

**SMP Annual Report to PCOM**  
**1 December 1993**  
**K. Moran**

Because I am unable to attend the meeting, I have written a very short report which contains the key SMP issues so that it can be read to you. This report is divided into five major topics: (1) the status of shipboard laboratories; (2) the status of core-log data integration and the need and priority of a new ODP computing system; (3) upcoming drilling Legs; (4) technical staff and (5) panel liaisons.

Over the past twelve months, TAMU has done an excellent job of meeting the SMP recommended upgrades to the shipboard laboratories. In our spring meeting, SMP defined nine upgrades, six of which were addressed by TAMU since then, including a new navigation system! One outstanding improvement was the installation of the whole core natural gamma instrument on the multi-sensor track. After a bit of a shaky start on Leg 149, this instrument has seen nothing but rave reviews since then. Because TAMU has met most of the highest priority equipment needs, you will see a much smaller list of equipment needs on page 241 of your Agenda Book.

Software improvements have had less success. SMP has updated the software priority list again (refer to page 241 of your Agenda Book). Please note that we still place the highest priority on the micropaleo data entry software. The reason for the SMP's high ranking of this software need is clearly stated in our most recent recommendation on this topic (refer to the recommendation 93-8 on page 239 of your Agenda Book). The second software priority is development of a visual core description (VCD) data entry tool. Do not confuse this development with the program now called VCD which some of you may have used or seen onboard. The VCD program which now exists is a software package which is used to make barrel sheets; it is in no way a program for the capture of visual core description data. This is ranked second highest because of the heavy demand on sedimentologists and structural geologists and because these data are not being captured for database use. Upgrades to Corelog ranks third on the priority list. Because of the possible no-go on the new computing system, SMP has placed a high priority on this upgrade. Currently, obtaining depths in anything close to real-time is impossible on the ship. None of the existing laboratory software is linked to a software package to obtain depths. This is a real and unnecessary bottleneck for the science. Please note that the new software package for hard rock core description and slides (Rocky) is ranked sixth. Even though the hard rock community has screamed the loudest in the past about the existing software on the ship, there is no way SMP can justify moving this development any

higher on the priority list. On hard rock legs, there is plenty of time (especially given the number of petrologists staffed) to enter the data using the existing, cumbersome software.

Core-log data integration has improved with the introduction of the natural gamma instrument. In addition, TAMU has installed a Sun workstation in the user area which can be used for manipulating large datasets. Given the budget constraints and the existing limitations on the number of staff scientists and technicians, TAMU can likely go no further on this important topic. Advancement can only be made if the new computing system goes forward. With a new computing environment, the existing roadblocks to data integration could be eliminated. For example, a client-server system could be designed so that all laboratories would work with the latest depth calculations, no matter how those depths were determined. Similarly, the data collected could be processed quickly to produce synthetic seismograms so that the drill and log data could be fully integrated with the seismic data. I repeat here what is essentially stated in your agenda book on page 240: The SMP urges you to rank the new computing system as your highest priority. When compared with other engineering developments (e.g., DCS), the upgrade of the computing system has an excellent chance for success and, thus, for scientific return. We currently have an incredible drilling capability which has produced exciting results under all of the themes of the program and yet we cannot integrate the data collected on cores and from the logs with the data set that provides the foundation for most of our science, seismic reflection. The technology exists to do this, we do not have to develop it as with the DCS; we only have to implement it.

SMP reviewed the proposals in the prospectus. Proposal 423 requires specialized shipboard equipment. Refer to the top of page 241 for our recommendation on meeting the gas hydrate objectives for this proposal. Please consider this recommendation in your deliberations on the drilling schedule.

SMP was dismayed to learn of the cutbacks to technical staff. We argued successfully to increase the technical/science staff ratio so that it would at least be equivalent to the DSDP ratio when there was significantly less "high-tech" equipment onboard. These new cuts place an increased strain on the technical staff. Given the budget constraints, SMP looked to other ways to reduce the impact of technical staff reductions. Although, SMP has had nothing but praise for the technical staff, a change in the management structure could improve the situation for both the program and for the staff. This recommendation is not made because of any criticism that SMP has for the existing management staff. Recent changes in the management structure of the computing staff has resulted in improvements to the program. As in most other scientific institutions, technical staff are most

effective working under the management structure of the science programs. The technical staff could then become responsible for an individual shipboard lab, rather than what now exists which is more like a "caretaker" role. This responsibility would provide for a much more satisfying job. These individuals could work with science staff to improve the labs with a longer term plan in mind and would truly become the backbone of the shipboard operations, a role they certainly deserve. I repeat the recommendation shown on the bottom of page 240 with one change: SMP recommends (to PCOM) that a request is made to TAMU (through JOI) to investigate the possible implications of moving the management of the technical staff to Science Operations (93-12). To enable cross training of technical staff and improvements to individual labs, SMP also recommends that science staffing be severely limited on the engineering legs (93-13).

SMP requests official liaisons from DMP, TECP, and from the BHRG. SMP requires a structural geologist to work with the panel on defining basic requirements for data capture. The new SMP chair, Joris Gieskes, will provide nominations to PCOM for the next meeting. Until a structural geologist is nominated, the TECP liaison can provide input to the panel.

I have sincerely enjoyed working with the program on the SMP. Although the trials and tribulations are frequent, the program continues to change and improve. I am continually amazed at how well it works. Thanks for the memories.