

Minutes for AMiBA Engineering Telecon

Meeting Date: 9-October-2002 (held 1 day earlier than normal due to Taipei holiday)

Participants:

Australia: W. Wilson, M. Kesteven

USA: D. Kubo, B. Martin, J. Peterson

Taiwan: W. Ho, H.M. Jiang, C.T. Li, C.J Ma, P. Shaw, J. Han, P. Wu

Minute Recorder: D. Kubo

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

I. New Action Items:

None.

II. Previous Action Items (still open):

03oct02-1: Site Clock >> Bob, Ferdinand: Identify and order site clock.

[Awaiting quotes.](#)

03oct02-2: JPL's LNA Test >> Ming-Tang: Generate schedule for the noise temperature test in Hilo with receiver #3.

[Ming-Tang on vacation.](#)

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.

[Waiting to see how we are doing on the current schedule. Expect some delay next week due to some logistic problems. Bob will expand and revise the schedule.](#)

[In process.](#)

03oct02-4: Correlator Readout Chip >> Derek: Reconfirm delivery date and quantity of 4-lag readout chip.

[C.T. reminded Derek that the Prof. Chiueh will deliver some chips \(10?\) before the end of this year for evaluation. After the design has been confirmed then he will make a production run for 49 + spares which will tentatively be available in March 2003. Derek has sent an e-mail to Prof. Chiueh requesting confirmation. AI will be closed after this information is verified.](#)

20sept02-2: Platform/Base >> Bob: Mike and Bob had some discussions about the calibration for the base. It was suggested that Bob begin a dialog with Vertex regarding this issue. It was also suggested to generate an interface document describing the drive of 3 rotational axis (look at draft interface doc from ALMA). This all has to be ironed out before the CDR on December 10th in Taipei.

[Mount: bob and Philippe were discussing with Vertex on the mount about Soten\(?\) jackscrew design. Bob and company will discuss more and come to conclusion by the end of week if possible.](#)

[Platform: Got some inquiry from CMA, hand more discussion with Vertex, Alctel declined to bid, ARL will visit us in Taipei on Friday and bring their proposal to us.](#)

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CMA came back with a bid which was significantly cheaper, contained more technical details, and the best delivery time of 6 months. The bid includes assembly on site (but excludes shipping). If we start the contract in January then the mount could be available in June which would probably put it ahead of the mount and receivers. It was decided to go with CMA. Bob commented that he was quite relieved to find a platform supplier. This AI will be close when contract work is started.

Philippe started doing some modeling using Ted's drawing, just in case we don't like these bids. Ted will also revise the drawings once his new computer is up.

12sept02-1: DC Power Routing on Platform >> Homin, Derek: Generate a spreadsheet of DC voltages and current necessary for each box.

Ongoing, people are working on better numbers.

Warwick commented that they have been using switching power supplies at ATNF without problems. Derek sent out an e-mail earlier this week asking others to take a look at the Agilent 66000 series supply (module w/ 8 plug-in switcher modules, low switching noise output). Homin suggested that we buy one and try it out with the prototype.

12sept02-4: Prototype Mount >> Ted, Ferdinand: Ted to finish/send the counter weight drawing, Ferdinand to have it fabricated at Dayton Jackson in Hilo.

The counter weight is done, plan to take it up to ML this Friday and install it to the mount.

12sept02-5: 60 cm Dish >> Ted, Philippe: Prepare contract to Dr. Ong.

The PO will go out next week. Delivery is expected to be 100 days ARO.

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

None

IV. Miscellaneous Discussions:

MMIC: Huei Wang not present.

Receiver: ..Ming-Tang not present.

LO/IF: Homin mentioned that the components should be available by Dec 1 and ready for assembly (for receiver #3?).

Correlator: Derek - packaged mixer w/o pads scheduled to ship to Taipei this coming Fri or Mon, mixer with 6 dB pads will ship a few days later. The two 4-lag modules are still on schedule for Oct-31. Jeff R. has resorted back to the original pin approach for the 4 IF outputs, however, he is using larger pins this time. We will have to make accommodations to interface to this.

Weinschel phase shift is on order through RCUH, still awaiting Dow-Key price through Taiwan. Other major items to order are the slope EQ and more LPFs.

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C.T. is working the 3rd section and expect to have the wire bond-able resistor in next week for the Triquint amplifier biasing. He is also working with the board fabrication company and may visit them next week.

Dishes: Contract is in place. Bob will answer the e-mail regarding the "3D picture" and send to Paul.

Platform/Mount: See discussion above.

Site Issues/Network: Kyle (K.Y. Lin)- DHCP is now working both in the visitors building and dome. Jeff P. commented that it seems quite fast.

Tried to mount enclosures and put in electronics for prototype mount after concrete pads have been modified. More electrical breakers will be put in, move UPS into the dome, also put down some different conduits in next few weeks. Will have the electrical contractor to work on the outside work.

People have been trying focusing telescope.

Jeff P. believes this has been resolved. He asked that Bob send the neutral density filters via FedEx.

Bob: Shed for compressor and chiller installed. Ming-Tang to take up receiver and electronics this week or early next week. Counter weight needs to be modified because it hits the equipment rack when the mount is fully tipped.

Jeff checked the alignment of the pol axis and found that it was off (too low). He believes it is because of the pad not being level and that a 0.5 inch shim should fix this.

Hilo Facilities: Bob - 2nd apartment has been rented(?), and is looking to get a 3rd to accommodate visitors. Found new office space 2 buildings away from SMA office. It has 1 common area and 3 offices. Derek is addressing the phone and network access issue. CSO lab space will be kept for the lab. This new office should be available next week or the following week.

Schedule: See AI 03oct02-3 above.

V. Other Inputs: