MANAGING THE INTEGRATED OCEAN DRILLING PROGRAM:

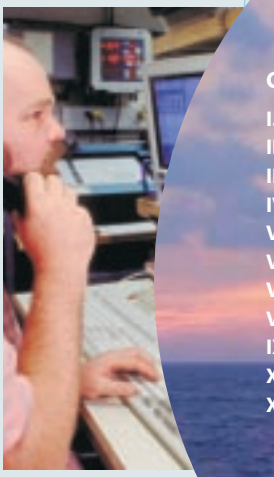
First-Year Operations, Achievements, and Highlights

A Report on 2004 by the Integrated Ocean Drilling Program Management International (IODP-MI)

IODP-MI
INTEGRATED OCEAN DRILLING PROGRAM
MANAGEMENT INTERNATIONAL

IODP
INTEGRATED OCEAN DRILLING PROGRAM

The Integrated Ocean Drilling Program (IODP) is an international marine research drilling program dedicated to advancing scientific understanding of the Earth by sampling subseafloor environments through seafloor drilling and coring, and establishing long-term borehole observatories. Hundreds of the world's preeminent scientists explore IODP's principal themes: the deep biosphere, global environmental change, and solid earth cycles.



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MESSAGE FROM THE PRESIDENT

2004 was a challenging year for Integrated Ocean Drilling Program Management International (IODP-MI). When I came on board in January, there was no staff, no office, no contracts with funding agencies, no contractual relationships with Implementing Organizations, and only meager corporate funding. Simply put, no management structure existed for the Integrated Ocean Drilling Program and no road map showed us how to proceed as the program's global management organization.

At the end of 2004, however, we had a 10-year contract with the program's funding agencies: the U.S. National Science Foundation (NSF), and Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT). We opened and began to operate two offices – one in Washington, DC and another in Sapporo, Japan – with outstanding staff in each. We formed new task forces to implement a variety of procedures. We activated new policies as we moved ahead with shaping program plans for FY '05 and '06. In addition, we contracted with the University of Bremen to provide and maintain a core repository, and we signed a five-year memorandum of understanding with the Japan Agency for Marine-Earth Science and Technology (JAMSTEC) to fund the Center for Deep Earth Exploration (CDEX), IODP's Implementing Organization in Japan. In short, IODP-MI put itself and the newly integrated – meaning *international* – ocean drilling program on a steady course.

Of course, we received a great deal of help and cooperation from IODP-MI's 34 member institutions and their corresponding representatives, and from our Board of Governors, as well as from partners, including JAMSTEC, the Joint Oceanographic Institutions (JOI), and the University of Hokkaido. IODP-MI members helped draft the 10-year proposal to NSF. Assistance and advice from NSF and MEXT were particularly helpful. Along the way, JAMSTEC also provided us with temporary office space in Washington and Tokyo.

IODP-MI received the NSF contract to become IODP's central management organization on April 1, 2004. Prior to receiving the contract, we recruited a Financial & Administrative Officer and a Contracts Officer. Immediately after receiving the contract, three key officers were added: the Vice President of Science Operations, the Vice President of Science Planning, and the Senior Advisor to the President. Other staff followed, in both the Washington and Sapporo offices.

Although work completed in 2004 is described in greater detail elsewhere in this report, I would like to highlight several initiatives new to IODP:

- Establishment of the Operations Task Force (formerly OPCOM), primarily responsible for constructing the Annual Operational Plan.
- Establishment of Review Task Forces to immediately evaluate expedition operations with a view towards future improvements.
- Organization of an IODP-Industry Workshop to catalyze collaboration at a high level.
- Organization of a Management Forum, consisting of national IODP leaders, so that the whole scientific ocean drilling community can share program ownership from a unified perspective.

IODP is a most ambitious program. With the inaugural Arctic Coring and Juan de Fuca Expeditions, a wonderful start has been made. While managing the program all the way to 2013 promises challenges, we hope to meet those challenges in a way that engenders pride for all its members and participants. We look forward to great achievements and grand discoveries along the way. After all, drilling IS the ultimate defining capability!

