Minutes for AMiBA Engineering Telecon

Meeting Date: 25-November-2004

Participants: Australia:

<u>USA:</u> M.T., Kyle, C.T. Taiwan: Homin, Steven, Huei

USA Dial-in = 1-800-653-5390, 6668081# Outside USA Dial-in = 1 773 843 6301

Minutes Recorder: Steven

I.New Action Items:

M.T. - Helium line will be taken care by Tashun. We need the detail statement of quotation to evaluate if it reasonable.

II.Previous Action Items (still open):

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

IV. Miscellaneous Discussions:

MMIC:

Huei-The specification is very tight. Need time to build a temperature model and to evaluate the gain and noise under room temperature.

M.T.-Derek had discussed with (K.C. Hogen) about the penalty. The amount is about 10K for the paper work etc. Derek will report this affair more detail.

Receiver:

 ${\tt Homin}$ - Johnson had cooled down the receiver but the lab is out of power in NTU few days ago. Waiting for Johnson come back to setup again.

C.T.- Hilo is normal except RX1 Ch2 were lower 5dB. Will change the two amplifiers of correlator. Now there are 10 dB output power difference between channels.

LO/IF:

Kyle - Had got the 42Ghz attenuators from Millitech. The cable length is not long enough. Had re tested the variable gain amplifier in Hilo. 50 degree phase change is obvious in 7GHz. Steven - We can bend the cable. Since we had not decided to use the attenuator or not, we might be able to use the flexible cable for testing first. If we can make sure of the power from SHM and the power difference could be very small, then the mechanical design can be modified. The major problems variable gain amplifier is the control voltage and gain. Now we just send it back and I will follow the schedule with Miteq.

Calibration System:

Kyle - We had received components from Wisewave. But I have only one F38 card and can only control 2 components. The oscillator needs the digital control signal. I had ordered some components for it. We still need 60cm dish for inject the signal to receiver, so I send one dish back to Taiwan only.

Homin - F38 can read out 4 channels. One F38 card can control two receivers. C.T. - the secondary might be wrong and need to test the coupling.

Correlator:

C.T. - All base lines had been check and all circuit can work. The offset is a little large. It might caused by the interference and need to terminate the unused signal.

Platform/Mount:

M.T. - The shelter is almost finished. Ted said it can be accepted. Next week jack screw should be installed. Dummy ring is delayed and might arrive in begin of December. The acceptance test of platform will be held on middle of December. It might arrive in middle of January then the whole system can be installed. We

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need the software. Vertex sends a computer here. The electric cable is not long enough since the drive cabinet locates on wrong direction. Pierre disconnects all the cables and makes the cables and connector again. Next week the electrician should be arrived. Joshua had distributed the fiber. Homin - We can use the software even they did not modified. But we need to down load the software to the computer on the mountain. Joshua should try the network first by using a computer and tell me the IP address.

Dish:

Kyle - I had measure the dish temperature. New dish is a bout 13K and old is 36k. Old secondary use conductive tape to cover it and the temperature is lower to 24k. And will also take 30cm for test again.

Site: