \$200K. The contract for Part 1 could be cancelled for a loss of about \$50K to realize a savings of about \$200-250K. This action is not recommended because the project may be black-listed among the few contractors doing that type of work. A better solution would be to go ahead with Part 1 and defer Part 2.

Data bases are nearly completed.

Discussion:

E. Winterer (SIO) - Is there any effort underway to make the data bases more accessible to the community, e.g. by use of modems?

Y. Lancelot - It was a long range plan at DSDP; hopefully TAMU will enact it.

H. Beiersdorf (FRG) - U. von Rad, Leg 93 participant, expressed concern about the efficiency and purpose of the post cruise meeting. The main topic at the meeting was the site chapter - not science. The site chapter could have been handled by mail.

J. Cann (UK) - Chief scientists for each leg should be informed by the science operator of the purpose of post cruise meetings.

475 JOINT OCEANOGRAPHIC INSTITUTIONS INC. REPORT

J. Clotworthy reported.

When NSF approached JOI to manage the ODP, much uncertainty existed regarding Congressional funding, the cost of DSDP phasedown, and the level of international participation in the program.

Some of that uncertainty still exists. The final cost of ship conversion is still unknown, and only one full partner (FRG) exists at this time. NSF firmed up the budget guidelines for ODP in early April. Last week the PCOM chairman was informed of the rough budget. At this meeting the overall budget was presented to the Planning Committee. The costs will continue to be under review as long as the uncertainty in costs and income continue. Input from the Planning Committee is needed to make the budgetary decisions.

Discussion:

H. Beiersdorf (FRG) - Germany may have problems maintaining its commitment to ODP if other countries do not join as full members.

E. Winterer (SIO) - What is the day rate for the SEDCO/BP 471?

L. Garrison (ODP) - The range is \$32-53K/day + fuel = about \$45K/day.
(L. Garrison will send more data on day rates to each PCOM member, to provide background information in case a temporary shut-down of drilling comes under consideration).
*****ACTION*****

PCOM Consensus:

Log Leg 101 and make budgetary adjustments elsewhere.

MOTION 475A: Introduced by J. Cann and seconded by H. Beiersdorf.

The Planning Committee reiterates its scientific advice that there should be conventional logging on every leg.

VOTE: 15 for; 0 against; 0 abstain.

(D. Fornari commented that the logging subcontractor will be ready to log Leg 101 by January 1985).

MOTION: Introduced by R. Moberly and seconded by J.Cann.

Move that JOI be advised of JOIDES' long standing recommendations that the engineering and down hole development programs have as highest priorities the ability to drill and sample in the subduction thrust zone and on bare rock.

Discussion:

Several PCOM members expressed concern that the motion might cause other important developments to be considered as second priority.

VOTE: 8 for; 6 against; 1 abstain (Motion not adopted due to lack of 2/3 majority affirmative vote).

476 EXECUTIVE COMMITTEE REPORT

J. Honnorez, PCOM liaison to EXCOM reported on the 6-7 March meeting.

Site Survey Panel (SS-SP):

J. Bowman, the U.K. representative to EXCOM, raised the issue of the effectiveness of the Site Survey Panel. At its 6-7 March 1984 meeting in Baltimore, the Executive Committee passed the following motion:

"EXCOM MOTION 283A:

- 1. EXCOM recognizes that it should be the responsibility of those scientists making specific drilling proposals to obtain adequate site survey information.**
- 2. EXCOM asks PCOM to examine the role of the Site Survey Panel.**
- 3. EXCOM suggests that PCOM should consider the desirability that the JOIDES office act as a coordinating office to link scientists having specific drilling proposals needing additional site survey information to a representative of each member who will be in a position to disseminate the need to relevant scientists and institutions in their constituency.**

Several PCOM members felt that points 1 and 3 of the motion were in part contradictory. The following points of view were expressed by PCOM members during discussion of the SS-SP:

- comingled funds should be used for regional (not site specific) surveys.

