

Minutes for AMiBA Engineering Telecon

Meeting Date: 14-November-2002

Participants:

Australia: W. Wilson

USA: D. Kubo, M.T. Chen, J. Peterson, M. Kesteven, Protty Wu, C.J. Ma, J. Han, T. Huang, B. Martin

Taiwan: H. Jiang, J. Lim, W. Ho, P. Ho, P. Shaw, C.T. Li, E. Hwang

Minutes Recorder: D. Kubo

[comments from this week](#), [previous weeks comments](#)

General prototype happenings:

Prototype fringes on the Moon (Nov 11), fringes on Jupiter (Nov 13-14)!

Pointing offset data for the 2 radio and 1 optical telescope were collected last night.

I. New Action Items:

Mount CDR & 7-Element Reviews: >> Bob: Organize and pin down dates for the Vertex mount CDR as well as the review of 7-element system.

Update Prototype Poster: >> Ming-Tang: Paul S. asked that the prototype poster be updated to show our most recent results and photos of the ML hardware. He would like to show this poster during the MOE visit on Nov 29.

II. Previous Action Items (still open):

7nov02-1: 60cm Dishes >> Bob/Philippe: The dish manufacturer is having some problems with the CAD drawings. Arrange telecon to discuss and resolve the problems.

Ted has distributed some revised drawings and Philippe arrives in Hilo this Friday. Bob, Ted and Philippe will have a telecon with manufacturer before the meeting next week.

7nov02-3: CW Source on Tower >> Derek: Make sure it is OK for us to radiate a CW signal in the 85-105 GHz range at ML.

Derek spoke to John Barns of MLO just after the engineering meeting today. John has had some problems in the past with a transmitter interfering with a photomultiplier detector he is using near us. He asked that we tell him once our transmitter is up so that he can make sure it does not affect his equipment by perform measurements with the transmitter on and off. This action is closed but will be held here until the next meeting.

7nov02-4: Vertex CDR in Taipei >> Bob: Contact CMA (platform subcontractor) to see if they are willing to attend the CMA CDR on week of Dec 16th (1 or 2 days during that week)

Bob informed me after the engineering meeting that CMA cannot attend the Vertex CDR during the week of Dec 16. This action is closed but will be held here until the next meeting.

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23oct02-2: Clock Drive Motor >> Ted/Ferdinand: Ted to characterize the torque for the clock drive shaft with the mount loaded. Thereafter, identify and order a motor.

Torque with platform loaded is 7nm. Mike asked Ted to repeat the torque measurement over a larger angle to make sure it is relatively consistent. Ted mentioned that there are still some other issues to address regarding the motor.

03oct02-1: Site Clock >> Bob, Ferdinand: Identify and order site clock.

Still in work.

03oct02-3: Test Schedule >> Bob: Expand schedule to include retrofitting of the following: new version 2 receiver, 4-lag correlators, 60 cm dishes, new DC amplifier and readout boards.

Still in work.

III. Closed Action Items (as of this meeting):

7nov02-2: VPN Remote Login >> Cheng-Jiun: Send out specific instructions as to how to access the correlator PC and monitor PC from remote locations. It is particularly important that Warwick gets connected soon so that he can prepare software changes before Michael K. arrives here on November 12 of next week.

Warwick has successfully connected to the VPN network late last week but did not enjoy the feature of VPN disabling local connections to his machine. Proty and Cheng-Jiun intend to change over to a normal remote connection (I.e., abandon the VPN) shortly but will warn C.T. and Warwick ahead of time. The AMiBA network at ML will be setup to accept only remote connections from specific IPs for protection. Further security will probably be enabled in the near future using a firewall.

Proty mentioned that he will setup an auto backup system.

IV. Miscellaneous Discussions:

ML Prototype: Ming-Tang - Obtained fringes on moon on Monday, Dec 11. No quantitative information yet.

Proty - Plan to measure the polar axis offset tonight as well as try to see Jupiter.

MMIC: No discussion(?).

Receiver:..Ming-Tang - Cold head on prototype receiver 2 is knocking heavily. Expect to receive the OMT for receiver 3 sometime this month. Still plan to do assembly of receiver 3 in December (need amplifiers).

LO/IF: Ming-Tang - New version of the slope equalizer is now finished and available.

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Correlator: Chao-Te - Completed and distributed S-parameter tests on single packaged mixer (w/o pads) from Jeff Rapadas. Received an invoice for \$300 with the mixer and asked Derek whether this should be paid or not.

Derek - Spoke to John Payne of NRAO during his visit to Hilo. John was concerned about the overall phase stability of the amplifiers and coax with respect to temperature. For instance, if some of the hardware were exposed to sun and others were not, would there be a differential phase movement which could hurt the system stability?

Dishes: See dish action item above.

Platform/Mount: No discussion other than when to schedule CDR.

Site Issues/Network: Paul H. asked about the on-line log system. Proty thought it would be best to have this reside either in Hilo or ML (monitor PC) to prevent problems of having to reliably access a machine overseas in Taipei. A backup mirror site can be established in Taipei. Paul suggested that the local webmaster in Taipei can help with this task.

Hilo Facilities: No discussion.

Schedule: We are planning to have the Vertex CDR on Dec 10 (Tuesday). This will be a good time to schedule the CDR for the 7-element system which will tentatively take place on Dec 12 and 13. There were no objections to these dates.

Bob - Jackie informed us that she cannot get any accommodations at the Howard International House in Taipei during the Dec 9-13 week. It was suggested that we move the Vertex CDR meeting to the following week, along with the reviews of the various 7-element system. Proty asked that some members of the science team attend this meeting.

V. Other Inputs: