JOIDES OPERATIONS COMMITTEE MEETING

Dalhousie University

Halifax, Nova Scotia

3 August 2000

Members				
Bill Hay (Chair)	GEOMAR Research Center, Kiel, Germany			
Casey Moore	Earth Sciences Department, University of California at Santa Cruz, USA			
Alastair Robertson	Robertson Department of Geology and Geophysics, University of Edinburgh, United Kingdom			
Thomas Shipley	Institute for Geophysics, University of Texas, USA			
Nick Pisias	College of Oceanic & Atmospheric Sciences, Oregon State Univ., Corvallis, USA			
Liaisons				
Jack Baldauf	Ocean Drilling Program, Texas A&M University, USA			
John Diebold	Lamont-Doherty Earth Observatory, Columbia Univ., USA (SSP Chair)			
Jeff Fox	Ocean Drilling Program, Texas A&M University, USA			
Thomas Janecek	Antarctic Research Facility, Florida State University, USA,			
John Farrell	Joint Oceanographic Institutions, Inc., USA			
Paul Dauphin	National Science Foundation, USA			
Mary Reagan	Lamont-Doherty Earth Observatory, Columbia University, USA			
Alister Skinner	British Geological Survey, Edinburgh, United Kingdom (TEDCOM Chair)			
Guests				
Frank Rack	Joint Oceanographic Institutions, Inc., USA			
Tom Davies	Ocean Drilling Program, Texas A&M University, USA			
David Goldberg	Lamont-Doherty Earth Observatory, Columbia University, USA			
JOIDES Office				
Warner Brückmann	GEOMAR Research Center, University of Kiel, Germany			

A. Welcome and Introductions

Bill Hay welcomed members, liaisons, and guests of the JOIDES Operations Committee meeting.

B. Approval of minutes

Consensus 00-2-1 OPCOM approves the minutes from the February 2000 meeting. Proposed by Tom Shipley, seconded by Alastair Robertson, 5 in favor, 1 absent (Moore)

C. Approval of agenda

Approved by consensus (00-2-2)

D. TEDCOM Report (Skinner)

The recommendations from the most recent TEDCOM meeting were presented and discussed.

TEDCOM RECOMMENDATION # 001-1

Following the excellent progress on the AHC installation and monitoring of its effectiveness TEDCOM request that SCICOM ensure that ODP-TAMU proceed quickly with the simulation studies which can now use real data. This is required in order to build a model, analyze existing observations, predict what may happen in different geological and geographical areas and allow unexplained or aberrant behaviour when using the AHC to be analyzed.

Jeff Fox repiled that this is being pursued at this point in time. Results will be presented at the next TEDCOM meeting in November.

Endorsed by consensus (00-2-3)

TEDCOM RECOMMENDATION # 001-2

TEDCOM request that SCICOM take steps to ensure immediate collaboration between ODP-TAMU and the BRG of LDEO in order that their combined expertise be pooled to provide a comprehensive package of down hole and rig floor instrumentation for upcoming Leg 193 and any future sensor developments. If necessary both should prioritize their objectives and should be supported with funding if necessary in order that the studies shown by both parties at the current meeting be properly harnessed for effective use by the programme.

Mary Reagan and Jeff Fox assured that LDEO and ODP-TAMU are cooperating in this effort.

Endorsed by consensus(00-2-4)

TEDCOM RECOMMENDATION # 001-3

TEDCOM request that SCICOM ask ODP-TAMU to review their approach to poor core recovery in unconsolidated, non-cohesive sediments and when doing so bear in mind existing tools available in the geotechnical industry together with ones currently under development.

Alister Skinner presents the TEDCOM recommendation to purchase and use standard geotechnical tools for the solution of recovery problems, operational difficulties, based on an observations by Brian Taylor during a recent cruise.

Endorsed by consensus(00-2-5)

TEDCOM RECOMMENDATION # 001-4

TEDCOM request SCICOM to ensure that, before the end of the current programme, ODP-TAMU have an up-todate inventory of all of their existing operational tools, that each has a folio of up-to-date drawings and an operational manual together with a digital copy of the information in a commonly available format. This is probably the best legacy that engineering can give to the IODP and it should therefore be a requirement that the Borehole Research Group at LDEO also comply with regard to all downhole logging tools and associated software.

John Farrell remarked that this task is already part of the subcontractors contract.

Endorsed by consensus (00-2-6)

E. SCIMP Report

Before presenting recommendations from the last SciMP meeting in May Tom Janecek reviewed the "success rate" of SciMP recommendations, which indicates a compliance or action rate of

about 80%. In terms of the overall number the SciMP recommendations forms a bell shaped curve.