- funds independent of JOIDES and ODP should be used for surveys for problem definition. The burden for detailed surveys is now unfairly borne by the U.S.

- the SS-SP has never worked well.

- the SS-SP may not be needed and could be replaced by an IPOD Data Bank officer.

PCOM Consensus (SS-SP):

A fundamental problem exists with the coordination of site surveys. Staff work, either through the JOIDES Office or the IPOD Data Bank is needed; the SS-SP cannot be expected to do the required staff work.

A PCOM subcommittee consisting of T. Mayer (U.K.-URI Joides Office), J. Honnorez (PCOM chairman) and R. Larson (PCOM chairman designate) will discuss the above concerns with the SS-SP, decide on the need for staff and management of site surveys and where the staff is to be located (JOIDES Office or IPOD Data Bank), and report their recommendations at the next PCOM meeting in September 1984. The subcommittee will also examine how regional and site specific surveys should be funded.

*****ACTION*****

UNESCO/ODP Cooperation (J. Honnorez continued):

The Executive Committee recommended that each JOIDES member nation use bilateral agreements to aid participation in ODP by scientists from third-world countries.

Discussion:

H. Beiersdorf (FRG) informed PCOM that German participation in ODP was presented to representatives of 10 third-world countries at a recent "marine affairs" meeting in Malta. Sri Lanka expressed interest in ODP.

ODP Leg Number Designation:

EXCOM decided that ODP legs will begin with Leg 101 and Site 625.

Name of ODP Ship:

The issue of a new name for the SEDCO/BP 471 was raised at EXCOM.

Discussion:

L. Garrison (ODP) - SEDCO has indicated that it would consider a new name, and prefers that the ship not be named after a person.

E. Winterer - A UNESCO publication lists all past vessels important in exploration.

(Several names were suggested by PCOM members, including the following: "Resolution"; "Argo"; "JOIDES ___?"; and "Explorer").

477 ATLANTIC REGIONAL PANEL (ATL-RP) REPORT

R. Buffler (^{UTA}~~TAMU~~, PCOM liaison to ATL-RP) reported and summarized the minutes of the 15-17 May 1984 meeting of the Atlantic Regional Panel in Miami:

ATL-RP recommended the following schedule:

- Leg 101 - Yucatan
- Leg 102 - Bahamas
- Leg 103 - ENA 3, Hole 417
- Leg 104 - Labrador (without Baffin Bay)
- Leg 105 - Norwegian Sea
- Leg 106 - Galicia
- Leg 107 - N.W. Africa
- Leg 108 - Mediterranean
- Leg 109 - MARK
- Leg 110 - Barbados North

Discussion:

The advantages and problems of drilling in Baffin Bay were discussed by the Planning Committee. A general consensus emerged to include Baffin Bay for the following reasons:

- weather is always a problem in high latitude drilling and high latitude drilling has already been endorsed by COSOD.
- Canada will provide site surveys if PCOM firmly endorses drilling in Baffin Bay.
- Labrador Sea paleoclimate objectives must include Baffin Bay.
- SEDCO and other entities with drilling experience can provide background data.
- daily satellite images of ice condition allow for real-time decisions.
- high latitude drilling and global paleoclimatology are important "new" aspects of ODP.

Norwegian Sea

PCOM felt that the Norwegian Sea leg would provide more information on passive margins, dipping reflectors and paleoenvironment.

Galicia

PCOM generally favored a Galicia leg, but felt that securing clearance from Spain could be a problem.

Mediterranean Sea

L. Montadert (chairman, ATL-RP) informed PCOM that input from the Mediterranean Working Group was not available when the ATL-RP met, so the leg was not thoroughly discussed. A Tyrrhenian Sea leg, however, is preferred. Much data already exists to select sites. More multi-channel seismic data is needed for the eastern Mediterranean.

