85 844 PCCCC 7 1985

Report of the Information Handling Panel meeting, College Station, Texas, September 9-11, 1985

#### Summary

1. Publications policy. The IHP restated its firm committment to a strong ODP publication program, and concluded that the two-part program adopted last year by PCOM still best meets the needs of the scientific community. To deal with the current financial shortfall the Panel endorses the conclusions and recommendations of the PCOM Publications Review Subcommittee. We recommend that (1) post-cruise conferences proceed on schedule; (2) all necessary material for Part A volumes be ready at the post-cruise conferences; (3) as a temporary expedient basic, cheaply-printed Initial Core Descriptions be produced for the early legs; (4) as Part A volumes can be completed, they are shelved to await funding for publication; (5) Part B. manuscripts be scheduled as originally planned, and shelved when received to await funding for editing and printing. The Panel concluded that ODP must maintain responsibility for publication of "Part B" peer-reviewed scientific reports by some means, and our proposal for a Part B volume seems ultimately to serve best the scientific community at a cost no higher than alternative proposals.

The IHP feels that the proposed "steady state" publications costs of \$2.1 million are reasonable and in line with percentage publication costs of other large science programs. We recommend that publications be given a very high priority when and if additional funding becomes available, to facilitate earliest possible publication of Part A volumes. If anticipated improvement in funding does not occur, IHP asks to meet on an emergency basis to evaluate further options.

In our assessment, if the results of the ODP are not published in an adequate and coherent form, the Project loses its only universally visible product.

2. Logging data. IHP recommends that the routine wireline logging results be published, as edited and selected by the logging operator in consultation with the science operator, in Part A at the scale of the barrel sheets. If financial or production constraints preclude this, representative logs should be published and the presense of all logging data indicated on the core descriptions. Non-routine downhole measurements should appear as individual scientific experiments in Part B.

3. <u>Other subjects</u>. The following matters were also considered at the IHP meeting, and are covered in the attached report.

- (a) Logging data distribution policy
- (b) Appointment of a liaison to IHP from the logging operator.
- (c) Sample curation policy, especially regarding requests for whole round core samples for destructive shipboard analysis.
- (d) Status of ODP data bases and data aquisition
- (e) Status of Micropaleontology Reference Centers
- (f) Status of ODP computer services
- (g) Need for representative sampling for consistent correlation

-1-

of various measurements.

(h) Relation of ODP Data Bank at LDGO to other data banks and services.

-2-

(I) Request for a Japanese representative on IHP.

# Report of the Information Handling Panel meeting September 9-11, 1985, College Station, Texas

#### I. ODP Publications

The Panel first considered the crucial situation which exists regarding the future of the ODP publications program. The current financial crisis in the ODP has resulted in a reduction of the publications budget virtually to zero. The Panel heard a presentation by S. Gartner of the report of the special PCOM subcommittee for review of ODP publications, dated 12 August 1985, and discussed that report at length. In general, we agree with the recommendations of the

-3-

subcommittee. We consider the following points especially important.

1. The IHP remains firmly committed to a strong ODP publications program. In 1984 we were asked by PCOM to consider a publications policy for ODP. We sought the opinions of many scientists, both participants in the program and those interested in the scientific results, and we considered the pros and cons of a great many publication options. All of these are described in detail in our 1984 report. We recommended a publications scheme which we felt would best satisfy the requirements of the entire scientific community by maintaining leg coherence, timeliness, editorial quality control and flexibility. This scheme was adopted in modified form by PCOM. It consists of an Initial Report (Part A) to appear about one year post-cruise, containing introductory material, site chapters, core descriptions (barrel sheets) and a short scientific summary. This would be followed, about 3 years post-cruise, by the final scientific report (Part B) containing the peer-reviewed scientific papers by the various shipboard specialists.

We are convinced that a publications program similar to this remains ultimately essential, despite the present financial shortfall. For most earth scientists, if the results of the drilling are not published in an adequate and coherent form, the Project loses its only universally visible product.

2. Our experience with computerized data bases strongly suggests that the number of scientists using them is negligible compared to those depending on the publications. Even those who do use the data bases are almost

-4-

always led to them from the publications. Information collected by Melgren, Nowak and Saunders indicates that this is especially the case in Europe. Therefore maintenance of machine-readable data bases, though important, is no substitute for publication even under severe financial restraints.

3. We agree with the PCOM publications subcommittee that Part B is essential to the program and ODP must eventually be responsible for its publication in some way. Much data of critical importance (for example, the biostratigraphic data) is only available from these papers. These contributions are the major record of all of the planning, execution and analysis effort focussed on the critical geologic problems which constitute the reason for each leg of the ODP. Without some form of Part B they would be widely scattered, without control over quality and timeliness; many might never appear at all.

4. We feel that it would be an unforgivable mistake now to cripple permanently the publications effort of the entire decade-long Ocean Drilling Program on the basis of an initial financial shortfall, which may be only temporary. Because the full publications effort is automatically phased in slowly, as the program generates the results from successive legs, the costs are not high initially. Futhermore, it is the consensus of the Panel that even the projected "steady-state" costs of about \$2.1 million are not at all out of line for a program of the magnitude of ODP, and are quite comparable with percent publication costs for other large scientific programs. As one eminent scientist put it to us, "I think saving money by publishing fewer scientific results is an unacceptable,

-5-

self defeating idea (Wouldn't we all sometimes like to have fun in the field and be satisfied, if we know the results?)."

5. Meanwhile, we recognize that all possible measures must be taken to lower publications costs, consistent with maintaining the program as approved by PCOM and outlined above.

<u>Recommendations.</u> We support the conclusions and recommendations of the PCOM publications review subcommittee. Specifically, (a) the post-cruise meetings should proceed on schedule, and all material necessary for Part A should be required from the shipboard party at this time as originally planned.

(b) Since the current funds run out after the post-cruise meeting ODP should produce (as a temporary expedient) a rather basic cheaply-printed Initial Core Description (ICD) - type publication for each leg during FY 86, so that sample requestors will have something to go on.

(c) Meanwhile, whatever editorial work possible should continue to produce the final Part A volumes for these legs, to be printed in FY 87. As Part A volumes are completed, they will be put on the shelf to await printing funds.

(d) Manuscripts for Part B should be planned, assigned and given deadlines as though the original publications schedule would still be followed. As they are received, they will also have to be temporarily shelved to await editing and printing funds.

-6-

(e) The Panel urges that restoration of publication funds be given the <u>highest priority</u>, if and when the present shortfall is ended. Specifically, we hope that all funds which become available from the phase-down of DSDP publications in FY 87 be used for ODP publications, and that publication of the delayed Part A volumes for the early legs will take place at the earliest date possible to maintain the visibility of the program to the scientific community.

(f) The Panel noted that negligible costs would be saved by cutting back on the ODP data bank efforts, as these are minimally funded now. Furthermore most of the work which is being done is essential for the publications anyway. Therefore, we recommend against trying to squeeze any further publications money out of data bank management.

The Panel discussed other possibilities for effecting savings within the recommended publications scheme, with input from the ODP publications staff. We concluded the ODP seems to be proceeding responsibly and cautiously in seeking out potential cost-cutting technology; but we do not feel that this kind of saving will materially reduce ultimate publication costs.

<u>Final Recommendations on Publications</u>: We recognize that anticipated funds may not materialize, and that the shortfall may therefore persist for an indefinite time. Should this unfortunate situation occur, we recommend that IHP meet immediately on an emergency basis to re-evaluate the possibilities. We restate, however, our belief

-7-

that an Ocean Drilling Program without adequate publications is unthinkable and self-defeating. At any rate we will evaluate the progress of publications in 6 months. Meanwhile we propose to circulate a brief questionnaire to the interested scientific community, encluding JOIDES Journal recipients, DSDP and ODP mailing lists and others, to obtain a more objective and quantitative estimate of (a) the usefulness of proposed ODP publications; (b) type of publication scheme preferred; (c) potential use of data bases; and (d) other possibilities for information dissemination.

## II. Logging Data

The IHP discussed at length the possible publication of logging data. Now that routine downhole wireline logging is an integral part of the drilling program, the amount and importance of this data increases tremendously. However, publication of this data could greatly impact publication costs. The Panel adopted the following resolution: The IHP recommends that the routine downhole wireline logging results should be made available to all interested scientitsts. The most desirable course would be to publish the results, as edited and selected by the ODP Logging Operator in consultation with the Science Operator, in Part A of the Proceedings of the ODP, at the scale of the barrel sheets. However, financial and editorial production constraints may dictate that only representative logs be published, along with an inventory of all logging data available. Non-routine downhole measurements should be treated as individual scientific experiments, and the results reported in Part 3 of the Proceedings. Their existence should be noted appropriately in Part A

-8-

where feasible.

In the absence of prior experience, we cannot have a clear perception of all aspects of publication of logging data. Therefore the IHP thinks it prudent to review policy regarding such publication in about one year.