SciMP had discussed the handling of digital photomicrographs and other images and reviewed information on two asset management applications (Extensis Portfolio and Cumulus Canto) that could be utilized by ODP for organizing, viewing, sharing, and previewing digital files across networks and platforms.

SCIMP Recommendation 00-2-5: To establish a protocol for the consistent linking of metadata with digital single frame images (e.g., thin sections, scanned core photographs) SCIMP recommends that ODP-TAMU purchase and implement the use of an asset management software/database (e.g., Extensis Porfolio or Cumulus Canto). The database generated should interface with JANUS, have SQL compatibility and be able to export data in a long-term archive format.

Endorsed by consensus

SCIMP Recommendation 00-2-4: SCIMP recommends that the ODP-IODP transition plan address the issue of long-term use of ODP drilled boreholes, with particular emphasis on the distribution and archiving of data collected from these legacy holes.

OPCOM briefly discussed the question who this recommendation is addressed to. There was agreement that the JOIDES Office should send this forward to IPSC;

Endorsed by consensus

SCIMP Recommendation 00-2-3: SCIMP recommends that all investigators who produce data using leg-specific, non-ODP scientific analytical equipment and instrumentation on board *the JOIDES Resolution* follow all standard ODP data policies and data moratoriums. In all cases these data should be made freely available in the same way that other shipboard data are distributed.

There was concern about limited coverage of this question in the ODP data and sample policy. ODP TAMU needs to stress this when external instrument providers get in on the leg, should be part of the invitation letter, needs to be included in the policy!

SCIMP Recommendation 00-2-2: SCIMP recommends that JOI direct ODP-TAMU to reallocate current fiscal year funds to move forward immediately with the purchase of a single-track, moving sensor GEOTEK line-scan digital imaging system.

John Farrell posed the question if producer brand names should be spelled out in motions like this one, because it could be a problem in procurement. Better communication between SciMP and TAMU was needed to avoid this.

Endorsed by consensus (with GEOTEK removed)

SCIMP RECOMMENDATION 00-2-1: SCIMP recommends that a temporary Working Group be established to advise SCIMP on the minimum capabilities needed for a routine seismic/downhole/core data integration program aboard the *JOIDES Resolution*.

The **mandate** of the Working Group is as follows:

- 1) Evaluate required seismic acquisition and processing facilities on the *JOIDES Resolution* (U/G and VSP).
- 2) Evaluate facilities required for core-log-seismic integration and interpretation on the *JOIDES Resolution*.
- 3) Evaluate the need for scientific and technical staff support on the *JOIDES Resolution*.
- 4) Evaluate how to obtain, store, and distribute digital seismic data.
- 5) Evaluate what shore-based facilities and personnel are required.
- 6) Estimate cost of different aspects of the seismic laboratory.

Timeline:

The evaluation of required seismic acquisition and processing facilities on *the JOIDES Resolution* (U/W and VSP) should be completed by December, 2000 and a report and recommendations presented at the December, 2000 SCIMP meeting.

The final report and recommendations to be presented at the June, 2001 SCIMP meeting.

Members:

Members should include (but not necessarily be limited to) one person from SCIMP, SSP, ODP-TAMU, and ODP-LDEO, a Shipboard Scientist participating in the ODP-LDEO FY 01 pilot study, and an Industry representative).

Meetings:

One to two meetings held at the Borehole Research Group facilities at LDEO.

There was some discussion about the question where this group would be located in the advisory structure.

Endorsed by consensus (add PPSP member)

E. Update on currently scheduled legs

Jack Baldauf provided OPCOM with an update on logistical issues with currently scheduled legs.

ONTONG-JAVA (Leg 192)

The Co-chiefs will ask for permission to drill an additional site if they don't get permission from the Solomon Islands, originally 807, Basement reach at this site is in question, but the co-chiefs are working on an answer.

MANUS BASIN (Leg 193)

There is an ongoing discussion with Papua-New Guinea concerning the microbiology program, ODP currently plans on participation of two microbiologists on board without industry ties.

GAS HYDRATES (Leg 199)

Because of the weather problem, the drilling on Hydrate Ridge needs to be moved to summer 2002. The move into 2002 should be considered together with the development of a new schedule.

H20 (Leg 200)

It has been suggested that chert may be present at the proposed site. Time needs to be added in case chert is encoutered and additional dasing is required. If no chert is found the time gained might be used to core for the following cruise (SE Pal.).

SE Paleo. (201)

Mix has asked for extra time, since they are now down to 51 days (30 on site).