R. Buffler (UT) expressed concern that the chairmen of the Caribbean Working Group (R. Speed) and the Mediterranean Working Group (J. Mascle) did not attend the ATL-RP meeting. J. Honnorez (PCOM chairman) said that J. Mascle was not aware of his responsibility to attend ATL-RP meetings, and that R. Speed was inadvertently left off the invitation list. Letters will be sent to all Working Group chairmen to inform them of the necessity of attending meetings of their parent panels. *****ACTION*****

Drilling schedule:

R. Buffler - The Atlantic Regional Panel felt insufficient data were available to justify drilling the Barbados South leg and therefore substituted the Yucatan leg. Bahamas was changed to Leg 102 because logging would not be available on the first ODP leg.

J. Cann (U.K.) - The ATL-RP and possibly other panels do not appear to understand their mandate. Final selection of legs and integration of the legs into a drilling plan and schedule is the role of the Planning Committee.

L. Montadert (ATL-RP chairman) - The Regional Panels are not in competition with PCOM or with the Thematic Panels. The list of legs represent the ATL-RP priorities, which PCOM should consider in their planning.

PCOM consensus:

The role of the advisory panels should be clarified. Panel chairmen are requested to read the mandates of their respective panels. J. Honnorez will write a letter to the chairmen clarifying their duties. *****ACTION*****

478 SEDIMENTS & OCEAN HISTORY PANEL (SOHP) REPORT

H. Schrader (PCOM liaison to SOHP) reported and summarized the minutes of the 7-9 May meeting.

After consideration of the various ODP legs of interest to SOHP, the panel identified themes for future SOHP focus and listed its highest priorities for the next 3-4 years of ODP. An uncertainty in planning is the actual capability of the SEDCO/BP 471 for deep drilling. The panel felt that TAMU should define the drilling limitations of the ship.

Discussion:

L. Garrison (ODP) - Depth of penetration is limited by sediment characteristics and by the type and length of casing available.

J. Aubouin (France) - The new program was sold on the basis of enhanced drilling capability. How does the new ship differ from the Challenger?

J. Cann (U.K.) - Although the new ship may not be able to suspend a longer drill string at this time, it does have the potential for high latitude drilling, it has a more stable platform, can carry more pipes and casing, and can lift heavier weights.

PCOM Consensus:

L. Garrison should define the drilling limits of the new vessel and should make the information available to PCOM members so that the future planning is realistic. The data should be available at the September PCOM meeting. The JOIDES office will distribute the information to the advisory panels. *****ACTION*****

479 TECTONICS PANEL REPORT.

J. Cann (U.K.) made a brief report on the 17-19 May meeting.

Norwegian Sea

Drilling the dipping reflectors is a high priority. A two hole approach is preferred; every effort should be to reach basement (reflector K).

Galicia

Considered to be a high priority leg.

Barbados

North of Tiburon Rise, Hole 541 is the primary objective. South of Tiburon Rise, the western deformation front is the primary objective (west side of Barbados Ridge).

Peru

The panel favored drilling on the upper slope of the Peru Trench.

Mediterranean Sea

The Tyrrhenian Sea was considered to be the best site for a Mediterranean leg. The panel, however, considered Galicia to be a more important leg than the Mediterranean.

The Panel considers the Norwegian Sea, Galicia, two Barbados legs and Peru to be of higher interest than other legs.

Discussion:

R. Moberly (HIG) - Did the TECP prioritize the first 5 legs scheduled by PCOM?

J. Cann - No priority was given to the list of legs.

J. Aubouin - If only one leg will be drilled in the Mediterranean Sea, then the Tyrrhenian Sea is a good choice.

R. Buffler - (Question to L. Garrison) If funds for packer modification become available soon, when can the Barbados North leg be drilled? L. Garrison - Barbados North could be drilled by Leg 103.

D. Fornari (logging) - If funds are available, the packer can be ready for use 9 months after 1 October (the summer of 1985).

480 SHORT RANGE PLANNING

The effects on the drilling schedule, Table X of the minutes of the March PCOM meeting of 21-23 March of the unavailability of bare rock drilling in time for Leg 103 (MARK-1), and the lack of a packer for Leg 102 (Barbados 1) were considered to by the Planning Committee.

Differences of opinion existed among the PCOM members of the extent to which the drilling established at the previous PCOM meeting should be changed. J. Cann (U.K.) felt that only the MARK-1 leg need be changed, to avoid unnecessary hardship on the science operator and all other parties in the process of planning based on the existing schedule. Several other members felt that early legs should be reconsidered because of the lack of bare rock drilling for the scheduled MARK 1 leg, the lack of a packer for the Barbados leg, and because of the high priority given to a Galicia leg by the advisory panels. After discussion, a general consensus was reached that all the early legs should be reconsidered, but that changes should be minimal.

J. Cann (U.K.) - PCOM has already decided (at past meetings) the following:

- two high latitude legs will be drilled during the first northern summer;
- the first two legs will be relatively near a U.S. port in case repairs are needed and because two crews will be trained; and
- the technical capabilities of the ship will be tested, but not to the limits

L. Garrison(ODP) - ODP has proceeded with the staffing and other plans based on the existing schedule; if changes are made, there should be good reasons.

The PCOM then considered the merits of various legs:

Barbados North - (North of Tiburon Rise). Redrill 78A; decollement zone, overpressure, pore waters, temperature, etc. Priority = high

Barbados South - inner deformation front, thicker sediments (Orinoco fan), less overpressure. No site surveys, no proposal. Priority = medium

Yucatan - +7000m hole would stretch technical capability of ship.

N.W. Africa and Galicia - high priority legs. Galicia has good surveys, high priority from ATL-RP, if Leg 103 then 102 would be close to U.S.; potential weather problems.

ENA-3 - high priority for Downhole Measurements Panel (DM-SP)

The following schedule was considered fixed:

Leg 101 - Bahamas
Leg 102 - ?
Leg 103 - ?
Leg 104 - Norwegian Sea
Leg 105 - Baffin Bay/Labrador Sea
Leg 106 - MARK-1

Possible new schedule:

Leg 101 - Bahamas
Leg 102 - Barbados South or ENA-3
Leg 103 - Galicia or ENA-3
Leg 104 - Norwegian Sea
Leg 105 - Baffin Bay/Labrador Sea
Leg 106 - MARK-1

The Planning Committee discussed the relative merits of Barbados South, Galicia or ENA-3. A straw vote revealed a consensus for ENA-3 as Leg 102 and Galicia as Leg 103.

J. Honnorez (PCOM chairman) will get input for drilling and logging at ENA-3 from the ATL-RP, and logistics information from ODP/TAMU. He will then contact PCOM members by mail for final planning of the leg. Although less than a full leg (56 days) may be required, extra days will be used to accommodate time changes which may be required on other early legs. Honnorez will inform G. Westbrook and R. Speed of the delay in Barbados drilling. *****ACTION*****

Consideration of legs beyond Leg 106 resulted in the following schedule and list of potential legs (Table X-1).

TABLE X-1

INITIAL ODP DRILLING SCHEDULE (MAY 1984)

Start date : 1 January 1985

Legs : 56 day cycle

Leg 101 - Bahamas
Leg 102 - ENA-3/417D, 418A, 395A
Leg 103 - Galicia
Leg 104 - Norwegian Sea
Leg 105 - Baffin Bay/Labrador Sea
Leg 106 - MARK-1
Leg 107 - Tyrrhenian Sea
Leg 108 - N.W. Africa (Cenozoic)
Leg 109 - Barbados North
Leg 110 - MARK-2
Leg 111 - ?
Leg 112 - ?
Leg 113 - ?
Leg 114 - Weddell Sea

Note: Legs 108, 109 and 110 may be delayed 1 leg if N.W. Africa (Mesozoic) is selected for drilling; it would then be Leg 108.