Manik Talwani

Manik Talwani
President & CEO

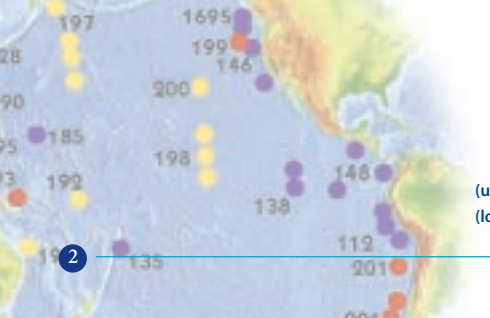
I. PREPARING THE FY '05 PROGRAM PLAN

Sections I through III reported by Thomas Janecek, Vice President, Science Operations

Development of IODP's 2005 Program Plan began early in 2004. It contained the scientific rationale and schedule for riserless vessel operations on the *JOIDES Resolution* from October 2004 to May 2005. The plan also detailed the scientific rationale and schedule for the second mission-specific program (MSP) projected for Summer 2005: an expedition to offshore Tahiti to study the last deglacial sea-level rise in the South Pacific. In addition, the plan provided details of ongoing outfitting of the Japanese riser-equipped vessel, *Chikyu*, in preparation of FY '07 scientific operations.

The science presented in the FY '05 Annual Program Plan represents the combined product of three ranking exercises by IODP's Science Advisory Structure (SAS). In August 2002, five MSP programs were ranked by IODP's interim Science Planning Committee (SPC) at the request of the International Working Group (IWG). Months later in September 2003, the SPC globally ranked all programs. At the March 2004 SPC meeting, the Tahiti component of the Last Glacial Sea-Level Rise program was presented to the IODP-MI Operations Task Force as an MSP operation to be conducted in FY '05.

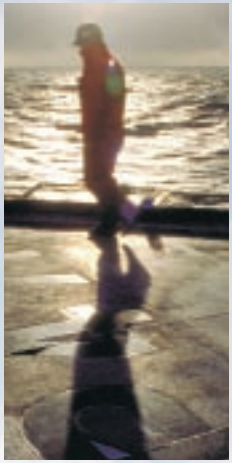
The FY '05 Annual Program Plan was approved by both the Science Planning and Policy Oversight Committee (SPPOC) and the Executive Committee of the IODP-MI Board of Governors in July 2004. During Fall 2004, the U.S. National Science Foundation and Japan's Ministry of Education, Culture, Sports, Science and Technology (Lead Agencies) determined that additional funds would be available to continue *JOIDES Resolution* operations through FY '05. At its October '04 meeting, SPC reviewed and approved a revised operations schedule developed by OPCOM that included three new programs (Porcupine Basin Carbonate Mounds, Gulf of Mexico Overpressures, and Superfast Spreading Crust I and II). At its December meeting, SPPOC further revised FY '05 operations and added the Cascadia Gas Hydrates Expedition to the *JOIDES Resolution* schedule.



(upper) ***Chikyu,*** **IODP's riser-equipped drillship, to be operated by Japan's Center for Deep Earth Exploration (CDEX).**
(lower) ***JOIDES Resolution,*** **IODP's riserless vessel, operated by JOI Alliance, the United States Implementing Organization (USIO).**

II. DEVELOPING THE OPERATIONS SCHEDULE

In conjunction with the IOs, the IODP-MI Operations Task Force – established to formulate the most logistically, fiscally effective operational plans – aims to meet the objectives set forth in IODP's 10-year science plan, prioritized by the SPC. Committee members include IODP-MI Vice Presidents of Science Operations and Science Planning, three SPC members, IO representatives, and outside experts, as needed.



The task force scheduling strategy involves: (1) examining science plans for each proposal; (2) determining operational and environmental constraints; (3) developing a matrix that combines the SPC science plan with operational and environmental constraints and risk, operational days at sea, and transits; and (4) adding fiscal reality to viable options forwarded to the SPC.

The Operations Task Force met in April 2004 and slightly revised the *JOIDES Resolution's* previously scheduled FY '05 operations. The committee also scheduled the next MSP, the Tahiti Sea Level Expedition. Part of the initial FY '05 Annual Program Plan, these operations were approved by SPPOC and the IODP-MI Board of Governors in July 2004.

During Fall 2004, the Lead Agencies determined that additional funds would be forthcoming to continue *JOIDES Resolution* operations through FY '05. In light of this budgetary guidance, the Operations Task Force met twice more in the fall of 2004 to develop several scheduling options for SPC consideration. It recommended expeditions approved by the SPC (October 2005) that comprised the FY '05 Program Plan Addendum, submitted for approval in December 2005 to SPPOC and the IODP-MI Board of Governors. At its December meeting, SPPOC requested that the task force revise this addendum. A mini-task force meeting was held during the SPPOC meeting, resulting in a schedule approved by SPPOC and the IODP-MI Board of Governors.

