



GEMINI BOARD MEETING

HILO, HAWAII – 16 – 17 MAY 2006

Resolutions Arising from 16-17 May 2006 Meeting of the Gemini Board of Directors

2006.A.1 The Board is pleased to see the continued increase in science productivity of the Observatory, as evidenced by publication rates, improvements in operational efficiencies, science availability, and program completion. The Board congratulates the Observatory for their success at reaching the goals of 100% program completion for Bands 1 and 2 in semester 2005B on Gemini North, and looks forward to similar gains in program completion at Gemini South. The Board congratulates the Observatory on the full implementation of the multi-instrument queue on both telescopes and notes its use for scheduling both science and engineering and commissioning time, with the resulting positive impact on efficiency in operation.

2006.A.2 The Board recommends a minimum of 85% with a goal of 90% of science availability of nights for Gemini North and a minimum of 70% with a goal of 75% for Gemini South in semester 2007A. In the future the Board wishes to see consideration of longer-term strategic science needs and constraints, both internal and external, provided through consultation with the GSC, in addition to the science and commissioning/engineering needs that are currently considered on a semester-by-semester basis.

2006.A.3 The Board notes the preliminary risk register that the Observatory has developed and believes that it shows promise of being a useful management tool. The Board wishes to review the risk register regularly at its meetings, including the priority structure assigned within the three main categories, the changes in categories and priorities, and indications of how the Observatory is using the register in setting its program.

2006.A.4 The Board reiterates its policy on the need for fixed price contracts in the procurement of Gemini instruments, and notes that individual contracts based on cost reimbursement should be considered only under extraordinary circumstances.

2006.A.5 The Board acknowledges receipt of the report of the Gemini Visiting Committee and thanks the committee for their efforts. The Board appreciates the careful and thoughtful evaluation of the Observatory and will undertake consideration of the Committee's observations and recommendations.

2006.A.6 The Board congratulates the Observatory on obtaining the first science images with the Altair laser guide star system and the recent outstanding improvements in imaging capability enabled by the conjugation of Altair to the ground. As well as



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providing an exciting new capability for the Gemini community, the success of this Observatory-wide effort, and the lessons learned during its development and implementation, bode well for the upcoming MCAO program.

2006.A.7 The Board notes with concern the status of Argentine operations payments as reported by the Executive Agency. The default of 2005 payments in the amount of \$236,345 has already resulted in the loss of 50% of the Argentine time in semester 2006B under the terms of the Administrative Guidelines. The Board was apprised of the 14 May 2006 email communication from the Argentine representative concerning the status of plans at CONICET for future payments. While the Board appreciates the continued commitment of CONICET to participation in Gemini, we wish to call attention to a number of concerns:

- Under Paragraph 8 of the Administrative Guidelines, all subsequent payments will be applied only to the 2006 operations payments, and credited to the next available observing period.
- It is imperative that 50% of the \$685,563 due for 2006 operations be received by the Executive Agency by 30 June 2006. If this payment is not received in full by that date *Argentina will lose 50% or the percentage of default, if larger, of its time in 2007A.*
- CONICET must clarify and confirm the nature of their commitment to the Aspen program.
- The Board further notes that, should Argentina remain in arrears with respect to its 2006 payments on December 31, 2006 by any amount, they will have been in arrears for a full year. In this case, the Board notes that Articles 16 and 5 of the Gemini Agreement will be applicable.

The Board asks that the Chair work with the Executive Agency to communicate the current situation and the above concerns to the President of CONICET and the Argentine Board representative as soon as possible.

2006.A.8 Australia and Brazil have expressed interest in assuming the remaining 2005 operations costs of \$236,345, and the associated Argentine time in semester 2006B. The partnership has decided not to exercise the default condition of distribution by partner share and expects the two interested parties to decide the distribution of Argentine time and operations payments in consultation with their funding agencies and to inform the Observatory and the Executive Agency of the share they are willing to assume and the payment schedule by 26 May 2006.



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2006.A.9 The Board agreed that in the future any partner in default with respect to annual operations payments and whose partner share is small enough to exclude them from Band 1, is not entitled to an approved program in Band 1. The Board considers the policy of including all minor partners in Band 1 a privilege for those partners not in default.

The Vice Chair position would not rotate to a partner that is in default on operations payments. If the Vice Chair currently resides with a partner in default, it should rotate to the partner in good standing.

2006.A.10 The Board further notes that policies and the schedule for actions in the event of partner default (under the terms of the Gemini Agreement articles and Administrative guidelines) require further elaboration and clarification, particularly with regard to partner representation and role on Board and Gemini committees. The Chair charges a subcommittee of Board members, consisting of Wayne Van Citters, Warrick Couch, and Claudia Mendes de Oliveira to examine the role of a defaulting party in Board and Observatory activities and committees and to develop a set of policies and practices that will clarify the status of party representation under default conditions. The Chair requests that this report be provided to the Board at its November 2006 meeting.

2006.A.11 The Board reaffirms its desire to have a clear policy on conflicts of interest for Board action. It requests that the working group comprised of Chick Woodward (chair), Greg Fahlman, Claudia Mendes de Oliveira, and Isobel Hook provide a statement for consideration and approval by the Board by 31 July 2006.

2006.A.12 The mid-November meetings of the Board will continue to be held in La Serena, but as of the 2006 meeting will cover a three day period, beginning at 13:00 on the Wednesday and ending by 13:00 on the Friday of the week. The 2006 meeting will then begin on 15 November 2006 at 13:00 and end on 17 November 2006 at 13:00.

2006.A.13 The Board thanks Brazil and the U.S. for their offers to host the 2007 Gemini Science and Users Meeting. In consideration of the desirability of engaging users from all partner countries, and holding meetings at diverse locations around the partnership, the Board enthusiastically accepts Brazil's offer to host the meeting in the week of 20-25 May 2007. The Board encourages the Observatory to work with the Operations Working Group and to seek input from the GSC in organizing the meeting. Recognizing the importance of user feedback, the Board recommends setting aside one full day of the planned 4-day meeting for a users' meeting. The Board looks forward to a successful and productive meeting.



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2006.A.14 The Board notes the comments by the GVC on the status and plans for the DataFlow project, and its recommendation that a plan for implementation of Phase II of the project be defined as soon as possible. The Board reiterates its request from November 2005 (resolution 2005.B.8) that the plan provide a clear articulation of the program sufficient for the Board to understand its scope, metrics, outcomes, optimum strategies and requisite FTE requirements. The Board acknowledges the critical role which data-processing software plays in the scientific productivity of the Observatory and requests that the Observatory, through the GSC and its Data Reduction Working Group (DRWG), develop a series of detailed principles and priorities regarding instrument-specific software development, quality assurance methodologies, definitions, and user interface optimization to enable productive use of Gemini science data products.

The Board asks that the Executive Agency work with the Observatory to schedule an independent review of this plan at an appropriate time. The Board wishes to receive an update on progress of the plan and schedule for the review at its November 2006 meeting.

2006.A.15 The Gemini Board approves the final, revised 2005 Operations Budget.

2006.A.16 The Gemini Board approves the 2006 Operations Budget.

The budget for Aspen instrumentation is approved with the understanding that some partner contributions remain subject to confirmation. The Board will revisit the contribution commitments at its November 2006 meeting, and asks that the Gemini Finance Committee present the Board with a thorough analysis of program risk at that time.

In approving the 2006 budget the Board re-affirmed its previous resolution on the high priority status of GPI within the Aspen program. The Board authorizes the Observatory to proceed with the contract negotiations and make the necessary commitments, based on the total cost of \$24,847,535, including all contingencies. The Board also authorizes the Observatory to continue with the design studies for PRVS and with the site tests for GLAO. The Board recognizes that while it has the commitment authority to proceed, it must do so on a sound fiscal basis and with the knowledge that the existing partner commitments towards the first year of the Aspen program are significantly below the anticipated total of \$15M (as of May 2006). Given that there was little resolution of partner financial commitments at the meeting, the Board must adopt a more conservative stance, particularly with respect to proceeding with WFMOS design studies.