The Panel reviewed Roger Anderson's draft policy on distribution of logging data, in view of overall ODP data distribution policy. We recommended that (a) tapes of logs of all offshore wells also be sent after one year to NGDC as practical; (b) cost of tape duplication needs to be budgeted; (c) item 6 be clarified, to specify who are the off-shore archiving agencies and logging representatives from each country, and if 'exchange" is necessary; (d) who can receive information from the Logging Operator if they want it. R. Merrill was asked to work these matters out with LDGO.

The above discussion showed the necessity for more information about the logging services being made available to IHP. The following <u>recommendation</u> was adopted: The IHP requests that a data management specialist from the ODP Wireline Logging Services operator at LDGO be appointed as liaison to attend the IHP meetings, in view of the increasing importance and complexity of the logging data base.

# III. Curation and Related Issues

The Panel reviewed the curatorial structure and procedures

-9-

stablished by ODP. Samples are currently being distributed at a rate of about 1000/repository/month; average time to fill a request is about 5 to 6 weeks which we thought to be reasonable. Requestors are being queried on whether they have lived up to past committments on supplying reprints, returning unused material, etc. The Panel re-stated its support for the policy of requiring peer-reviewed proposals for unusual sample requests, which violate normal JOIDES policy.

A major issue affecting sample distributions policy was triggered by a proposal from Elliott Taylor that consolidation and triaxial testing be done on a semi-routine basis aboard ship. This type of analysis requires whole-round core samples of fairly large size and frequency and is more or less destructive. It therefore violates the integrity of the archival ilves of the cores. In considering this larger issue, the Panel concluded that archival halves are not necessarily sacrosanct, but that any request to sample them must be very cautiously, carefully and judicially handled, and that present procedures provided for this.

The Panel then invited W. Bryant of TAMU to attend as an expert in these types of measurements, and help evaluate the reasonableness of the request. We concluded that consolidation testing could be "semi-routine", but triaxial testing should be done only for a good program reason. The Whole Round Core Sampling Policy was amended as follows: "Whole round samples may be requested for consolidation testing. These consist of a maximum of one 8 to 10 cm section per lithologic unit of unlithified sediment, from core sections expected to have no coring disturbance. If .is frequency of sampling will excessively deplete the core in the

-10-

udgment of the co-chief scientists, sampling must then be done from a duplicate core at the site.

Sampling of whole round cores for triaxial testing is an exception to this policy and must be proposed through the JOIDES panel structure. Alternatively, if time and resources permit, co-chiefs may authorize a dedicated additional hole for this purpose.

All whole round samples must be retained intact until the shipboard scientists have determined that stratigraphically critical intervals will not be destroyed."

The Panel restated existing policy that routine interstitial water upling can consist of up to 10 cm of whole round core taken every 50 m downhole. Additional material may be taken from the shipboard portion of the working half at the discretion of the co-chief scientists. Any exceptions must be included in the proposals for designing the leg, and be submitted through the JOIDES panel structure to allow for peer review. Duplicate holes at the site are always an option, allowing for unlimited destructive sampling of whole-round core.

# IV Paleo Reference Centers

J. Saunders reviewed the status of sample selection and preparation for the Micropaleontolgy Reference Centers. A brief summary, furnished by him, is attached. The biggest problem is radiolarian processing. The

if difficulty is that the project is mostly unfunded, and J. Saunders

-11-

and W. Riedel (SIO) are to main intersted parties.

The IHP recognized Bill Riedel's years of outstanding service as Curator at DSDP, and his seminal role in guiding the development of the reference centers. The Panel emphasized that Riedel and Saunders have the full blessing of the Panel and of ODP in running the reference center project. We strongly urge that Riedel apply to USSAC or other sources for support to continue the work and especially to do the radiolarian processing at SIO. IHP makes the following <u>recommendations</u> to PCOM. (1) That PCOM formally thank Bill Riedel for his tremendous contributions as Chief Curator of DSDP over many years. (2) That Bill Riedel retain his major role in the development of the Micropaleo reference Centers, including establishment of the remaining centers and planning for the preparation of the final fossil groups. (3) That PCOM support Riedel in his efforts to obtain funding for this purpose.