2004-2005 IODP EXPEDITION SCHEDULE

LEG NO.	EXPEDITION	DATES
301	Juan de Fuca Hydrogeology	June 27 - August 21, 2004
302	Arctic Coring Expedition	August 7 - September 19, 2004
303	North Atlantic 1	September 22 - November 14, 2004
304	Core Complex 1	November 14, 2004 - January 5, 2005
305	Core Complex 2	January 5 - February 27, 2005
306	North Atlantic 2	February 27 - April 22, 2005
307	Porcupine Basin Carbonate Mounds	April 26 - May 31, 2005
308	Gulf of Mexico Overpressures	May 31 - July 6, 2005
309	Superfast Spreading Crust I	July 6 - August 24, 2005
310	Tahiti Sea Level Expedition	TBD
311	Cascadia Margin Hydrates	August 24 - October 7, 2005
312	Monterey Borehole Observatory	October 7 - November 24, 2005
313	Superfast Spreading Crust II	November 24, 2005 - January 8, 2006

Acronyms Frequently Referenced in IODP

AESTO	Advanced Earth Science and Technology Organization
BGS	British Geological Survey
CDEX	Center for Deep Earth Exploration
ECORD	European Consortium for Ocean Research Drilling
EMA	ECORD Management Agency
ESO	ECORD Science Operator
ICDP	International Continental Drilling Program
IO	Implementing Organization
IODP-MI	Integrated Ocean Drilling Program Management International
ISP	Initial Science Plan
JAMSTEC	Japan Agency for Marine-Earth Science and Technology
JOI	Joint Oceanographic Institutions
LDEO	Lamont-Doherty Earth Observatory
MEXT	Ministry of Education, Culture, Sports, Science and Technology (Japan)
MOST	Ministry of Science and Technology (People's Republic of China)
MOU	Memorandum of Understanding
NSF	National Science Foundation (U.S.A.)
POCs	Platform-Operating Costs
SAS	Science Advisory Structure
SOCs	Science-Operating Costs
SPC	Science Planning Committee
SPPOC	Science Planning and Policy Oversight Committee
SSDB	Site Survey Data Bank
TAMU	Texas A&M University
USIO	U.S. Implementing Organization (JOI Alliance)

III. REVIEWING EXPEDITIONS

Following IODP's inaugural expeditions, a formal two-part review process was developed to assess both operational and science performances.

Generally, an expedition's operational review is conducted by an IODP-MI Review Task Force one to three months post expedition. Each review task force includes the IODP-MI President, the IODP-MI Vice President of Science Operations, the expedition co-chiefs, the Implementing Organization's (IO) representatives, three industry experts, and three scientists knowledgeable about the expedition's objectives.

An expedition's science review comprises two phases. The first phase, included in the preliminary report, is a brief assessment of how the expedition met its scientific objectives as described in the Scientific Prospectus and the original proposal. Co-chief scientists, science party members, and operators contribute to the report.

The second scientific assessment is conducted by SAS in conjunction with the IODP-MI Vice President of Science Planning. This phase, conducted several years post expedition, assesses the long-term science impact of the expedition or a group of related expeditions.

IODP-MI conducted two operational reviews in FY 2004: Juan de Fuca, Expedition 301; and the Arctic Coring Expedition, Expedition 302. These reviews focused on lessons learned and how to improve operations in the future. Discussion areas included pre-cruise planning, actual cruise drilling operations, communications between scientists and operators, roles and responsibilities of scientists and operators, general procedures and policies (e.g., curation, communications), laboratory operations, and more. Each review resulted in approximately 15 recommendations for future implementation. IODP-MI will assure compliance by incorporating the recommendations into IO contracts.

The Arctic Coring Expedition Armada: (left) the Norwegian drillship *Vidar Viking*. (middle) the Swedish *Oden*. (right) the Soviet icebreaker *Sovetskiy Soyuz*.

IV. DATA MANAGEMENT

Sections IV through VI reported by Hans Christian Larsen, Vice President, Science Planning

IODP scientific data generally fall into two categories: (1) data generated in support of scientific proposals and drilling operations referred to as site survey data; and (2) data based on the actual drill cores and measurements made within the drill hole, often referred to as shipboard data. The two categories are treated differently in the current data management protocol inherited from the legacy program, the Ocean Drilling Program (ODP). In 2004, IODP-MI collaborated with the IOs to pursue a number of data management activities in both data management categories.

Historically, data in support of drilling proposals were managed by a Site Survey Data Bank (SSDB) located at the Lamont-Doherty Earth Observatory, an IODP partner under contract with JOI. Until recently, this data-bank grew with increasing electronic and digital data, although it still comprises significant amounts of hard copy seismic data and maps. During 2004, with help from the SAS and a task force, IODP-MI conducted a review of the future needs in data management. Based on the findings of the review, a request for proposals was posted for a new and fully electronic SSDB. A new SSDB contract is expected to be effective within the first half of 2005. An added science coordinator will assist SAS panels and the science community with site survey data. By the second part of 2005, IODP-MI anticipates the establishment of an entire new SSDB with improved community support.