The funding of HyperSuprimeCam is a key element in the ability of WFMOS to proceed. The Board notes that proposed design studies of the Subaru top end are projected to arrive later than the Board's current nominal deadline for a WFMOS decision. Owing to



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both these issues, namely, the timescale of funding commitments to the Aspen program and the timescale of the design studies for HyperSuprimeCam, the Board therefore directs the Observatory to delay the two WFMOS design studies, but will keep the situation under regular review. The Board remains committed to pursuing WFMOS when conditions allow and asks the Director to continue to work with the NAOJ to arrive at a timely plan for the development of WFMOS and the associated access to Gemini.

In anticipation of a positive funding decision on HyperSuprimeCam the Board wishes the Observatory to be prepared for possible budget-driven changes in the corrected field size of HyperSuprimeCam/WFMOS. The Board directs the Observatory to explore the implications of a possible smaller corrected field size on the WFMOS science case. In particular, it needs to investigate the impact it would have on the number of fibers, fiber positioners, spectral resolution requirements, etc., and at what levels the key science goals of the dark energy and galactic archeology projects can still be achieved within the number of nights anticipated in the previous feasibility study. The Board expects the results of the trades for the dark energy component of the WFMOS program to be framed in terms of the recent reports from NSF's Dark Energy Task Force and compiled for PPARC's Science Committee. The Board also directs the Observatory to not exceed expenditures of \$250K in support of this study. A status report about this study needs to be provided to the Board at its November 2006 meeting.

The Board recognizes that additional significant Aspen commitments from partners prior to its next scheduled meeting may provide an opportunity to proceed with WFMOS studies, in full or in part, and will keep the situation under review. The Board agrees to meet by teleconference if Aspen commitments for 2006 and 2007 increase significantly before its November 2006 meeting.

In approving the 2006 operations and Aspen budgets the Board notes that, if none of the partners is able to commit funds to Aspen in 2007 and beyond, the Observatory still faces the worst case situation of withdrawing from the GPI contracts. While the precise costs of this cannot be determined at the moment, it is estimated that the total expenditure would be approximately \$9M, i.e. approximately \$5M in excess of the funds available. This would have to be found from the operations budget in late 2006 and early 2007 and the Board agrees that, in the event of termination of contracts, the liability would be redistributed across the partnership in accordance with partner shares. The Board continues to believe that the exposure of approximately \$5M is an acceptable risk to the Observatory, particularly as the alternative would be to delay delivery of GPI resulting in further cost escalation and an erosion of Aspen science goals. The Board asks that the Observatory provide the Executive Agency with monthly updates showing projections of the cash flow situation over the next year.



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2006.A.17 The Board takes note of the Long Range Plan for 2007 – 2010 and regards it as generally responsive to the Board's direction for the operation of the Observatory and the execution of the Aspen program. Again, the Board cannot approve the Long Range Plan until such time as partner commitments are clarified. With this in mind, the Board will revisit the Long Range Plan at its November 2006 meeting, as required by the Agreement.

In this regard, the Board takes this opportunity to reaffirm its support for the scientific vision of the partnership as expressed in the Aspen program, its resolve to pursue the necessary funding in the longer term, and its desire to advance a mutually beneficial partnership with our Subaru colleagues. The actions taken at this meeting rather express the high priority that the Board places on the core operation of its Observatory and the enhancements to that operation that are supported by the 2.5% ramp. The Board is determined to support these operational functions adequately and to provide the staff of its Observatory with proper working conditions, adequate space, and sufficient tools to continue their superb performance as noted by the Visiting Committee.

Finally, the Board notes that realization of the full Aspen program will imply activity that extends beyond the expiration date of the current Gemini Agreement. The Board welcomes the intent of the relevant agency representatives to begin immediately consideration of the future of the partnership and the terms of the follow-on Agreement.

