

Minutes for AMiBA Engineering Telecon

Meeting Date: 31-October-2002

Participants:

Australia: W. Wilson

USA: D. Kubo, M.T. Chen, J. Peterson, F. Patt, T. Huang, Joshua, K. Lin

Taiwan: H. Jiang, J. Lim, W. Ho, H. Wang, P. Wu, P. Ho

Minute Recorder: D. Kubo

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

General prototype happenings:

Obtained fringes on sun last week with warm receivers and no dishes.

Receivers have cooled down successfully this week.

Currently performing calibration measurements (receiver temp, correlator SNR, sensitivity).

I. New Action Items:

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

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

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.

Jeremy mentioned that a number of tests listed in schedule make use of a motorized drive. He asked whether plans are being made to perform motorized tests before beginning the build of the production hardware. Jeff P. believed we will do this.

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

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.

Awaiting Bob's return on November 4.

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

23oct02-1: Enclosure Sizes >> Derek/CT: Ted requested the external box sizes for weather tight enclosures which mount on the platform.

A platform meeting was conducted in Hilo which included the following individuals: C.T. Li, K. Lin, J. Han, Joshua, T. Huang, W. Wilson, M.T. Chen, D. Kubo, F. Patt. Enclosure sizes are described in the minutes of this meeting (soon to be distributed).

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IV. Miscellaneous Discussions:

ML Prototype: Ming-Tang summarized the prototype status at the summit:

- Receiver, LO, and correlator boxes are installed on the mount.
- Correlator PC is now working and has been installed in the outdoor rack.
- Monitor PC is installed in the dome and the connection to the correlator pc looks good.
- Plan to install the translation table and noise source onto the mount and look for fringes while the receiver is warm at ambient temperature. Obtained fringes on noise source for cooled receivers this week.
- 3-phase power has been installed with 2 15A breakers. Will attempt to do a cool down test later. Receivers cooled down fine this week.
- Ted - mechanical balance of the mount/platform looks good. Ted is still using some counterweights held in place by some C-clamps. He will measure the clock drive torque in a few days.
- Dishes and optical telescope will be mounted after the noise source tests are completed (translation table must be removed before dishes/optical telescope can be mounted).
- Astronomical tests on moon.
- Moving the mount for pointing is very difficult because of all the cabling and helium lines.

MMIC: Huei- in regard to the InP devices, he is interested in having TRW perform only S-parameter tests. Remaining tests can be performed by ourselves (students) or people from Todd G.'s staff.

Receiver:..Receivers have been cooled down successfully.

LO/IF: No discussion.

Correlator: No discussion.

Dishes: No discussion.

Platform/Mount: Platform meeting was conducted in Hilo last week. Minutes will be distributed shortly.

Site Issues/Network: Derek- Bob from ML said that the abandoned tower to the S-SE is available for our use. He asked that we check the guy wires and structure before we climb it. Ming-Tang eye-balled the position of the other occupied tower with the stairs and believes that the lower receiver beam path will be blocked by the equipment rack.

Network- Remote login is still not working.

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.

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.

V. Other Inputs:

Optical pointing data from Kyle: e-mail titled "Re: the polar axis alignment result (supplement)", dated 10/30/02.