

Marine Sciences Development Shop Committee Report, 2008

Over the last two fiscal years, the Marine Science Shop has generated over \$3 million in revenue. Future growth plans include the opening of a Shop Storehouse as well as the hiring of six additional staff members. Substantial changes are being made to administrative operations to streamline billing and timekeeping procedures by becoming as digitized as possible. It is anticipated that Recharge Statements for UC customers will become accessible via single sign-on, which is a feature we hope to add to the Machine Shop website soon. The digitization of the billing process will also significantly decrease the chance of human error, as well as allow customers to receive a more immediate answer when contacting the shop to track the real-time progress of a job.

At its September 9th meeting, the MSDS committee ratified the Hydraulics Laboratory Academic Report recommendations I, II, and III related to the development shop. These recommendations are:

I. It is recommended that the TAG-Group, the facilities management team and the facilities be placed under the management of the Marine Sciences Development Shop (MSDS). Making this management change would provide the following benefits. 1. Within the MSDS structure, individuals with the TAG-Group would be less vulnerable to fluctuations in workload demand, allowing TAG to be maintained as a unit and accessible to SIO scientists. 2. The customer base for the TAG-Group and the test and calibration facilities would be expanded through association with the MSDS. 3. Overhead for repairs, maintenance and the planned obsolescence of facilities would be generated through a rationalized recharge structure.

II. It is recommended that the SIO Director's Office and MSDS each make capital expenditures of \$250,000 for a total of \$500,000 to implement facilities refits, and establish a computerized pressure testing facility. These refits (or a suitable sub-set of them determined by budgetary constraints and facilities priorities) would maintain the viability of the facilities and their availability to SIO scientists and external customers. It is anticipated that moving the facilities into the MSDS structure will generate sufficient revenue to cover the current \$75,000 per year shortfall in recharges required to pay facilities management staff. Current MSDS plans are to double the facilities recharge revenues from \$50,000 to \$100,000 in the first year and double again to \$200,000 in the second and third years. Upgrades for the research facilities and the maintenance or replacement of a rotating fluid table are also recommended to support SIO's teaching mission (SIO 202, 211, 212, & 214). The funding required to implement a fluids and waves teaching laboratory in the HLAB has not been estimated.

III. It is recommended that the machine shop be moved from the main Hydraulics Laboratory building to a new structure (the Butler Building) on the northeastern area of the Hydraulics Laboratory yard. This would provide additional space for MSDS machine shop tools, would free up space in the main Hydraulics Laboratory building and would improve the quality of research obtainable from use of the research facilities. Given the projected cost of the conversion of the southwestern area of the main Hydraulics Laboratory building from storage to offices and laboratory space, it is recommended that these renovations be deferred (see Fig. 2). The costs associated with a butler building have not been established, but should be more compatible with the currently allocated Director's Office HLAB renovation funds than the proposed office and laboratory expansion.