

## Minutes for AMiBA Engineering Telecon

Meeting Date: 21-October-2004

Participants:

Australia:

USA: Ming-Tang, Ted, Johnson, Philippe

Taiwan: Huei, C.T., Steven, West, Patrick

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Outside USA Dial-in = 1 773 843 6301

Minutes Recorder: C.T. Li

[previous weeks comments](#)

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### I. New Action Items:

### II. Previous Action Items (still open):

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

### IV. Miscellaneous Discussions:

MMIC:

C.T. - Purchase order for the doubler housing was issued. It will take 21 days for the machine shop to deliver the products.

Receiver:

Johnson - We're checking the cooling power as both receivers were cooled down.

Johnson - After bias is turned on, temperature of Rx #2 is varying between 9 and 13K, while temperature of Rx #1 rises about 1 degree.

LO/IF:

Steven - I have tested two variable gain amplifiers. One has lower gain than shown in the attached data sheet. We probably have to ship it back to the vendor.

Steven - Control voltage units for the variable gain amplifiers have been verified. IF output power of Rx #1 is abnormal (-15 dBm vs. -5 dBm for Rx #2).

Calibration System:

Correlator:

C.T. - All equipments were packed. It will possibly take 2 weeks to ship and get through the customs.

C.T. - I found that the residual counts are larger (about 20 ~ 50 counts) when correlator 2<sup>nd</sup> and 3<sup>rd</sup> sections were powered up by the DC-to-DC converter, compared to a small offset (~ 3 counts) with a commercial power supply.

Platform/Mount:

West - I will circulate the helium line design by this Friday.

Ted - The cone was shipped up to MLO yesterday. We will start the cone assembly tomorrow.

Philippe - I was in CMA on Monday to check on the status of the platform.

They're making very thorough inspection, improving all the gaps existing between plates, shimmed with glue. All the L-brackets were glued as well. It's progressing nicely. About the schedule, they may expect to finish the modification by the end of Nov. Assembly is planned for the 2<sup>nd</sup> week in Dec. Then acceptance test, disassembly and shipping will follow.

Ming-Tang/Philippe - We should put together the hexapod and the dummy ring by mid Dec. The cabling will take about 2 weeks. We will probably start the pointing in early Jan. Because of the dummy ring design, the pointing will be limited between 50 ~ 90 degrees. Vertex server people will be in Hilo in Jan. for hexapod re-commissioning. Then we need to carry out the tracking exercise.

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Philippe - The cone has arrived and will be delivered to the site on next Tuesday. We will start the assembly of the cone on the following day. Vertex engineer will be in Hilo around the end of Oct. to check the leveling of the cone. In the first week of Nov. we will do the grouting between the concrete and the cone. The dummy ring will be delivered in the first week of Dec. I'll be in CMA next week to check on platform status.

### Dish:

Patrick/Ted - According to Michael, the asymmetry of 1<sup>st</sup> side lobes could be due to mis-alignment. We will ship this new 60-cm dish to Hilo to measure the dish temperature. It will take about 2 months for Along to finish the remaining 6 dishes.

Patrick - We did an extended measurement on the new dish last Saturday night. The power level difference between the main lobe and side lobe is as expected. The pattern is quite symmetric now except the 1<sup>st</sup> side lobes (about 1-2 dB difference). We did rotate the dish by +/- 120 degrees. We also did some fitting to check on the focal length.

### Site:

Pierre - The drive cabinet and the transformer have been installed. I am buying components and install them for the network.