## Minutes for AMiBA Engineering Telecon

Meeting Date: 16-Jun-2005

<u>Participants:</u> <u>Australia:</u> <u>USA:</u> Patrick, Kyle, Johnson, Joshua, Keiichi, Pierre, Paul Ho, M.T. <u>Taiwan:</u> Chia-Hao, Homin, Po-I, Ted, C.T., Shockly <u>USA Dial-in = 1-800-653-5390, 6668081#</u> Outside USA Dial-in = 1 773 843 6301 Minutes Recorder: Kyle

#### I.New Action Items:

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

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

### IV. Miscellaneous Discussions:

Platform:

Ted - Stress relieve of the interface ring is finished. They will start to machine it. It will take about two weeks to finish.
Ted - For the crane, I found one but still need to discuss with the sales. This one can operate under 72km/h wind and survive under 152km/h. When fully extended is 16m high, and is 2m high when stowed. Plan A is to erect it outside the fence on lave with a large concrete slate. Plan B is to erect it just outside the containers.

M.T. - Ted, please talk to Ludwig about the concrete slate.

# (02/Jun/2005) M.T. - Measurement of the hole pattern and pin location is critical. Welcome everyone's input on how to measure about 2.5m distance at 1mm accuracy.

#### Mount:

**Patrick -** Klaus solved the following problems:

- 1. Why did the mount go to 24deg elevation? (HPC problem)
- 2. PTC refraction model.
- 3. Lower stow position by 5cm.
- 4. Suppress the over-shoot problem.
- 5. Some fixes in documents about remote control and interface.

There are still some issues with safety limit remained.

**Patrick** – I have analyzed the pointing data on May/31. The R.M.S of pointing error is 8  $\sim$  9 arcmin.

#### (09/Jun/2005)

Homin - Guillaume has written a linux based software for CCD control. He is working on the documents and will circulate when done. Homin - We will also send out details of the program to Michael so he can integrate it into a\_boss.

#### Receiver:

Johnson - Receivers still shutdown. No update. Pierre - Electrician came and did most of wiring. He will come this week to finish the rest. Pierre - I have got only one quote for fencing (for compressor) and is very expensive. I'm still working on this.

#### (09/Jun/2005)

at 3V.

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2. The polarized capacitor at output is reversed and I suspect it is dead. They should be replaced.

Pierre - I will send out a preliminary report on the noise I found in LNA bias.

#### LO/IF:

**Shockly** - There was some problem controlling IF/LO module from software for #7. After swapping the F83 cards between #5 and #7, everything is fine. Next I will test #6.

**Homin** - When changing the cards, you have to be ware of the address. Address 11 should be the one connecting to computer.

#### Power Distribution:

**Pierre** - Waiting for three filters I ordered. I can have a look on power distribution when I am back in Taipei.

#### (09/Jun/2005)

 ${\tt Pierre}$  -  ${\tt Parts}$  arrived but I did not have time yet. We should try a set of cold-head power distribution in the new office.

## Shelter:

**Pierre** - We replaced the right-hand-side shackle and it looked quite good. It is self-aligned and is grabbing a thick truss. I have ordered five more shackles with safety clips. When they arrive, we can replace the left-hand-side as well because it is dangerous now.

M.T. - About two months ago, I asked a lawyer to send a letter to ASFI to ask them fix our shelter. After 60 days, they still did not respond, so they have forfeited their last installment of money. We will do it ourselves but keep a record of the problems we fixed and the cost.

#### Correlator:

C.T. - I am testing the new design of back-plane by modifying the old design. It will finish some time next week. I will circulate the design and then send it to fabrication.
Po-I - I am doing the figures of the new design of correlator bracket. We can have a review after I finish in next week.
Homin - A major concern is to install the correlator. We need a crane and a cherry-picker at the same time.

#### Calibration System:

**Kyle -** I have the new harmonic generator and the waveguide attenuator for it. Now I am waiting for receivers to come online and test them. Otherwise I will start working on the computer control system with Pierre.

#### (09/Jun/2005)

Kyle - I circulated the minute of our review about the calibration system. It also refers to a post on the discussion board about the testing results. Please take a look.

#### Helium Lin:

 ${\bf Ted}$  - I am going to buy 30ft of 3/4" helium line for realistic length test.  ${\bf M.T.}$  - We have some 9m lines on-site, for the prototype. They can be temporarily removed for test like this.

#### (09/Jun/2005)

Ted - I will prepare a draft about routing the helium line up to the platform. I will need input from all who can help. Target date for cabling is mid to late July.

## Misc:

M.T. - We need a third compressor. I can not find it in Taiwan, but it can be found on the web, about 1,500 dollars. We can probably buy one directly to Hilo. Ted - We are going to buy two source meters for Hilo. Need Ming-Tang's approval.

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M.T - I got some PR from Prof. Chiueh about the laser measurement device. I will ask him the plan, price estimate and so on. **Ted** - Design of optical telescope bracket for platform is almost ready to send

to machine shop.

**Patrick** - Need some help for a 30m long 48V power cable. It is needed when we want to do pointing with the platform.

Patrick - Will measure the distance between two pins as soon as I have a chance. Ted - We need this information for Mr. Mu of the machine shop.