2006.A.18 The Board notes the increase in the cost estimate for the HBF expansion. The Board understands that a modest decrease in cost may be achievable by descoping the design. However, the resultant delay in construction start, with the attendant exposure to further cost escalation, as well as the loss of capacity in the expansion is judged to be a false economy in the long run. Hence the Board urges the Observatory to proceed as rapidly as possible with the original plan and has made allowance for this in its view of the 2007 budget.

2006.A.19 The Board is concerned by the perceived lack of progress on some issues that are regarded by the user community and GSC as high priority. The Board recommends that the Observatory, with the help of the NGOs, formalizes the procedures by which it (1) collects user input and (2) responds to it. The Board would like to be informed of the method by which users' input influences Observatory priorities on commissioning and engineering activity.

The Board is concerned at the lack of progress on testing the broadband CCDs that are available for potential use in GMOS. The Board directs the Observatory and the Executive Agency to explore the contractual limits of its obligations and investigate



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alternative procurement of these devices should it become clear that a timely delivery is not possible.

2006.A.20 The Board extends its warm thanks and deep appreciation to Jean-Rene Roy for serving as acting Director in addition to continuing his normal responsibilities as Deputy Director during this transition period in Gemini management. The Board looks forward to his continued contributions to the success of Gemini.

2006.A.21 The Board thanks Larry Ramsey for his service as Chair of the AOC-G. His commitment to Gemini has made significant contributions to the progress of the Observatory.



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Actions Arising from the Meeting of the Gemini Board of Directors – 16-17 May 2006

To Gemini Observatory: The Board requests that the Observatory work with the Operations Working Group to examine the causes and recommend changes in practice to correct the imbalance in time charged across the partnership, and to report the outcome to the Board at its November 2006 meeting.

To the Gemini Board Chair and Executive Agency: The Board asks that the Chair work with the Executive Agency to communicate the current situation with regard to the Argentina default on operations payments and the concerns articulated in resolution 2006.A.7 to the President of CONICET and the Argentine Board representative as soon as possible.

To Board representatives from Australia and Brazil: To decide the distribution of Argentine time and operations payments in consultation with their funding agencies and to inform the Observatory and the Executive Agency of the share they are willing to assume and the payment schedule by 26 May 2006.

To the Gemini Board: The Board requests the subcommittee, consisting of Wayne Van Citters, Warrick Couch, and Claudia Mendes de Oliveira, to examine the role of a defaulting party in Board and Observatory activities and committees and to develop a set of policies and practices that will clarify the status of party representation under default conditions. The Board requests that this report be provided to the Board at its November 2006 meeting.

To the Gemini Board: The Board requests that the working group comprised of Chick Woodward (chair), Greg Fahlman, Claudia Mendes de Oliveira, and Isobel Hook provide a statement on conflict of interest for consideration and approval by the Board by 31 July 2006.

To the Executive Agency: The Board asks that the Executive Agency work with the Observatory to schedule an independent review of the plan for Phase II of the DataFlow project at an appropriate time. The Board wishes to receive an update on progress of the plan and schedule for the review at its November 2006 meeting.

To the Gemini Observatory: The Board directs the Observatory to explore the implications of a possible smaller corrected field size on the WFMOS science case. In particular, it needs to investigate the impact it would have on the number of fibers, fiber positioners, spectral resolution requirements, etc., and at what level the key science goals



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To the Gemini Observatory: The Board asks that the Observatory provide the Executive Agency with monthly updates showing projections of the cash flow situation over the next year.

To the Gemini Finance Committee: The Board will revisit the partner contribution commitments at its November 2006 meeting, and asks that the Gemini Finance Committee present the Board with a thorough analysis of program risk at that time.

To the Designated Members: The Board welcomes the intent of the relevant agency representatives to begin immediately consideration of the future of the partnership and the terms of the follow-on Agreement.

To the Chair of the Gemini Board: With Warrick Couch, to develop a response to the GVC report for distribution to the full Board for comment and approval.

To the Gemini Observatory and the Executive Agency: The Board asks that the Observatory and Executive Agency explore the contractual limitations on obligations concerning the broadband CCDs for GMOS and investigate alternative procurement of these devices if timely delivery is not possible.