F. Scheduling of highly ranked proposals

Rank	Proposal #	Proposal Name	mean ranking	stdd dev.		
1	533-Full2	Arctic Ocean	5.20	5.31		
2	534-Full	Shatsky Rise	5.80	5.75		
3	525-Full	MAR Peridotite	7.93	6.05		
4	571-Full	Peru biosphere	8.13	4.69		
5	505-Full3	Mariana Conv. Margi	n 8.93	8.30		
6	455-Rev3	Laurentide Ice Sheet	9.27	6.65		
7	482-Full3	Wilkes Land	10.40	5.93		
8	544-Full2	Costa Rica	10.87	7.76		
9	559-Full	Walvis Ridge Transec	et 11.73	6.06		
10	564-Full	New Jersey Shelf	12.40	6.13		
11	539-Full2	Blake hydrates	12.80	6.13		
12	512-Full2	Core Complex	13.27	6.09		

The following list of 12 highly ranked proposals was forwarded by SCICOM to OPCOM for consideration in FY 2002:

SCICOM also forwarded two Ancillary Program Letters to OPCOM for consideration: <u>APL-10</u> (Conical Seamount) and <u>APL-14</u> (Pleistocene Kuroshio Paleoceanography). Jack Baldauf explained to the panel that ODP-TAMU had prepared a set of operational options focussing on the perceived top ranking proposals (Project A). In the preparation of possible scheduling options the following operational issues must be considered:

• Environment (weather windows, sea state)

- Special Operating items and related expenses
- Minimization of the transit times
- goals of the LRP

Before evaluating possible scheduling options OPCOM discussed highly ranked proposals <u>533-Full2 (Arctic Ocean)</u> and <u>564-Full (New Jersey Shelf)</u>. Regarding the Arctic Ocean proposal it was noted that during the SCICOM meeting Martin Hovland, Chair of the Arctic Program Planning Group, had informed the committee that the drilling on Lomonosov Ridge would involve at least three ships - a drilling vessel of some sort and at least two icebreakers, one of which should be a Russian nuclear powered ship. Hovland also stated that the estimated cost of this operation would be between one and two ODP Legs. OPCOM also considered the fact that the budget for FY 2001 was being balanced based on the assumption that oil prices will fall back to the levels of last year and will not remain at the current high cost. Regarding the New Jersey Shelf OPCOM considered the fact that \$2.2 million were requested for the operation of an alternate drilling platform.

After a perfunctory discussion there was a general agreement that the funds necessary to implement 533-Full2 and 564-Full would not be available without drastic cutbacks in JOIDES Resolution operations in FY 2002. Hence OPCOM decided not to pursue these two proposals any further. It was doubted that the funding situation in FY 2003 would improve to the extent that funds of this magnitude would become available. OPCOM briefly discussed the negative impact of the steadily increasing operations costs against the fixed budget.

Baldauf then provided OPCOM members and liaisons with documents outlining the key operational parameters and constraints for the proposals selected for FY 2002. An overview of parameters is included below (table 1).

Proposal #	Weather window	Site time	Est. total Cost
534-Full	Apr - Sept	51.0	\$199.411
525-Full	Nov-Dec / Mar-May	64.9	\$465.214
571-Full	any	56.6	\$302.304
505-Full3	Jan-Jul	14.1	\$332.415
455-Rev3	Jul-Nov	52.4	\$325.021
482-Full3	Jan-Mar / Febr (best)	26.8	\$370.120
544-Full2	any	61.6	\$922.636
559-Full	any	49.1	\$313.935
539-Full2	Oct-Dec / Mar-May	46.8	\$365.124
512-Full2	Nov-Jul	42.7	\$527.888

Baldauf explained that for logistical and operational reasons there was some flexibility in the current schedule beginning after Leg 197 (Hotspots), ending August 2001. The approach should be to define cornerstones in the new schedule first, then tie in the connections.

After considerable discussion the following draft schedule was developed for presentation to SCICOM:

Proposed schedule

Leg 198 (Aug - Oct)	Shatsky (or Mariana) new
Leg 199(early Oct - Nov)	H2O
Leg 200(Nov - end Jan)	Paleogene
Leg 201(Febr & March)	Peru new
Leg 202(end March - May)	SE Pacific
Leg 203 (June – July)	Costa Rica new
Leg 204(late July - late Sept)	Hydrate Ridge
Leg 205	Eq. Pac, ION new

Since OPCOM considered the scheduling of highly ranked proposals as their first priority, APL-10 and APL-14 were not included in the proposed schedule.