To date, shipboard data are captured and archived in a database structure that the IO operator provides and maintains. In ODP, a data management system called JANUS was established at Texas A&M University (TAMU), and now the U.S. Implementing Organization (USIO) is carrying this proven data management system forward.

In addition, CDEX, the operator of the riser-equipped drillship *Chikyu,* developed a new data management system called J-CORES (based on the JANUS system) and is developing it with more application and visualization tools. The ECORD Science Operator (ESO), the MSP operator, is using a third data management system similar to that used by the International Continental Drilling Program (ICDP). IODP-MI's challenge is to ensure a consistently applied, efficient, program-wide data management system, which provides the end-user with seamless, cutting-edge data-mining capacity, and visualization tools.

Steps were taken in 2004 to coordinate development of applications tools, such as protocols for meta data and the formation of an IODP-MI-chaired data-management coordination group with representatives from each IO. In addition, IODP-MI requested that IOs report their visions for program-wide data management by mid-January 2005, a first step in the development of a true, integrated data management system.

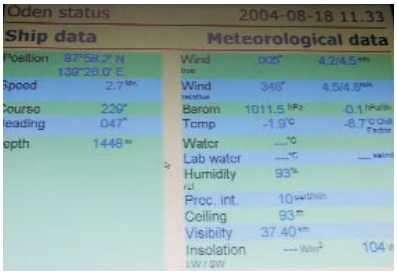
V. PUBLICATIONS

Following a Publications Task Force meeting held with IO and SAS representatives and publishers, the following publication principles were approved for adoption:

(1) All scientific specialty papers will be published in open, peer-reviewed literature;

(2) Expedition reports with site descriptions will be entirely electronic and web-based with end-user print capability; and

(3) An electronic, web-based publication series comprising expedition reports, reviewed data reports, reviewed scientific synthesis papers, and a bibliography with open access links (as permitted by journals) to all scientific specialty papers, will constitute the prime scientific program publication series.



These initiatives represent a new and fully electronic publications policy.

Expedition-related publications also were reviewed. Together, IODP-MI, the USIO, and the ESO established pro forma publication designs scheduled for 2004-06. To address issues of uniformity, timeliness, and cost-effectiveness, the TAMU publication group (part of the USIO) will edit and produce expedition publications for both riserless and mission-specific expeditions.

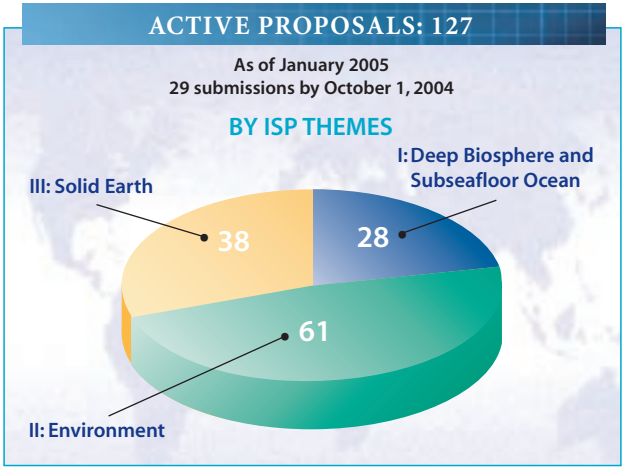
A new program journal, *Scientific Drilling*, was proposed to succeed its predecessor, the *JOIDES Journal*. Other scientific drilling programs were invited to join the initiative. The Tokyo-based Advanced Earth Science and Technology Organization (AESTO) will serve as technical editor and production manager in coordination with the IODP-MI Sapporo staff. Available in electronic and print versions, the journal is expected to debut in 2005.

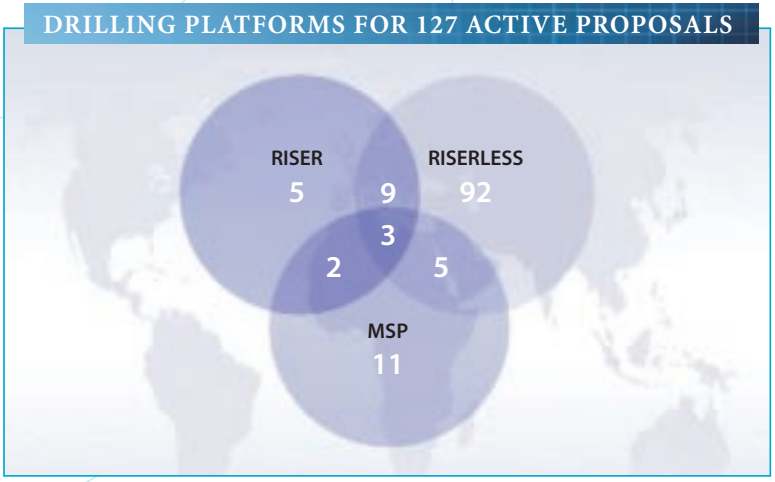
VI. SUPPORT OF THE SCIENCE ADVISORY STRUCTURE

In 2004, IODP-MI accepted 57 drilling proposal submissions, including 24 new proposals and four ancillary project letters, a total of 127 active proposals. Each is reviewed by staff to determine how well these proposals address the eight initiatives in the IODP Initial Science Plan (ISP).

