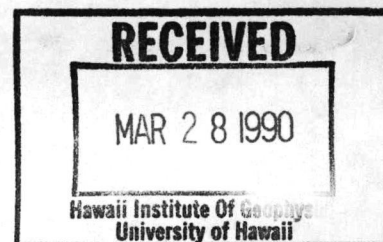


BCOM Report
6, 7 and 8 March 1990
Washington, D.C.



1. BCOM met in Washington D.C. on 6, 7 and 8 March 1990. Members present were Brian Lewis in the chair, Jim Briden, Hans Durbaum, Ralph Moberly and Jamie Austin. Also present for part of the time were Xenia Golovchenko (LDGO), Phil Rabinowitz and Audrey Meyer (TAMU), and Tom Pyle and Ellen Kappel (JOI).

1.1 NSF provided a target budget of \$39.3 M from U.S. and partner-country funds and would consider a further \$0.3 M specifically for further technological development above that supportable through base budget and 4% SOE. EXCOM in 1988 had projected that total costs for FY1991 would be \$40M.

2. Emphasis on New Technology.

In NSF's letter of 2 January, 1990 to JOI Inc. concerning the FY91 Program Plan it is mentioned that "NSF is prepared to consider arguments for additional resources above the target level for engineering and technology development in the FY budget - providing that these additional funds represent a real increment above FY90 levels in this category." BCOM welcomes this offer in the light of the necessity on one hand to improve the Diamond Coring System and to make it operational soon, and on the other hand to have the necessary high-temperature slimhole tools developed. There have since been negotiations between JOI Inc. and Sandia Laboratories on necessary developments and adaptations to HT tools for ODP purposes. BCOM recommends that JOI Inc. not only propose to NSF that the \$300,000 be spent in this way, but also that a further \$150,000 be allocated for a duplicate set of these tools.

3. Proposals to BCOM.

The proposed draft budget totals presented to BCOM were:

	<u>Presented</u>	
TAMU	\$35,971,000	
LDGO	3,760,200	
JOI/JOIDES	1,377,865	
MRCs	70,000	(Micropaleo Reference Centers)
SANDIA	<u>450,000</u>	
TOTAL	\$41,629,065	

In the morning of 6 March, excellent presentations were made by JOI, TAMU and LDGO to the committee, which provided the BCOM with an overview of the budget requests. In the discussions that developed, problems that needed attention from the BCOM were identified.

In the late afternoon of 6 March the BCOM reviewed, in executive session, the budget in terms of the FY91 program plan, the long-range outlook for ODP, recommendations by recent reviews of ODP, and the necessity to balance the budget. It was recognized that:

3.1 There were two elements of the budget that are non-negotiable by JOI Inc., namely the SEDCO and Schlumberger contracts.

TABLE 1

Budget Summary FY 91

		<u>Bids presented to BCOM</u>	<u>BCOM Allocation</u>
TAMU	Base	\$32,640,000 ¹	\$32,715,000 ²
	SOE	3,331,000	1,602,000
LDGO	Base	3,346,000	3,316,218 ³
	SOE	414,200	256,000
JOI/JOIDES		1,377,865	1,340,782 ⁴
MRC		70,000	70,000
Sandia		450,000	450,000 ⁵
		<u>\$41,629,065</u>	<u>\$39,750,000</u>
		Including SOE	\$1,858,000
			+ \$450,000 } note 6

- Notes: 1. Base budget bid against target \$34M less 4% SOE
2. \$75,000 TAMU SOE bid for Pressure Core Sampler agreed within base budget—see Table 2
3. Includes \$30,000 LDGO base bid for CONOCO consortium fee agreed but classified as SOE by BCOM
4. \$37,083 reduction to set JOIDES Advisory Services ceiling at \$550,509
5. Subject to NSF allocating funds, see paragraph 2
6. SOE to TAMU and LDGO = 4.9% of their combined budgets; this rises to 6.02% if the \$450,000 Sandia item is included

3.2 Such items as fuel, port-call costs, and travel costs are difficult to predict, but TAMU, LDGO, and JOI had made realistic estimates of probable costs.

3.3 One potential increase in the SEDCO day-rate has been budgeted. As in previous years, day-rate increases and deductibles for insurance claims will have to be dealt with by management if they occur.

3.4 JOI Overhead. JOI Inc. is in the process of renegotiating the way in which it calculates its general and administrative costs (G&A) related to the ODP. If successful in this process JOI anticipates a reduction of \$400,830 in this amount relative to FY 1990 costs. This provided a corresponding increase in the funds available for other activities.

3.5 Publications. In the FY90 program BCOM recommended that SOE be assigned to speed up publications. TAMU has implemented this recommendation with the result that by the end of FY90 the backlog of volumes in preparation for publication will have been eliminated. TAMU requested special funds to print this backlog.

3.6 Transportation of cores from ship. BCOM noted that concern had been expressed by IHP and co-chiefs that funds were insufficient to transport the cores from the ship after every leg. TAMU gave assurance that their base budget indeed covers this item.

