Status of the Anode Front-end Electronics

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1. Amplifier/Discriminator ASIC
   (a) Produced: 28,000
   (b) Tested: 28,000
   (c) Good: 26,000 (93%)
   (d) Used: 14,000
   (e) Required Spares: 5,000 (35%)
   (f) Extra: 7,000
   (g) Six experiments have expressed interest in buying some of the extra chips – trying to find a way around DOE rules.

2. Anode Signal Cables
   (a) Cables which run from the AFEB to the ALCT.
   (b) All 9,400 cables, including spares, are finished. All either shipped or awaiting shipment to FAST sites.
   (c) Please don't ship cables around yourself without letting us know!

3. Anode Front-End Boards (AFEB)

   (a) Postscript files showing 13 plots of bench calibration/test results for each of the 12,200 AFEB's installed in CERN database.

   (b) Measurements confirm the AFEB current consumption of 100 mA.

4. Grounding Jumpers (See N. Bondar's talk at Jan. EMU Meeting)

   (a) Successfully installed on all chambers at CERN.

   (b) Successfully installed on all chambers at UC and UF FAST sites.

5. New ALCT Bench Tests

   (a) Based on ALCT measurements taken in Dec. '02 at UF (see N. Terentyev's talk at Jan. EMU meeting), new tests of the analog part of the ALCT have been incorporated into the standard UCLA bench tests.

6. New ALCT/AFEB FAST Site Test

   (a) In Dec. '02 tests, noticed that AFEB discrimator voltage needed for 20 fC threshold was slightly different between bench test value and FAST site measurement.

   (b) Offset traced to the difference in rise times of the input pulse used for the bench test: 8 ns, and the ALCT/FAST site: 27 ns.

   (c) Turned this test into a new FAST Site Procedure (#13B) – ALCT Threshold Verification.

   (d) Look for a large difference between the bench value and the ALCT measurement of the 20 fC threhold setting for each individual anode channel. Tests both the ALCT and the AFEB's. New test now working at the FAST sites and at the ISR.

7. Effects on AFEB's and Anode Cables of Shipping to CERN

   (a) All AFEB's still working.

   (b) Found several loose "self-tapped" screws which provide support and grounding for AFEB. Can be found by standard AFEB noise test.

   (c) Found several disconnected cables and one cut cable.

   (d) Bondar now at CERN developing inspection check-list.