Potential legs under consideration for Legs 111-113:

Ionian Sea
N.W. Africa (Mesozoic)
Barbados South
Yucatan Basin
Venezuela Basin
Hole 504-B
Costa Rica
EPR-1 (13°N)
Peru Trench
Chile Triple Junction

J. Honnorez will mail the list of 10 potential legs under consideration to the advisory panels. Each panel will prioritize several legs from the list and provide a brief justification for their selection and prioritization. The ten potential legs are in competition for the three open legs in Table X-1. PCOM will make the final selection.

*****ACTION*****

L. Montadert will poll the ATL-RP for nominations for co-chief scientists for the Galicia leg and inform J. Honnorez of the names. The ATL-RP will assemble and submit a proposal for Galicia as soon as possible (no later than end of July).

*****ACTION*****

Motion 480A: Introduced by E. Winterer and seconded by R. Moberley.

Move that the drill site priorities for the Bahamas as presented by the ATL-RP (15-17 May meeting) be approved for the first ODP leg.

VOTE: 14 for; 0 against; 0 abstain.

481 FUTURE COSOD MEETING

J. Honnorez requested that PCOM reconsider scheduling of the next COSOD meeting.

PCOM Consensus:

A subgroup consisting of H. Beiersdorf (FRG), R. Moberly (HIG) and R. Larson (URI) will examine the need for a COSOD or a similar meeting, and report to PCOM at the September meeting. *****ACTION*****

482 JOIDES ADVISORY PANELS

Technology and Engineering Development Committee

J. Honnorez informed PCOM that a problem exists in staffing the TEDCOM. Several individuals contacted by the JOIDES Offices are now serving on the ODP/TAMU engineering advisory panel, and therefore do not want to serve on the parallel JOIDES panel. Qualified persons are few, so staffing is a real problem. TEDCOM representatives from Canada, Germany and the United Kingdom have accepted; only 2 of 9 US engineers have accepted. The committee is very important to non-US members because of the link with future procurement and technological developments.

PCOM Consensus:

Continue to try to staff the panel, even though US members will be difficult to recruit. In the meantime, the TEDCOM should meet; ODP/TAMU engineers should attend the meeting. *****ACTION*****

Discipline panels:

The JOIDES Office has received several letters criticizing the lack of discipline panels. The letter from G. Jenkins (Appendix B) is one of several complaints. The JOIDES Office has sent letters explaining that the lack of formal discipline panels in the new structure was deliberate, and that the structure will be reviewed if necessary at a later date.

PCOM Consensus:

The criticisms may be valid. PCOM will examine the disciplines of advisory panel members at the September meeting. *****ACTION*****

Panel membership:

R. Moberly noted that panel nominations made at the last PCOM meeting (p. 18 of minutes, 21-23 March meeting) were not formally approved. A motion was introduced.

MOTION 482A: Introduced by R. Moberly and seconded by E. Winterer.

Move that panel nominations made at the 21-23 March PCOM meeting be approved.

VOTE: 14 for; 0 against; 0 abstain.

483 OTHER BUSINESS

Downhole Chemistry:

J. Cann (U.K.) informed PCOM of new developments in downhole sensors, of which the marine geology community is most likely not aware. His notes are included as Appendix C.

Publication of DSDP results:

A publisher had contacted J. Cann about publication of a series of books based on DSDP results. Example titles are "Geological Evaluation of the Mediterranean Basin", "The Indian Ocean", etc. Should the contact be pursued?

PCOM Consensus:

PCOM felt that a book series based on deep sea drilling would help synthesize the knowledge, disseminate the results and add to the visibility of the program. The contact should be pursued.

Terms of Reference - JOIDES Science Advisory Structure:

Mandates are required for the Information Handling Panel and for the Site Survey Panel.

