

Minutes for AMiBA Engineering Telecon

Meeting Date: 7-November-2002

Participants:

Australia: W. Wilson

USA: D. Kubo, M.T. Chen, J. Peterson

Taiwan: H. Jiang, J. Lim, W. Ho, H. Wang, P. Wu, P. Ho, P. Shaw, C.T. Li

Minute Recorder: D. Kubo

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

General prototype happenings:

VPN remote login is now working.

Limited set of correlator SNR tests performed. Data looks similar to what was obtained in Taipei before shipment.

I. New Action Items:

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

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.

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.

7nov02-4: Vertex CDR in Taipei >> Bob: Contact CMA (platform subcontractor) to see if they are willing to attend the CMA CDR on Dec 19.

II. Previous Action Items (still open):

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.

Everything is now on the platform except the dishes. Ted will take torque measures next week at the next available opportunity.

Ted and Ferdinand are at Daikin training in San Francisco today.

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

Ferdinand is awaiting further feedback from a number of individuals to make sure he is purchasing the right hardware. We are not in a hurry to purchase this but it would be nice to get it out of the way sooner rather than later.

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.

Bob is on travel today.

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

31oct02-1: Platform Meeting Minutes >> Ming-Tang: Generate minutes from platform meeting held in Hilo last week.

Ming-Tang sent out platform meeting minutes on 11/7/02.

31oct02-2: VPN Remote Login >> Kyle, Cheng-Jiun: Get remote login to correlator computer working.

Remote login is now working! Problem was related to firewall in monitor and correlator PCs. Current version of Linux is Redhat 7.3.

IV. Miscellaneous Discussions:

ML Prototype: See discussions below.

MMIC: Paul H. (in place of Huei)- TRW will test wafers for S-parameters.

Receiver:..Ming-Tang - Next item to do is to log the receiver data over long term to examine the receiver stability with respect to time. After that is complete then the receiver will be leveled using precision levelers and the dishes will be installed.

LO/IF: Ming-Tang - One more set of IF and LO boxes will be made for the 3rd receiver. Delivery date = ?

Correlator: Chao-Te - Translatable table broke last week so he was not able to complete all of his SNR measurements. The one measurement he took indicates about the same overall SNR as what was seen in Taipei which is good news.

Chao-Te - Received packaged mixer (no 6 dB pad version) and will run responsivity tests as well as S-parameter (Smith chart for S11 and S22).

Derek - 4-lag correlator housing for 1st 2 prototypes were machined wrong but we will accept them "as is" to stay on track with the schedule. We will accommodate this error at our end when we mount the interface board for prototype tests.

Derek - Was attempting to trouble-shoot large RMS value for receiver 1, IF1 & IF2, as seen on the monitor computer. Will send Warwick the files.

Dishes: Paul S. - Dish manufacturer has a problem with the drawings. See action item at top.

Platform/Mount: See minutes distributed by Ming-Tang on 11/6/02. Warwick mentioned that the cable trays may be insufficient in Ted's most recent platform sketches. Ted is in the process of updating his sketches.

Site Issues/Network: Jeff - Asked about whether there was a contract in place between NOAA Mauna Loa and ASIAA. I spoke to Bob when he arrived after the meeting and he said "no".

Jeremy reminded Derek to ask Darryl of ML facility whether it is indeed OK to radiate an 85 - 105 GHz signal from the tower.

Proty mentioned that he will be here this weekend and is planning to write a script to backup the correlator PC files to IAA on a periodic basis.

Derek relayed a message from Nagayoshi as to whether AMiBA could use the services of Wei-Da(?). He is currently working as a software person at CFHT and his task is

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nearly over. Paul H. thought that maybe he can help with the a) electronic logging system, and b) manual online log entry system that Ming-Tang asked for last week.

Hilo Facilities: Contract paper work has been delayed due to some technical issue.

Bob McWilliams informed Derek to hold up on the Verizon phone and network connection until the contract issues have been resolved.

No progress but this is a relatively low priority issue.

Schedule: Ming-Tang- rough outline of things to do are as follows: correlator calibration, receiver stability tests, optical pointing, dishes installed (and leveled - 2 days), astronomical calibration on Jupiter.

Ming-Tang - Proty is planning to be here Nov 9-15, Michael on Nov 12-18, Kyle on Nov 20-?, Ravi on Nov 23-? Still need to come up with visitors schedule for December.

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.

V. Other Inputs:

Chao-Te: sent out S-parameter data for the 1st iteration mounting of the Triquint TGA-8300 amplifiers. Data looks good but there are some resonances to fix at around 14 GHz.

Chao-Te: sent out S-parameter data for the connectorized Merrimac 4-way dividers. Data looks very good. Data exhibits some undesired dispersion but this should be OK if all the dividers exhibit the same behavior.