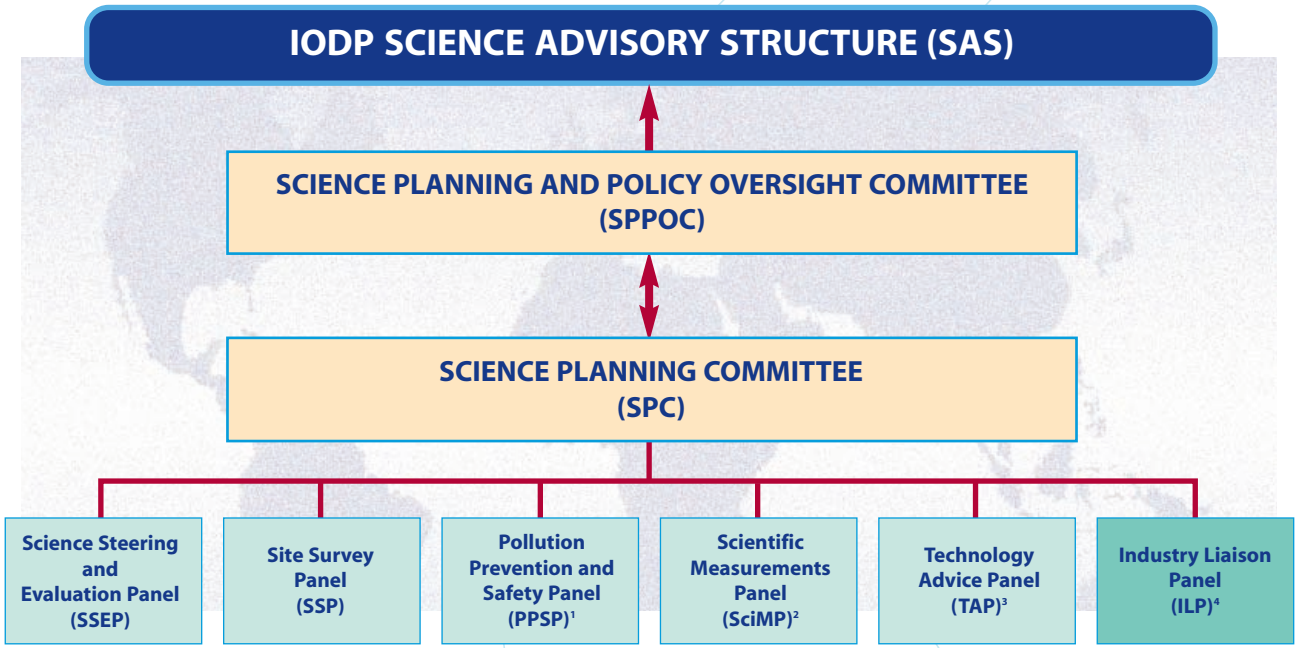
SAS provides IODP-MI with scientific and technical advice. The structure currently consists of eight standing committees and panels, and more than 160 individual members from science and industry.

IODP-MI coordinated all SAS activities to develop meeting agendas, prepare and distribute agenda books and meeting minutes, and discuss and gain approval of policy matters. In addition, IODP-MI prepared and distributed proposal packages for review by various SAS committees and panels, solicited external reviewers, distributed drilling proposals for external review, communicated the results of SAS and external reviews to proponents, and provided onsite logistical support at most SAS meetings.





VI. SUPPORT OF THE SCIENCE ADVISORY STRUCTURE



[1] Panel name will change to Environmental Protection and Safety Panel (EPSP) in FY '05.

[2] Panel name will change to Science Technology Panel (STP) in FY '05.

[3] Panel name will change to Engineering Development Panel (EDP) in FY '05.

[4] Panel will develop into the Industry-IODP Science Program Planning Group in FY '05.