J. Honnorez will ask D. Appleman (IHP-SP chairman) to write the IHP-SP mandate; L. Garrison (former SS-SP Chairman) will search for the panel mandate.

*****ACTION*****

484 FUTURE MEETINGS

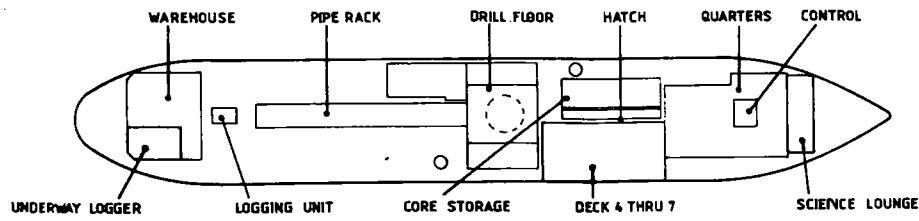
25 - 27 September 1984, Hawaii

December(?), At or near ship (L. Garrison will make arrangements)

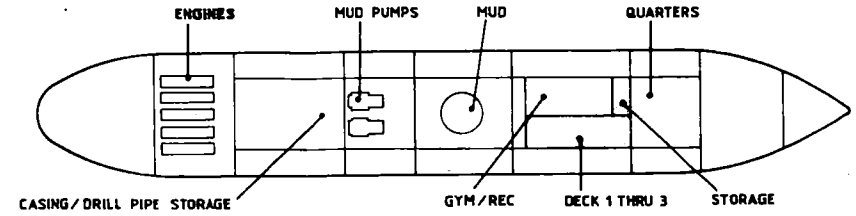
26 - 28 March 1985, Washington D.C. or other central location (tentative location)

4 - 6 June 1985, JOIDES member country (tentative location)

mid-Jan UTA.



