SDSS Change Control Board Meeting Minutes August 1, 2001

Present: B. Boroski B. Gillespie, J. Gunn, S. Kent, J. Peoples, C. Stoughton, M. Strauss

Special guests: G. Richards, D. Vanden Berk

1. TARGET SELECTION CHANGE REQUEST

Gordon Richards, on behalf of the Quasar Working Group, submitted a change request to modify the target selection code so that, among other things, z=3.5 QSOs will no longer be missed. Full details of the proposed changes can be found in the e-mail change request that Gordon submitted (ref: http://www.astro.princeton.edu:81/sdss-qsos/msg.455.html). Jim asked that a comparison be made between what was targeted before vs. what will be targeted with the new code, to verify that the new code will not miss interesting objects that were previously targeted. The following acceptance criterion was established: the new code must target at least 97.5% of the objects that were targeted as quasars in the current working version. Gordon and Michael will verify the performance of the new code and e-mail the results of their analysis to the CCB. Bruce raised a concern that the change will decrease the number of objects targeted in categories other than quasars. Gordon verified this would not be the case. The CCB provisionally approved the target selection change request pending verification that the acceptance criterion is met.

2. FALLING BEHIND THE BASELINE PLAN

John noted that we have fallen behind the baseline performance plan and therefore need to develop plans for how we will get back on track. John laid out two proposals for addressing performance shortcomings.

The first involves applying unspent contingency to extend the length of the survey in order to achieve the performance goals. Specifically, John proposed using unspent contingency from the 2001 budget to fund survey operations in Apr-Jun 2005. This will synchronize the 5-year baseline operations budget with the 5-year baseline performance plan, so that both will extend through June 2005. John also asked Bill to develop a budget to support minimum survey operations for the period Jul-Dec, 2005, which would be funded using unspent contingency from subsequent years. Minimum operations include activities at APO (observing), UW (plate production), and Fermilab (data processing). The first two would be ARC funded and the last would be an in-kind contribution. The new budget proposals must be completed by mid-October, in time for submission of the annual budget request to the Advisory Council. ARC acts on the annual budget request at its annual meeting in November.

The second involves finding ways to improve operational efficiencies. John noted that Hirsh Cohen is concerned about survey progress and has asked for a plan for how we will meet our baseline performance goals. We need to develop ways to quantitatively and accurately measure actual performance against baseline goals. Eric Neilsen's work on extracting performance

information from APO operations was discussed. Bill will arrange a ph-con with the relevant people to review Eric's work and progress.

Finally, John noted that both Sloan and the NSF would like to receive their annual reports in November. We must submit the reports in November in order to obtain funding in January. This requires that we have materials and budgets in shape by mid-October.

3. EXTENDING PHOTOMETRIC CALIBRATION ACTIVITIES

John noted that resolving photometric calibration issues is taking longer than anticipated and so the period of performance for this work needs to be extended. This will have a corresponding budget impact with regard to support for David Hogg and David Schlegel. Hogg has requested an additional \$4.5K to cover travel and miscellaneous expenses in the last half of 2001. Princeton has requested that Schlegel's support in 2001 be increased to 100% through the end of 2001. The estimated cost for increased salary, travel, and miscellaneous support costs for Schlegel is \$27K. Jim noted that he is working with the "calibration team" to develop a revised scope of work and schedule for completing the calibration effort. While this is being prepared, John asked that the CCB approve the budget increase to support Schlegel at 100% through Dec 2001. The budget increase was approved. The budget increase to support Hogg will be reviewed in a subsequent CCB meeting once the revised scope of work is prepared and all related costs are gathered together. The revised scope of work is expected shortly.

4. BRINGING THE SDSS SOFTWARE STANDARDS DOCUMENT UNDER CHANGE CONTROL

Steve noted that the SDSS Software Standards document that is on the web is out of date and not under change control. It was agreed that this document should be brought up to date and placed under change control. Steve agreed to be the interim owner of the document and will assemble the various links into a cohesive package that he'll distribute to the CCB, and other relevant individuals, for review. Steve proposed that the document be modified to include requirements on file formats and interfaces with the outside world. Steve agreed to have a draft ready for review by the end of August. The document will be placed under change control once it is accepted and ratified by the CCB.

5. ADDING IDL AS AN OFFICIAL SURVEY LANGUAGE

Jill Knapp submitted a change request proposing the IDL be added to the list of official survey software languages. Steve noted the philosophy that all survey code would be supported at the SDSS institutions and expressed concern that IDL knowledge within the EAG at Fermilab is limited. He also said he was concerned about the multiplicity of programs that required support. John expressed concern that IDL might migrate into other existing programs, such as Photo, and have a detrimental effect on performance or operations. Michael confirmed that Robert has no intention of letting IDL creep into Photo. After further discussion, it was agreed that IDL would be accepted as an official survey language and will be included in the revised version of the Software Standards document. It was further agreed that files shared by IDL and other survey software packages (e.g. TCL) must be compatible and address case sensitivity issues. In

particular, this means that writers of survey IDL code will have to use IDL utilities with "case preservation." It also means that survey interfaces and the data model must respect IDL's lack of case sensitivity and not use the same variable name, differing only in case, within the same file.

Minutes prepared by Bill Boroski, 08/02/01 Revised 08/03/01.