SCIENCE ADVISORY STRUCTURE (SAS) MEETINGS HELD IN 2004

Site Survey Panel #1	February 11-13	Tokyo
Industry Liaison Panel #1	February 22-23	Houston
Science Planning Committee #2	March 23-26	Washington, DC
Science Steering and Evaluation Panel #2	May 17-20	Granada, Spain
Science Planning Committee #3	June 14-17	Yokohama, Japan
Environmental Planning and Safety Panel #2	June 21-22	College Station, Texas
Science Measurement Panel #2	June 23-25	Boston
Technology Advice Panel #1	June 29-July 1	Nagasaki, Japan
Science Planning and Policy Oversight Committee #2	July 8-9	Paris
Site Survey Panel #2	August 2-4	Palisades, New York
Science Planning Committee #4	October 25-27	Corvallis, Oregon
Science Steering and Evaluation Panel #3	November 16-19	Okinawa, Japan
Environmental Planning and Safety Panel #3	December 6-7	Chiba, Japan
Science Planning and Policy Oversight Committee #3	December 11-12	San Francisco

VII. EDUCATION AND OUTREACH

Reported by Nancy Light, Director of Communications

A series of program recommendations developed by advisors in an Education and Outreach Workshop and an Education and Outreach Task Force Meeting preceded the arrival of the IODP-MI director of communications. Once on board, the director developed an annual program plan that emphasized program identity and branding, internal communications networking, outreach to scientists, media relations, and public information outreach.

With consensus and input from program scientists, IO representatives, and national secretariats, a program-wide mission statement and stock language were developed for use by all IODP partners. The program logotype was refreshed with a new design element and color palette. Introduced in December 2004, the new branding elements were widely adopted by IOs, member institutions, and national secretariats on print materials and web sites.

IODP's new logo debuted when IODP-MI mounted the program's first information booth at a national science conference in San Francisco. On the exhibition floor at the American Geophysical Union Fall Meeting, the booth served as a gathering point for IODP scientists who formed an international volunteer corps to guide their non-ocean-drilling peers through IODP presentations and virtual tours. Activities of all three IOs were represented, and interactive booth briefings were conducted by two co-chief scientists in small groups of science exhibitors and journalists. In addition, visitors left the booth with take-home information about the primary program elements, the web portal address, and newly scheduled expeditions. Traffic to the IODP web site spiked noticeably after the event as more scientists located IODP online.

An IODP Town Meeting held by IODP-MI attracted approximately 300 scientists to an evening program dedicated to the program's inaugural expeditions, ships, platforms, and upcoming plans. NSF and MEXT leaders opened the program and co-chief scientists of the inaugural expeditions highlighted IODP's dramatic and newsworthy achievements.

The IODP web portal continues to gain attention and attract visitors even as it undergoes redevelopment. By December 2004, *www. iodp.org* attracted 3,937 unique web visitors – up from 1,505 unique visitors in October, when monthly web statistics first became available. Staff and outside professional resources will continue to focus on redeveloping the site until a relaunch in 2005.

IODP activities attracted ample media attention in the program's first year of operation. As media lists were developed and outreach tools accrued, media representatives flocked to news releases from the program. News coverage appeared on *USAToday.com*, and a syndicated report about the Artic Coring Expedition from the Associated Press generated news in nearly every major news daily in the United States. IODP also enjoyed coverage in European news dailies, on the BBC, in Japanese news media including NHK Broadcasting, as well as in *The New York Times.* Tracking statistics reveal that more than 2,000 journalists read online news releases from IODP-MI during the last two months of 2004 alone.

Chair Mike Coffin, Science Planning Committee, discusses upcoming program plans during a scientific conference event.

VIII. FINANCE AND ADMINISTRATION

Reported by Stephanie Murphy, Finance & Administrative Officer

During FY '04, IODP-MI opened two offices and recruited staff on two continents. A financial system was created, software was installed, and a computer network was set up that includes a wireless component that enhances time efficiency for meeting participants who travel to the Washington office. An intranet site links Washington and Sapporo employees for sharing of documents, calendars, announcements, databases, and other critical information. Ongoing information technology updates, maintenance, and networking are provided by an outside firm. An independent audit firm completed the first annual audit of IODP-MI records with a clean opinion.

After a thorough search, IODP-MI moved into its new Washington, DC headquarters on September 30. The new office affords meeting space for the Board of Governors, task forces, and committees, plus the capacity for video conferences. Eight employees were recruited in 2004 and four more vacancies are to be filled in 2005.

In Sapporo, IODP-MI opened its doors April 1 on the Hokkaido University campus, where offices are provided cost-free through the support of Prof. Hisatake Okada, Chair of the Board of Governors. Nine employees were recruited in 2004, all supervised by the Vice President of Science Planning. One more position is to be filled in 2005.

(left) IODP-MI headquarters offices are located in the heart of Washington, DC.
(right) The IODP-MI office in Japan is located on campus at Hokkaido University in Sapporo.

IODP MANAGEMENT INTERNATIONAL, INC.