ABOVE



BELOW

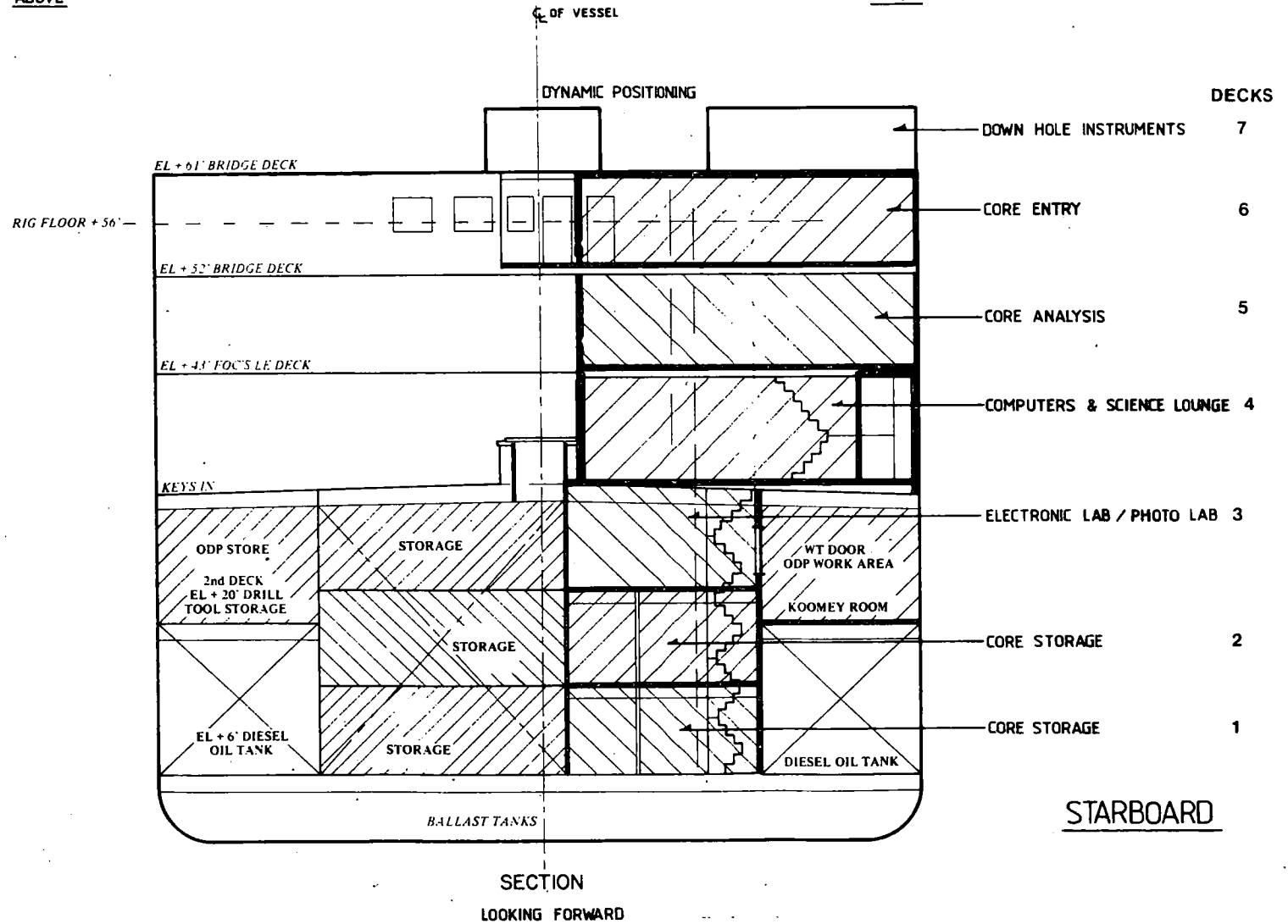


TABLE 2
SCIENTIFIC WORK SPACES

Location	Function	Approx. Area Gross Sq. Ft.
Deck 1 Hold Deck	Refrigerated Core Storage, Staging Area, and Miscellaneous Storage	1790
Deck 2 Lower Tween Deck	Refrigerated Core Storage, Second Floor Lab, Staging Area and Misc. Storage	1790
Deck 3 Upper Tween Deck	Photographic Lab and Dark Room, Electronic Repair Shop, Staging Area and Misc. Storage	1890
Deck 4 Main Deck	Computer Facilities, Science Lounge, and Offices	1880
Deck 5 Forecastle Deck	Chemistry Lab, X-ray Labs, Petrology Lab, Paleo Labs, Thin Section Lab, Drafting	2045
Deck 6 Bridge Deck	Core Receiving, Magnetics Lab, Physical Properties Lab, Core Description and Sampling, Photo Lab, Core Splitting	2150
Deck 7 Lab House Top	Downhole Measurements Lab and Tool Repair Shop	390
Poop Deck - Fantail	Underway Geophysics Lab	340
Main Deck - Forward	Library, Study	600

TABLE 1

CONVERSION SCHEDULE

	Feb. 1/84	Mar. 1/84	Apr. 1/84	May 1/84	June 1/84	July 1/84	Aug. 1/84	Sept. 1/84	Oct. 1/84	Nov. 1/84	Dec. 1/84	Jan. 1/85	Feb. 1/85
Lab Design ODP/TAMU		-----											
Preparation Shipyard Bldg. Package				-----									
Procurement Long Lead Time Items (Sedco)		-----											
Evaluation Shipyard Bids						-----							
Selection and Award by Contract							-----						
Shipyard Construction and Conversion								-----					
Ship to Shipyard								-----					
Shakedown and Sea Trials											-----		
Start Drilling Operations													-----

*See note

* Note: If ship completes current drilling commitments prior to October 1, it may be dry docked for bottom cleaning and other scheduled maintenance work. This may be done at shipyard other than yard doing conversion work.

RECEIVED

MAY 17 1984



THE OPEN UNIVERSITY

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U.S.A.

