

901107 SeeStar Camera System

Note that overall Phase 1 requests exceed total available resources, so some adjustments are necessary as outlined below. Please review this information ahead of preparing your Phase 2 response, and feel free to ask the management team for clarifications should questions arise. Project-specific feedback follows this general information.

For those projects given a “1” rating with no need to prepare a Phase 2 response: be aware that while the management team fully supports the proposal as-is, it is still possible budget cuts may be necessary pending final budget, labor, and ship time balancing.

Direct expenses

Total requests exceed available funds by more than \$900k and so a reduction of direct expenses during Phase 2 is necessary to balance our overall budget. Please review your budget requests carefully to determine if any savings are possible, and if so revise your budget accordingly. In some cases, Management Team feedback provides specific suggestions/guidance/instructions on reductions for Phase 2, but we ask all project teams to consider ways to reduce costs where possible and appropriate.

Engineering

Requests for all categories of engineers significantly exceed the number of allocable hours. Please ensure that requests for engineering time have been carefully scoped and, if possible, reduce those requests. Where applicable, prioritize engineering tasks and indicate in your response which tasks may be deferred or removed to enable balancing labor resources.

Some reductions/changes in engineering resources have already been made in the budget system. These changes are detailed in the project-specific feedback below. Please review these changes carefully and make any additional corrections (particularly to technician and machinist requests) for projects that the management team has slated for descoping. If there are concerns about changes made to your project scope thus far, please include details in your Phase 2 response and provide justification for any requests to increase time above that currently allotted. Again, please reach out to your management team contact if you would like to discuss your response prior to the Phase 2 deadline.

Ship time

Requests for the Rachel Carson exceed total available time by 21 days. Therefore, please consider how your project might combine ship days with other projects or cut down the number of ship days you have requested based on a prioritization of field programs.

Requests for the Western Flyer exceed available time by 40 days, assuming the Hawaii expedition goes forward. For a variety of reasons, the management team is recommending that the Hawaii expedition be cancelled. If that happens, approximately 25 days of time will become available for consideration during Phase 2. A meeting to

discuss ship planning (and the 2017 budget in general) is scheduled for Monday Aug 29 at 2PM in the Pacific Forum.

Final notes

*Please be sure to make **all budget changes** (labor, ship, expense), as necessary, in the web budget system prior to the Phase 2 deadline (Wednesday, September 7 at 8:00 a.m.). All written Phase 2 responses should be sent to Mandy Allen directly via email by the deadline as well.*

Rating: 1

MT contact: Douglas Au

Management Team Feedback

General Comments:

Nice job of connecting to external users and expanding the examples of use cases. It is also noted that the SeeStar camera is cross referenced in several internal proposals this year.

There are several concerns that the management team would like the project team to address:

- Why is there a need to develop a custom controller? Contextual sensor data is really important to integrate so would it make more sense to use an OASIS5 controller? Drivers exist for many of the possible contextual sensors thus reducing development time. If cost is a consideration, data from our Cawthron technology transfer of OASIS could be used as a comparison.
- More description of the science justification would be helpful as it appears weak as written.
- How are you going to make this system any different than previous ones with respect to the short time before obsolescence of the available imagers? Perhaps the focus should be on developing an imager as a stand-alone sensor (i.e., absent a dedicated controller) to make it more widely available to external users and hobbyists? A stand-alone SeeStar imaging sensor could be integrated to other loggers or controllers depending on the users' applications; this could serve the needs of MBARI users, too, by allowing a choice of controller and data logger depending on the science drivers.
- It appears that the end goal of this project is yet another prototype. Please provide a road map that results in an end of the development effort.
- The camera selection seems high priced. (Note: a domed, optical corrected, 6,000-meter rated, high definition camera is available from Deep Sea Power and Light for around \$5,000.)

For Phase 2 please address the following:

In addition to responding to the questions and requests above, there is a labor inconsistency between the text in the proposal and the budget entry. Are François Cazenave and Erich Rienecker the divers mentioned in the text?

The following labor adjustments have already been made in the budget system made:

Thom Maughan is heavily overallocated, so some of his hours were transferred to Danelle.

- Maughan: 200 hours → 160 hours
- Cline: 300 hours → 340 hours