



**GEMINI BOARD MEETING
LA SERENA, CHILE – 10-12 NOVEMBER 2010**

**Resolutions Arising from the 10-12 November 2010
Gemini Board Meeting**

2010.B.1. The Board adopts the new mission statement for the Observatory, "To advance our knowledge of the Universe by providing the international Gemini Community with forefront access to the entire sky."

2010.B.2. The Board requested that Eric Tollestrup construct a matrix of the capabilities outlined in the white papers on the high resolution spectrograph and how the proposed draft requirements of the proposed Gemini Optical Echelle Spectrograph (GOES) mapped onto that matrix. GOES is the most likely instrument to be built by Gemini. The Board declined to put a specific cap on the cost of GOES at this time, but the Observatory should look at both capability and cost when they have developed a cost estimate. The Observatory should evaluate instruments such as Keck HIRES, UVES on the VLT , and MIKE on Magellan to assess the competitiveness of the proposed GOES to assure that when GOES is implemented it will still be scientifically competitive by the Gemini community. The observatory should move forward with all deliberate speed on GOES with the goal of having the project well underway in 12-15 months.

2010.B.3. The Board approves the proposed minimum science fraction of 85%, with the goal of 90%, for Gemini North and a minimum science fraction of 70%, with a goal of 77%, for Gemini South for semester 2011B.

2010.B.4. The Board notes the Observatory's intent to ask for a Call for Proposals for the GPI science campaign. The Board instructs the Observatory to move forward with its Notice of Intent to a call for proposals.

2010.B.5. The Gemini Board approves the revised 2010 Operations Budget (\$40,809,542 spend and \$32,310,514 committed).

| | Cash Expenditures | New Commitments |
|-----------------------------------|---------------------|---------------------|
| Operations and Maintenance | \$29,355,585 | \$28,717,929 |
| Instrument Development | \$2,279,359 | \$985,705 |
| Facilities Development | \$3,504,571 | \$2,351,566 |
| Hilo Base Facility | \$40,470 | \$33,554 |
| Southern Base Facility | \$40,000 | \$80,735 |
| Aspen Instrumentation | \$4,578,067 | \$1,057,214 |
| Total | \$40,809,542 | \$32,310,514 |

“Cash Expenditures” include commitments made in past years and new commitments for expenditures in 2010. “New Commitments” includes the normal operation and maintenance costs



**GEMINI BOARD MEETING
LA SERENA, CHILE – 10-12 NOVEMBER 2010**

planned for 2011, as well as new downstream payments planned for multi-year activities approved by the Board.

This approved final budget for O&M includes reassignment of expenditures to future years. Changes for IDF and FDF include a shift of funds for Flamingos 2 and GPI into 2011, and MCAO into 2011. The change in the SBF is due to remodeling of office space.

2010.B.6. The Gemini Board, recognizing the advice of the Gemini Finance Committee, provisionally approves the 2011 budget (\$36,572,614 spend and \$37,885,934 committed), predicated upon receipt of an update of the forecasted expenditures to be provided at the May 2011 Board meeting.

| | Cash Expenditures | New Commitments |
|----------------------------|-------------------|-----------------|
| Operations and Maintenance | \$30,513,872 | \$30,696,249 |
| Instrument Development | \$1,572,823 | \$709,751 |
| Facilities Development | \$1,133,510 | \$4,978,412 |
| Hilo Base Facility | \$0 | \$0 |
| Southern Base Facility | \$40,000 | \$0 |
| Aspen Instrumentation | \$3,312,408 | \$1,501,522 |
| Total | \$36,572,614 | \$37,885,934 |

The Board also approves the addition of \$1,500,000 to the IDF to facilitate an early start on a new instrumentation program at Gemini.

2010.B.7. The Gemini Board, recognizing the advice of the Gemini Finance Committee, instructs the Observatory to move forward with a plan to submit a proposal for an extension to the current Cooperative Agreement for 1.5 years per the schedule outlined by the Observatory.

In addition, the Gemini Board, recognizing the advice of the Gemini Finance Committee, instructs the Observatory to prepare a proposal for a new Cooperative Agreement for 3.5 years per the schedule outlined by the Observatory.

2010.B.8. The Board notes the UK withdrawal from the Gemini partnership at the end of 2012 and a need to ensure that the executed UK telescope time is in balance with respect to the rest of the partnership by this time. The Board instructed the Observatory at the May 2010 Board meeting to provide an analysis of what would happen at the end of 2010 to the UK's unused time. The Observatory provided that analysis to the Board Chair in August 2010. The Board instructed the Observatory to closely track imbalances in order to keep them as minimal as is practical.



**GEMINI BOARD MEETING
LA SERENA, CHILE – 10-12 NOVEMBER 2010**

In consultation with the UK representative on the Board, the Board has determined that the Observatory has a process in place to account for the UK's unused time. Therefore, the Board approves the Observatory's plan to achieve the balance required at the end of 2012.