Appendix B

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Professors of Earth Sciences:
G C Brown, Ph.D., D.Sc., M.I.M.M.,
F.G.S. (Head of Department)
Tel: Milton Keynes 653012
I G Gass, Ph.D., D.Sc., F.G.S., F.R.S.
Tel: Milton Keynes 653751
R M Shackleton, Ph.D., F.G.S., F.R.S.
Tel: Milton Keynes 653002

DIRECT LINE: 653116

27th April 1984

Dear Dr Honnorez

I have just recieved my JOIDES Journal x No.1 Feb - 1984 and would like to comment on the Panels and Working Groups. There is a large area of research which does not seem to be covered and it concerns stratigraphy - a point which I argued at the PCOM meeting in Newcastle last year. Nowhere in the Panel structure is an overview of the worlds oceans and the Mesozoic - Cenozoic fossil, paleomagnetic, organic geochemistry etc. record. You may argue that it is the provinance of the SED Panel but I and many others would strongly disagree.

The key to many interpretations of the sedimentary record is based on micro-paleontology and magnetostratigraphy and you appear to have lost sight of this in your re-organisation. But I hope it is not too late to consider this aspect at PCOM before the re-organisation loses touch with micropaleontology, magnetostratigraphy and organic geochemistry.

For the record I was out on Legs 9, 29 and 90.

Yours sincerely

D. Graham Jenkins

D. Graham Jenkins

Copies to: Prof. J. Cann (University of Newcastle)
Dr S. Brassell (University of Bristol)
Mr T. Mayer (NERC)
All members of PCOM

Possible Ionic Sensor

(APPENDIX C)

J. Cann notes

* = sensors that could be included in an early package.

	<u>Range</u>	<u>Precision</u>	
* pH	3-10	+0.1	
* Na ⁺			
* Cl ⁻	0.3-0.7M	+0.05M	
K ⁺	10uM-50mM		Potentiometric
ΣPO ₄	5uM-40uM		using ion
* Ca ²⁺	0.002-0.1M	+0.002M	specific
Mg ²⁺	0.002-0.1M	+0.002M	electrodes of
HCO ₃ ⁻	0.1-3mM		different kinds
* SO ₄ ²⁻	0.1-30mM		
HS ⁻	0.1-20mM		
* Fe	up to 5mM		ASCREV
* Mn.	down to a few ppb		coulombic
* Cu	(all elements with		polarographic
* Zn	one sensor)		
CO ₂	down to		
H ₂ S	ppm levels		galvanic
* O ₂	(ppb with O ₂)		polarographic
? CH ₄	up to gas saturation		
Higher hydrocarbons			

Pressure causes no difficulty.

Temperature 0 - limit of electronic support system (usually 70°C, but electronics can be refrigerated).

Eh k conductivity can be added easily.

6 - 12 sensors would be possible on a single tool (with ASCREV counting as one).

Four different kinds of experiments discussed:

- Sensor pushed into soft sediment ahead of bit. 6 or more sensors could fit in a single probe. Would need 1-2 minutes to complete cycle of measurements. Could telemeter results back to ship in real time.
- Sensors on cutting shoe of HPC. Robust sensors would have less precision and longer response time than less robust sensors, but could provide reconnaissance results of acceptable standard.
- Sensor between 2 packers in hard rock hole. A tool of this kind with 6 sensors has already been built. Submersible pumps pump water through packed interval, past sensors. Results are monitored in real time.
- Long term sensor package in hard rock holes. This is a much more distant objective but is still achievable, though with some delay.

How can we move towards making this a reality? Suggested best way would be a 2-year dedicated development program, designed to produce an initial tool within a year of starting (perhaps giving temperature, pH, Na⁺, Cl⁻, Ca²⁺, SO₄²⁻ and dissolved oxygen), and then develop this over the following year to include greater versatility and other experimental design. The eventual aim would be a modular tool with a variety of sensor heads used under different conditions. Such a 2-year program might cost \$170,000.