### V. Data Bases

The IHP reviewed at length the progress made at ODP in establishing the scientific data bases. Allen Bakker provided detailed documentaion including data collection forms, methodology, planning and progress in each area. The Panel concluded that the various types of data from the ship should be put into machine - readable form without delay, despite the delay in publications, to facilitate data use and production of the publications as expeditiously as possible after funds are restored. The Panel agreed with R. Merrill that the Paleo data should be excepted, as the interpretations change too drastically even at the time of the

-12-

## post-cruise meeting.

The data collection forms for shipboard use were dicussed in detail, including the balance between the confusion resulting from too many forms (e.g., the early igneous rock forms) or too much stuff on one form (e.g., the smear-slide form). The problems of implementing the hard-rock data base, for which few guidelines exist, were especially discussed by Bakker; he is adopting a system based on methods developed by the Cyprus drilling project for visual core description. On one very important point, the Panel agreed that hard-rock thin sections should be made of representative samples and not just of "interesting" or odd structures. In this connection, the Panel <u>recommends</u> to PCOM that co-chiefs be encouraged to obtain as many different kinds of data as possible from the <u>same</u> stratigraphic units, to enable correlation between the different data bases.

The Panel also discussed the possibility of holding workshops as a way of standardizing procedures in particular areas, for example igneous rock classification and visual core descriptions. ODP already does this where necessary, but the Panel concluded that sufficient progress was being made without a workshop for the present.

In discussing the chemistry data bases, it was noted that the new LDGO logging system provides additional chemical data. The Panel urged coordination of this data with the TAMU core analysis data; another reason for a logging-operator liaison to IHP.

-13-

The Panel concluded that the raw X-ray diffraction data does not need to be stored in an integrated data base; it is primarily for shipboard mineral identification. These identifications can be coded as XRD in the visual identification computer file. The raw data should be kept on the original floppy disks until publication, and the samples retained.

In general, the interaction between IHP and the ODP data base managers was very productive, and we were encouraged by the progress which has been made and the outstanding efforts at documentation and quality control.

## VI. Other topics

1. <u>Computing services</u>. The Panel had a thorough briefing and tour of the ODP computer center by Jack Foster. This included a detailed anaysis of the kinds of software being developed and provided to shipboard scientists. Again, a productive interchange of ideas was accomplished between IHP members and the ODP staff. The Panel concluded that ODP was proceeding prudently; that without trying to be at the "leading edge" of technology they were providing precisely the kinds of services that shipboard scientists would expect from a modern research vessel. User response so far has been very positive, with less resistance then expected to new technology.

2. <u>Site File</u>. Several Panel members stressed the importance of the Jata which becomes the Site summary file, a sort of index file with

-14-

atitude, longitude, basin, hole status, number of cores, last sediment, etc. M. Melguen and M. Loughridge stressed that this should be the first data file to be released to the public.

3. <u>Underway data</u>. Various technical problems have plagued the shipboard collection of underway data. No magnetic data were obtainable for the first few legs, and seismic data are of low quality above 8-10 knots ship speed. Upgrading of underway seismic data is planned but has a low priority.

The ODP Data Bank. The IHP discussed its continuing concern 4. over the role of the ODP Data Bank at LDGO, in relation to other existing data banks such as the various national data centers and the ODP data anks at TAMU. The Panel recognizes clearly the operational mission of the ODP Data Bank as a critical resource in evaluating drilling proposals, providing data to the Safety and Site Survey Panels, co-chiefs and the Science Operator. It is not clear to us what the longer-term, archival functions of the Data Bank are, nor whether these archival functions duplicate those performed at ODP/TAMU, NGDC and other national centers in France, Germany and Canada. If in fact the ODP Data Bank does not actually supply data to would be proponents of particular sites, but merely tells them what data it is aware of, its archival role is even less clear. The Panel concluded (1) that we would like to have a member of the Site Survey Panel attend out next IHP meeting to discuss mutual concerns; (2) that we feel that the long-term, post-cruise role of the ODP Data Bank needs clarification; and (3) that we are concerned that the ata Bank may be duplicating functions already being performed by national

-15-

ta depositories in the U.S. and other JOIDES member countries.

5. Japanese participation in IHP. The IHP requests that PCOM recommend that a Japanese representative be asked to join the IHP.

6. <u>Quality Control of ODP Publications</u>. The Panel considered quality control for Part B papers, especially those dealing with paleontology. We are satisfied that the ODP publications staff is aware of the potential problems, and the Panel will work with them to assure that adequate quality is maintained. R. Merrill agreed to send the draft ODP Style Manual to IHP members for review.

7. <u>DSDP Data Base Transfer</u>. The IHP Chairman will determine the itus of transfer of DSDP data bases, as completed, for ultimate incorporation into current ODP data bases.