2010.B.9. The Board notes the report (Version 3 Nov 2, 2010) from the Board's subcommittee (Quinn, Barton, Walterbos) on the proposed new Terms of Reference for the Gemini Science Committee, and the subsequent discussion during the November 2010 Board meeting. The Board endorses the creation of a Gemini Observatory Science and Technology Committee (STAC) to replace to current GSC. The draft Terms of Reference will be finalized with the addition of operational and procedural text to assist the Director and Management Team in planning for their support of the STAC. The Board will consider adoption of the revised Terms of Reference at the May 2011 meeting and recommends that the new STAC will be operation by early 2012.

2010.B.10. The Board endorses the Director's plan to move forward and get the GMOS-N CCDs on the telescope despite the problems with the middle array on the detector. [may need additional wording]

2010.B.11. The Board notes the presentation given by Dr. James Ulvestad, the NSF/AST Division Director, on the recommendations of Astro2010 and its implications for the Gemini Observatory. The recommendations included a readjustment of the balance of current vs. future facilities, and in particular, a restructure of Gemini that included an increased US share, and a consideration of a Gemini/NOAO consolidation. A proposal for a Tiger Team of all participating (post-2012) Gemini partners to look at a new governance structure that can be implemented in 2013 was proposed by Ulvestad.

The Board endorses the concept of a Tiger Team (Ulvestad, Fahlman, Quinn, Gattone) and instructs the Executive Agency to work with the Gemini funding partners on developing basic concepts of cooperation with the ultimate goal of a new governance model for the Observatory by 2013. The timeline is to have official Board approval by the November 2011 Board meeting.

2010.B.12. The Board notes the paper on a Comparative Review of Queue Systems and thanks the Observatory for a very useful study. The Board further notes the differences and similarities identified between Gemini operations and that of other facilities, and the existence of opportunities to reduce scope and complexity. It is clear that the development of advanced scheduling tools like those being considered in the Gemini Observatory transition plan, is very challenging and is not currently being undertaken by other observatories. Given this technical challenge, the associated risk, the identified opportunities to reduced scope and the pressures on finances for the transition plan, the Board recommends that the Observatory reconsider its planning for the development of scheduling tools. While simple graphical tools may be effective and desirable, complex development projects to produce "smart" tools are clearly to be avoided at this time. Through changes in scope, the exploitation of "off-ramps" and a reasonable reduction in the expectation for efficiency of scheduling, the Board feels the Observatory should be able to run queue operations with non-PhD staff that are currently being used.



GEMINI BOARD MEETING
LA SERENA, CHILE – 10-12 NOVEMBER 2010

2010.B.13. The Board notes the Calibration Report and thanks the Observatory for an excellent and comprehensive discussion of current calibration procedures. The Board recommends that these calibration policies and procedures be captured into instrument specific calibration plan documents, under the control of the individual instrument scientists. These plans should be reviewed regularly to ensure data quality is maintained and calibration levels are appropriate. The calibration plans should serve as primary requirements documents for the development of instrument-specific pipelines. The Board recommends that software development priorities be set for instrument-dependent pipelines and community tools that specifically reflect the operational modes and calibration methods contained in the calibration plans. The Board further recommends that calibration plans and their associated data products be executed and archived consistently between Gemini North and South instruments.

2010.B.14. As part of the transition plan, and in relation to ongoing discussions of the Gemini governance in the future, it is the intention of the Board to work with the Observatory to identify an alternative mechanism for Gemini staff access to observing time on the Gemini telescopes, one that does not involve an off-the-top allocation of observing time.

The Board recognizes the importance of Gemini science staff actively using the observatory both for their own science and for the health of the observatory. However, an off-the-top allocation is inconsistent with practice at other facilities and the Board believes that the Gemini staff should compete more directly with the community. The Board notes that such competition could also lead to more collaboration and stronger scientific interaction of the Gemini staff with the Gemini community. In an accompanying resolution, a small team has been established which will consider overall partner and governance issues. This team will bring initial concepts on a revised TAC process, one that would allow for fair inclusion and consideration of Gemini Observatory staff observing proposals, to the May 2011 Board meeting.

2010.B.15. The Board notes the update on the Flamingos-2 instrument. The instrument was delivered to Gemini-South in July 2009. Acceptance testing took place at the Gemini-South. Significant instrument deficiencies were discovered during the acceptance testing. Further tests and in-depth inspections revealed several issues with the instrument that were not apparent during the previous three acceptance tests.

The Board instructs the Observatory not to proceed with physical repairs to the instrument until the Board receives a legal opinion and a response from the University of Florida.

2010.B.16. The Board is very pleased to commend the Observatory on the progress made on MCAO since the previous meeting and looks forward to commissioning in the coming year..

2010.B.17. The Board warmly welcomes Professor Michael Balogh as the new Canadian member of the Gemini Board.

2010.B.18. The Board thanks Dr. Craig Foltz for his many years of service to the Board and the Gemini community. His active and forward looking leadership helped guide the Board and the Observatory through a very challenging period.