STATEMENT OF FINANCIAL POSITION

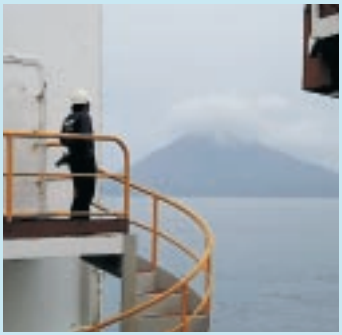
September 30, 2004

ASSETS

Cash	$ 138,911
Contracts receivable	230,598
Dues receivable	10,000
Prepaid expenses	24,713
Certificate of deposit	66,478
Deposits	7,385
Total assets	$ 478,085

LIABILITIES AND NET ASSETS

Liabilities	
Accounts payable	$ 123,350
Accrued expenses	90,960
Subrecipients payable	181,284
Total liabilities	395,594
Net assets	
Unrestricted	82,491
Total liabilities and net assets	$ 478,085



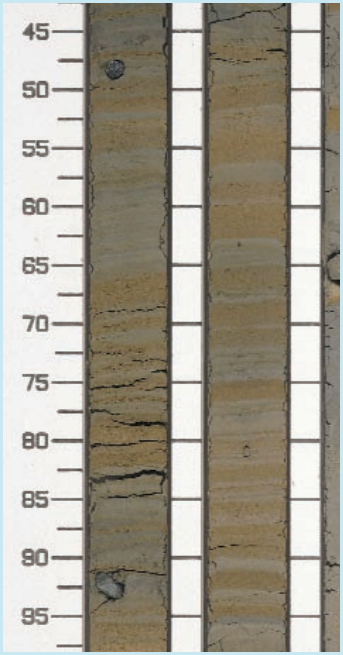
The complete audit report, with footnotes, is available by contacting IODP-MI, Washington, DC.

IODP MANAGEMENT INTERNATIONAL, INC.

STATEMENT OF ACTIVITIES

February 28, 2003 (Date of Inception) to September 30, 2004

Revenue and support	
Contract revenue	$ 1,565,425
Membership dues	275,000
Miscellaneous	391
Total revenue and support	$ 1,840,816
Expenses	
Program expenses	$ 1,062,646
General and administrative expenses	695,679
Total expenses	$ 1,758,325
Change in net assets	82,491
Net assets, February 28, 2003 (date of inception)	-
Net assets, September 30, 2004	$ 82,491



IODP MANAGEMENT INTERNATIONAL, INC.

STATEMENT OF CASH FLOWS

February 28, 2003 (Date of Inception) to September 30, 2004

Cash flows from operating activities	
Change in net assets	$ 82,491
Changes in operating assets and liabilities	
Contracts receivable	(230,598)
Dues receivable	(10,000)
Prepaid expenses	(24,713)
Security deposits	(7,385)
Accounts payable	123,350
Accrued expenses	90,960
Subrecipients payable	181,284
Net cash provided by operating activities	205,389
Cash flows from investing activities	
Purchase of certificate of deposit	(66,478)
Net increase in cash	138,911
Cash, February 28, 2003 (date of inception)	-
Cash, September 30, 2004	$ 138,911

IX. STATUS OF CONTRACTS

Reported by John Emmitte, Contracts Officer

As the U.S. National Science Foundation awarded the prime contract to IODP-MI, the first phase of international partnerships between the NSF, MEXT, and sponsor countries began to unfold.

Within the first few weeks following the contract award, IODP-MI issued a subcontract for FY '04 to AESTO to assist in the start-up, operation, and management of IODP-MI Sapporo. The AESTO agreement includes resources for administrative support, science planning, proposal handling, Science Advisory Structure (SAS) meeting coordination, data management, and oversight of program publications. A new five-year subcontract was awarded to AESTO by October 1, 2004.

The five-year memorandum of understanding (MOU) between JAMSTEC and IODP-MI establishes a formal framework for planning, coordinating, and implementing future IODP-JAMSTEC activities. IODP-MI and JAMSTEC leaders formally ratified the finalized MOU in Japan in late fall.

Funds are transferred to cover science-operating costs (SOC) only after contractual ties are established between IODP-MI, the IOs, and others. With the aforementioned contract in place with the University of Bremen, we are in negotiations with JOI and the British Geological Survey (BGS, representing the ESO) to undertake MSP operations. Similarly, JOI will manage, coordinate, and perform the activities and services necessary to support the scientific research operations associated with the USIO program.