3.7 Drilling Schedule. The science plan approved by PCOM for FY1991 calls for extensive early use of the diamond coring system (DCS). This impacts the scheduling of funds for development of the DCS in FY91 and was a major factor in the BCOM recommendations.

3.8 Base budgets and inflation. The base budget for all contractors had increased by about 4%, approximately commensurate with the present rate of inflation in the U.S.A. BCOM endorsed this rate of increase in the base budgets but is aware that inflation above 4% in FY1991 will have a detrimental result on the program.

3.9 The target of at least 4% Special Operating Expenses (SOE) must be achieved and utilized for the purposes originally intended by JOIDES. SOE is calculated on the total budget minus the JOI/JOIDES budget.

On the morning of 7 March BCOM obtained additional comments from JOI and the subcontractors about their programs. During the remainder of the day, BCOM, in executive session, developed the following recommendations.

4. Budget Recommendations:

4.1 Base Budget

BCOM was especially pleased to note that the base-budget requests were close to the projected inflationary rates and also had reflected the general advice of JOIDES. Even though the total requests by the subcontractors were beyond the total funds available for FY91, the level requested in the base budget was sufficiently restrained that a modest sum was available for the vital Special Operating Expenses that are discussed in a following section. BCOM thanks TAMU, LDGO, and JOI-JOIDES for this restraint.

BCOM decided:

- (1) that the further development of the pressure core sampler (PCS II) be considered a normal advancement of engineering development, and therefore added \$75,000 to the TAMU base budget,
- (2) that the request to join the CONOCO consortium is properly an SOE and therefore transferred its one-time cost of \$30,000 from the LDGO base budget to the SOE category,
- (3) that the separate item for a radiolarian component to the MRCs be transferred to become a part of the JOI-JOIDES base budget (realizing that this will be subcontracted by JOI at some figure near \$70,000 based on bidding not yet complete), and
- (4) that the JOIDES Advisory Services part of the JOI base budget be reduced \$37,083 from the requested \$587,592 to \$550,509. These adjustments to the budget are summarized in Table 1.

4.2 Special Operating Expenses

To ensure the "innovation content" of the Ocean Drilling Program, BCOM recommended that for FY91, SOEs should be allocated to four initiatives (Tables 2 and 3): acceleration of the continued development of the diamond coring system, development of high-temperature logging capability, acceleration of the publication schedule of both the "Initial Reports" and "Scientific Results" volumes, and selected enhancements to the existing program.

4.2.1 Diamond Coring System (\$843,000): The promise of better core recovery in young brittle ocean crust and other lithologies difficult to sample, has led JOIDES to recommend further developments and improvements of the DCS, including (a) post-ENG II (Leg 132) improvements, (b) preparation for ENG III (Leg 136), including testing of the DCS/drill-in bottom-hole assembly (BHA), and (c) longer term development of technology. The exact distribution of efforts by TAMU funded within this SOE will await the outcome of Leg 132, but by allocating the largest SOE to this initiative and listing it first among these four SOEs, BCOM emphasizes the importance of the DCS as a development necessary to achieve several important scientific themes of the program.

4.2.2 High-temperature logging (\$180,000): BCOM approves LDGO's requested SOE for repackaging the slimhole formation resistivity, gamma ray, and sonic tools, either through work at BRG at LDGO or by subcontract. BCOM also acknowledges with great appreciation the donation of these tools to BRG from ARCO. These tools and those being proposed separately from Sandia must be available in a timely manner for much of the drilling activities proposed in the immediate future of the program.

4.2.3 Publications (\$172,000): The scientific community has been critical of the rate at which publications of ODP results have appeared. BCOM commends TAMU for its success in responding to that criticism. To capitalize on this success BCOM recommends that \$172,000 be allocated beyond the TAMU base budget, to print four volumes beyond the normal 12 volumes budgeted for FY91. BCOM agreed with TAMU's assertion that publication staff will be adequate to maintain a steady-state schedule.

TABLE 2

TAMU Requested SOE, in priority order

	<u>Requested</u>	<u>Allocated</u>
1. Publication: production of two additional volumes of <i>Proceedings</i> .	\$86,000	\$86,000
2. Computers	99,000	37,000 (note 1)
3. Gulf Coast Repository, extension of refrigeration FY92	89,000	deferred to
4. Drilling Operations; replacement for exceptional high losses of supplies	450,000	450,000
5. Engineering Developments: Diamond Coring System	461,000	461,000
Pressure Core Sampler	75,000	(note 2)
6. Scientific Equipment: CD-ROM for ODP database	43,000	43,000
other equipment and projects	57,000	57,000 (note 1)
7. Further development of Diamond Coring System High temperature fluid sampler (note 3)	900,000	382,000
8. Additional Electronics/Marine Technical support	100,000	_____
9. Publication: two further volumes, additional to item 1 above	86,000	86,000
new publications staff	185,000	_____
10. Additional Science Equipment:		
Real-time navigator	250,000	
Color imaging device	175,000	
Whole core X-ray	30,000	
Petrology photocopier	5,000	
IBM-PCs	33,000	
MARISAT replacement	30,000	
	523,000	_____
11. Three Staff Scientists (salary and recruiting costs) for editorial support	<u>177,000</u>	<u>_____</u>
	\$3,331,000	\$1,602,000

