

## Minutes for AMiBA Engineering Telecon

Meeting Date: 17-February-2005

Participants:

Australia:

USA: M.T., Patrick, Michel, Stefan

Taiwan: Homin, Kyle, Pierre, C.T., Ted, Johnson, Steven, Joshua, Chao-Hao

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Minutes Recorder: Steven

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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:

Optical Telescope:

**Patrick** - I have two problems here. One is the network signal is not synchronized. The other is the CCD image data analyzing program is still not working. I have the problems of time synchronization between TBS server and TCS computer. I had sent the e-mail to Homin. I still have the error message. **Homin** - I think there is still something wrong. I will try your commend later. We can remote control the TCS and I cannot analysis the CCD image file. You have to change the IP then should be no problems. I will send you the e-mail for the detail IP setting. The program works on the prototype is for Linux but we use windows now. **Patrick** - I think the interface for program call C program have some problems. **Homin** - the image file should be saved in the default path. I will show you after the meeting. **Michel** - You can use my current program to analysis the image. If you sent the file and I can run the program in TCS computer. **M.T.** - We should get the CCD image file first then we try to analysis the image file. The problems we have now are we can not make the program works.

Receiver:

**Johnson** - No update. **Homin** - Tashun have done the leakage test for #5 to #8 in Taipei. **M.T.** - I guess the mechanical is OK. We need to work out the schedule for shipping date.

LO/IF:

**Steven** - I am working on the #5 to #8. I am trying to have switch combination for power difference under 0.5dB. Now I had tried out three combinations and I need 8 at least. No major problems.

Calibration System:

**Kyle** - The revised result looks good. I can measure the phase introduced by receiver in each path. The problem is how do I verify the measurement is correct or not. To summarize, I can change the relative phase between each receiver. Steven helped me to use the VNA to measure it in EE lab. I will go to Hilo on next Tuesday.

Correlator:

**C.T.** - We probably have to modify the enclosure. We have a test rack to verify all the cover and enclosure. We have to figure out how we can enforce the mechanical. **M.T.** - I need you to work out the shipping schedule. Do not have to be very detailed.

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### Dish:

**M.T.** - Anyone have the 60cm dish since we need to decide if we should pay the vendor. **Kyle** - The dish had been tested during Chinese New Year. We don't have time to discussion it. **M.T.** - I need to know if we are happy on this dish. **Kyle** - Basically, we are happy about the dish. **M.T.** - My last impression from Ted is one of dish is out of specification from the mechanical measurement data. **Ted** - We took the data is only 20 measurement and the error is very little. Then we take another data and the result is very good. Patrick is concern the fitting result is not as we expect. Aalong has modified the design so I think it should be OK. **Patrick** - If the Aalong had this free parameter from manufacturer, I think we should not need to test it again. **Kyle** - The surface mechanical and beam pattern measurement result is very good. The problem would be the alignment. The total power integrated from side lobe is 10% of main lobe. **M.T.** - Unless there is mechanical, painting or other fault from Aalong, now we should not hold the foundry to them.

### Platform:

**Phillip** - I think the  
**Michel** -

### Mount:

**Stefan** - The hexpod and driver system had been tested and there are some minor problems. After remove the hexpod several times, we verify the limiting and the U join, I need some additional information from Vertex. The U join have to be adjusted. It is independent to the dummy ring.  
**Pierre** - Do you have any problems on temperature sensors? **Stefan** - I lost the connection to one of them. It should be wire problem.

### Site:

### Pointing:

**M.T.** - We have this new issue here which Michel arise about the pointing model analysis. The basic pointing model is provided by Vertex. **Kyle** - The job description is we need to take the error data for them to correct the model. **M.T.** - I believe the e-mail is talking about that we should build the point model among ourselves. **Kyle** - I didn't mean that we should find out the error of hexpod or else but we should find out the pointing error from the image we take. **Pierre** - As I know from the acceptance test, Vertex had pointing correction model for temperature, wind, etc. They correct everything about the mount but no information about the platform. **M.T.** - That is different issue. What we need to do now is to provide the Vertex the raw data for the pointing model. It should be finished end of February. **Patrick** - We don't look into how the model looks like but just provide series data on the table for Vertex fine tuning. We can image the error would be very small. So it should be a simple way that we just provide the CCD image shift then provide the error table to Vertex. The form is not problems. I had discussed this with Michel for take a bright star's image. **M.T.** - Anyway you are the guy take in charge of this matter. I think you have cleared this question out. What we need is two things. One is make sure of the programs is work on windows which Patrick need it very much now. Second is moving the file from one computer to another. **Homin** - I resolve the interface part and Ploty is resolving the program. I think the polarization is Phase two job. The version works in Linux is pretty old one. Polty totally understands the problems. **M.T.** - I think we have to resolve this problem as soon as possible. I don't to waste Patrick and Nishioka's time here.