X. FOREIGN OUTREACH

Reported by Yoichiro Otsuka, Senior Advisor to the President

International partnerships represent a vital element of IODP. IODP-MI's relationships with the Lead Agencies, specified through MOUs, are a fundamental mechanism of the program. Accords were reached after several years of discussion in the International Working Group, which represented more than a dozen countries. In March 2004, the European Consortium for Ocean Research Drilling (ECORD) joined IODP as a contributing member, and in April 2004 the Ministry of Science and Technology (MOST) of the People's Republic of China joined the program as an associate member. The program currently spans three continents and 18 countries.

Continual efforts are in place to expand IODP's membership. IODP-MI held two meetings, in September and November 2004, with the Korea Institute of Geoscience & Mineral Resources (KIGAM) to discuss how Korea might join IODP, given its national resources. IODP-MI is in contact with scientists in Australia, Brazil, India, New Zealand, Russia, and Chinese Taipei. The creation of a new consortium comprised of many nations is under consideration as a practical solution.

IODP MEMBERSHIP

LEAD AGENCIES

U.S.A. (NSF)

Japan (MEXT)

CONTRIBUTING MEMBER

ECORD (European Consortium for Ocean Drilling Research):

Austria / Canada / Denmark
Finland / France / Germany
Iceland / Italy / Netherlands
Norway / Portugal / Spain
Sweden / Switzerland
United Kingdom

ASSOCIATE MEMBER

People's Republic of China (MOST)

PROSPECTIVE MEMBERS

Australia

Brazil

Chinese Taipei

India

Korea

New Zealand

Russia

As of 12/04.

XI. APPENDIX

(A) Board of Governors

OFFICERS:

Chair:
Hisatake Okada
Hokkaido University, Japan

Vice Chair:
Paul Stoffa
University of Texas, U.S.A.

Treasurer:
Christopher Harrison
University of Miami, U.S.A.

Secretary:
Kiyoshi Suyehiro
Japan Agency for Marine-Earth Science and Technology, Japan

President & CEO:
Manik Talwani

GOVERNORS:

Robert Detrick
Woods Hole Oceanographic Institution
U.S.A.

Olav Eldholm
University of Bergen, Norway

David Falvey
British Geological Survey,
United Kingdom

Takemi Ishihara
National Institute of Advanced Industrial Science and Technology,
Japan

Dennis Kent
Rutgers University, U.S.A.

Gaku Kimura
University of Tokyo, Japan

Hajimu Kinoshita
Japan Agency for Marine-Earth Science and Technology, Japan

Toshiyasu Nagao
Tokai University, Japan

Hisatake Okada
Hokkaido University, Japan

Neil Opdyke
University of Florida, U.S.A.

John Orcutt
Scripps Institution of Oceanography, U.S.A.

Tokio Osaki
Kochi University, Japan

Tsunemasa Saito
Tohoku University, Japan

Eli Silver
University of California
Santa Cruz, U.S.A.

Paul Stoffa
University of Texas, U.S.A.

Manik Talwani
IODP-MI (non-voting)

Joern Thiede
Alfred Wegener Institute for Polar and Marine Research, Germany

(B) IODP-MI Staff

Manik Talwani
President & CEO

Thomas Janecek
Vice President, Science Operations

Hans Christian Larsen
Vice President, Science Planning

Yoichiro Otsuka
Senior Advisor to the President

Yumi Baba
Administrative Assistant

Nobuhisa Eguchi
Science Coordinator

John Emmitte
Contracts Officer

Diane Giuliani
Executive Assistant to the President

Nancy Light
Director of Communications

Therese Lowe
Project Assistant

Bernard Miville
Data Management Specialist

Stephanie Murphy, CPA
Finance & Administrative Officer

Jeffrey Schuffert
Science Coordinator

Emanuel Soeding
Publication, Sample & Data Integration Manager

Saneatsu Saito
Executive Program Associate

Kozue Shimada
Administrative Assistant

Yoshiko Suzuki
Contracts Officer

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Front cover: (top) Kathy Couchon, teacher-at-sea, aboard the *Oden*, IODP Leg 302, the Arctic Coring Expedition. (inset second row) Jerry Dickens of Rice University, aboard the *Vidar Viking* during the inaugural Arctic Coring Expedition. (bottom left) Andy Fisher of University of California, Santa Cruz, addressing scientists at the IODP Town Meeting held in San Francisco, December 2004.

IODP-MI
INTEGRATED OCEAN DRILLING PROGRAM
MANAGEMENT INTERNATIONAL

815 Connecticut Avenue, NW, Suite 210

Washington, DC U.S.A. 20006

Tel: (001) 202-465-7500

Fax: (001) 202-955-8363

CRIS Building, Rm. 05-101

Hokkaido University

N21W10 Kita-ku

Sapporo 001-0021 Japan

Tel: (81) 11-738-1075

Fax: (81) 11-738-3520

www.iodp.org