Notes to TAMU requested SOEs

1. Final decision on the spending of \$37,000 and \$57,000 approved in items 2 and 6 respectively to be determined by JOIDES advisory structure (see paragraph 4.2.4 (b)).
2. Pressure core sampler funding agreed, but assigned to base budget by BCOM.
3. TAMU also put in a holding bid for an additional \$300,000 which has been subsumed into the \$450,000 request to NSF for supplementary funds for new technology (see "Sandia" item in Table 1, and paragraph 2 in text).

TABLE 3

LDGO Requested SOE, in priority order

	<u>Requested</u>	<u>Allocated</u>
1. Hot temperature tools, dewarring, etc. of slimline tools donated by ARCO.	\$180,000	\$180,000
2. Shipboard specialist for FMS Processing	46,000	46,000 (note 1)
3. Postdoctoral fellow for Borehole Research Group	51,400	Not approved
4. Assistant Systems Manager	54,100	"_____"
5. High density tape drive	13,000	"_____"
6. Disk drives for Masscomps	14,000	"_____"
7. Second-hand Masscomp 5520 for back-up and spares	20,000	"_____"
8. Mac II x 4	18,000	"_____"
9. Apple scanner	1,200	"_____"
10. Maxtor disc drive spare for shipboard VAX	3,000	"_____"
11. Futher Masscomp upgrades	11,000	"_____"
12. Tektronix color printer for Mac II	<u>2,500</u>	"_____"
	\$414,200	\$226,000
13. CONOCO consortium fee requested by LDGO in base budget but allocated to SOE by BCOM		<u>30,000</u>
		\$256,000

Note 1. Approved for 1 year only as SOE

4.2.4 Additional response to JOIDES Advice (\$663,000): Based on recommendations of the science advisory structure and after further questioning of the subcontractors, BCOM recommends the following SOE items beyond the TAMU and LDGO base budgets:

(a) Drilling operations (\$450,000).

Recognizing the requirement to replenish drilling supplies after the abnormally high losses of BHAs and televiewers in the past few months, BCOM recommends \$450,000 for TAMU for partial replenishing of its inventory.

(b) Shipboard measurements and information handling (\$100,000) and computers (\$37,000).

TAMU requested a total of \$722,000 for shipboard and shore-based scientific equipment and projects, including computers (items 2,6 and 10 in Table 2). BCOM approved \$43,000 for development of a CD-ROM of the ODP data base for public distribution, and \$94,000 to be expended for the highest-priority recommendations of the SMP and IHP panels (see Table 2, note 1). These panels are meeting in March 1990 to set their recommendations into priority; PCOM will forward specific recommendations to JOI. The \$32,000 for shore-based computer equipment and \$30,000 for programming support requested by TAMU as SOEs should be absorbed, if possible, within the TAMU base budget.

(c) FMS Specialist, \$46,000:

The strong impact of the Formation Microscanning Tool (FMS) on the interpretation of structure and lithology of ODP holes requires speedy processing of FMS logs onboard ship. BCOM recommends an SOE of \$46,000 to LDGO for a one-year trial of a 0.5 FTE technician (shared with 0.5 technician within the TAMU base budget) to process FMS logs on the *Resolution*.

(d) CONOCO Consortium (\$30,000).

BCOM recommends funding LDGO's BRG membership in the CONOCO logging-test consortium. We strongly prefer one-time SOE of \$30,000 for membership fees rather than the alternative of using BRG personnel for reprocessing geochemical logs for the consortium.

4.2.5 Gulf Coast Repository: To clarify one specific item, in light of the funding cycle and the lead-time necessary, we defer the request by TAMU for funds to expand core-storage capacity in the Gulf Coast Repository; but recognize this must be a high priority SOE for the FY92 BCOM deliberations.

4.3 Outline budgets incorporating the BCOM recommendations are attached as Annex A.

5. Long-Range Implications:

The previously described allocations of funds allow both for stable base budgets, and SOE expenditures well in excess of the minimum levels mandated by EXCOM. BCOM, however, notes with anxiety that FY91 budgetary flexibility has occurred only as a result of a number of factors being favorable simultaneously; the inflationary climate resulting in only modest increases in day rates and fuel charges; the willingness of all program subcontractors to prioritize their special needs in the context of base budgets cognizant of ambient inflation; a substantial reduction in logging-tool insurance premiums; and a one-time saving induced by a change in cost-accounting procedures at JOI Inc. Because these ameliorating effects on expenditures could disappear at any time, BCOM strongly endorses the target figure of \$42 M that EXCOM has proposed for the program in FY92, in line with long-term projections for expected, realistic cost increases.

BCOM passed these recommendations to JOI Inc. for discussions with the subcontractors.