Meeting Participants
Penticton	Brent, Dave D, Donna, Gary, Igor, Sean, Sonja, Zhang
Socorro	Allen, Barry, Bruce, Bryan, Ken, Kevin, Martin, Michael
Jodrell Bank	Bryan, Dave, Christine, Roger, Simon

Software Focus

Sonja Vrcic
- Added name space to the VCI schema.
  - → Waiting for the VCI Review report from Michael. It should be available within the next day or two.
  - → Sonja will finalize the schema before updating the documentation.

Dave Del Rizzo
- By the end of today, Dave will have the RTDD JAR file ready so plotting lags can be done.
  - → Will add zoom capabilities.
  - → Will fix the correlation coefficient problem. The number of lags should be the same for both sides.
  - → **Action** – Bruce to forward an xml file re: lags with examples to Dave D.

Kevin Ryan
- Supporting OTS testing during the last week.
- Kevin is back working on the test executor.

Bruce Rowen
- Working on the Station Board software.
  - → Wrote the config scripts for OTS.
  - → The scripts are mostly automatic now; just turn on the Delay Module and it is running.
- Encountering an issue on the Station Board GUI when the Delay Module is idle.
  - → All the CRC interconnections are green when data flow starts indicating the CRCs are fine, but one of the Station Board is showing errors on a few wires but the other Station Board is not.
  - → Brent commented that this is not unusual. Dave F and Zoran have done extensive testing; it could be anything.
    - o **Action** – Bruce to generate Jira items re: Station Board and Delay Module with attention to Zoran.
  - → Sonja commented that clock hedges could be adjusted and requested Bruce to save the file when this happens.
  - → Brent commented that there should be a start button or start-up sequencer on the main Station Board GUI.
  - → Michael commented that there is something wrong with the colour scheme; everything looks good but there is a red light.
  - → Brent suggested moving towards a CLF between the GUIs.
  - → Sonja commented that Bryan Breported at a previous meeting that there was a general dissatisfaction with the Station Board GUI. Currently, the GUI is comparing lines, eventually the comparisons will be done in the CMIB.
- It may be useful for Sonja to go to Socorro.
  - → Bruce commented that in the long-term it could be useful but for the short-term it may not be necessary.
  - → Bruce commented that, for now, utilizing the Jira system to identify and track problems will be sufficient.

➔ Gary mentioned that a video camera in the lab with a connection to DRAO could be helpful.
- o There was general agreement with Bryan's suggestion of waiting until Brent's trip in August.
- o Brent commented that Michael is doing a good job driving the Baseline Board testing.
- o Bryan commented that Brent's presence helps to focus the team; however 2 weeks is a good length of time for Brent to be at Socorro as installation and debugging the system is exhausting work.
- o Brent is not confident that he would be much help with the Station Board.
- o Remote testing is scheduled for July 24. This will help to determine whether or not more personnel is needed in Socorro.

Martin Pokorny
- Implemented changes to the Monitor and Control interface to the CBE. In the process of adding documentation.
  ➔ No higher level functionality has been added.
- Running live data through the back end to debug the changes of the last few weeks.
- Encountered a problem with the Station Board that Bruce drives.

Michael Rupen
- Reviewing VCI schema issues arising from the recent review.
  ➔ Brent commented that there needs to be discussion re: phased offsets.
  ➔ Question – will investigations of pulsars be accommodated?
- Working on On-the-sky tests.
- In response to Michael's inquiry re: new schedule, Brent commented that there will be a new schedule released following the EVLA monthly issues meeting on July 24.

New Software Action Items

- Bruce to forward an xml file re: lags with examples to Dave D.
- Bruce to generate Jira items re: Station Board and Delay Module with attention to Zoran.
- Martin to talk to Ray re: how to run tests independently with an external clock.

Continuing Software Action Items

- Martin to forward the BDF format to Dave D.
- Zoran to email the new load for board testing to Bruce.
- Kevin to forward an email to Ralph re: the RPMIB and auto refresh.
- Mark to order bigger ESD bags for the next board shipment.
- Kevin to forward the new code that was programmed into the NRAO board that originates the time code to send to the Fanout Board to Brent for testing at DRAO to proceed.
- Bruce to set the obs time to synchronize re: Station Board to Baseline Board testing.
- Kevin to build a delay button into the GUI to accommodate different time requirements.
- Bruce to forward the artificial Linux distribution system created by James to DRAO.
- Brent to consider possibilities for testing the CPCC and let Kevin know.
- Kevin to check re: if each board is identified with a serial number on the board.

- Martin to forward a copy of the CBE schema/config to Sonja once a stable copy is available.
- Brent to review the 4-bit and 7-bit correlation samples for the VCI as Sonja would like to ensure that the connections/syntax are agreed upon.
- Michael to clarify with Bryan re: Delay Model, on-the-fly observing, smoothing, buffering, and cuing and report back to Hichem and Bruce.
- Michael to define critical tests.

Hardware Update

Brent Carlson
- The shipment of racks are loaded in the truck and ready to go. [The truck is scheduled to depart DRAO July 25.]
  - → Brent would like delivery to the VLA to be as soon as possible.
- The Baseline Board Work Order has been submitted, it could take 8 weeks for delivery.
- Brent has not heard back from MuAnalysis re: boundary scan testing, so assumes that they will not test the chips.
  - → DRAO will probably hire temporary staffing to test the chips at DRAO before forwarding them to BMS.
- All Station Boards have arrived at DRAO.
  - → There is no time to test them this week. Zoran and Ralph are both on vacation.
  - → Dave is off for another 4 weeks. Brent is at DRAO for only 4 days this week and will be off all of next week.
  - → Next week Zoran will work on the delay tracker and the spontaneous de-configuring of the filter chip.
    - o In the past, Brent fixed the filter chip problem by adding a capacitor, maybe that will work again.
    - o The FiFo issue is a functional issue. This is not a re-set problem.
    - o Zoran is on the critical path.
  - → NRAO would like to receive a new Station Board so testing can continue.
  - → Brent commented that until delay tracker is sorted out then there is no point in sending the Station Board to Socorro.
  - → Zoran to provide his own test vectors to provide both in and out and hook Logic Analyzer up to the DM output. Brent commented that loading vectors with a counter and using the LA is the easiest method.
    - o Brent reported that Dave thinks this is sorted out but we are still running in to problems. Maybe Dave's vectors are wrong.
- Brent worked on the chopper circuit re: losing sync, it is now working with the Baseline Board.
  - → Brent made a change so that it no longer captures bad IDs when it is not synchronized: still to be tested.
- Bruce reported that the current Baseline Board (at Socorro) suddenly loses synch after several hours. Brent commented that it is noisier than the new build because of de-coupling problems.
  - → It automatically re-syncs. Brent is hopeful that the changes will help. The new design should regain synch.
  - → Brent discussed with Ray Ferraro re: how to run tests independently with an external clock.
  - → **Action** – Martin to talk to Ray re: how to run tests independently with an external clock.
- The Recirculation chips take ~ 10 s to synchronize.

Simon Garrington
- **Action** – Sean and Amy to contact Simon by phone, July 24.