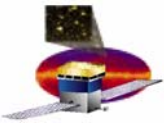


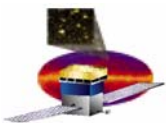
NCR Status

Pat Hascall
SLAC
System Engineering



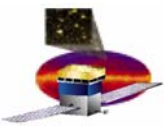
Overview

- **Open NCR report attached**
 - **Included all open NCRs at the I&T level**
 - **Mechanical and electrical**
- **Of the 45 NCRs that were reviewed**
 - **30 are resolved (problem understood, closure is pending follow up actions)**
 - **2 track FIFO full messages (the result of showers)**
 - **2 are open to look for ACD characteristics during TV**
 - **4 cover tracker**
 - **Noise bursts**
 - **GTFE register readout**
 - **Two low level tracker characteristics – likely will close**
 - **One is waiting for a test with the ACD and tracker**
 - **One tracks a PDU LPT issue**
 - **5 are still in work (no indication that they are significant)**
- **There is no lien on ACD installation based on the NCR review**



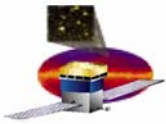
NCR Report

NCR#	Description of problem	Status	Category
281	FMA AVDDDB current is 176mA for C45 (in spec but out of family)	Monitor	TKR track
297	TE702 trigger jitter > 250 ns	Specification corrected, test updated, awaiting retest	resolved
351	Thermistor cable unavailable for installation	Thermistors to be added later in an alternate location	resolved
405	Grid related components unavailable for installation	Components to be installed when available	resolved
432	Resistance to ground >2.5mOhm for FMA & FMB	Measurement method corrected, results within spec	resolved
443	CAL fle difficulties in trigger tests near noise threshold	Test updated to improve settings (not an operational issue)	resolved
458	Event phasing errors observed	Traced to extremely low probability bug in VHDL, no action required	resolved
477	TEM FIFO overflow error events	Natural phenomenon cause this response, review to ensure nothing else is going on	track
487	CAL register test failure	In work	in work
529	TKR GTFE readback error in bay 9	no more action for now	TKR track
532	TIC mux_config readback	Error due to interaction with housekeeping readout	resolved
535	Duty cycle margin failure in FM4	Verify proper operation at LAT level	TKR track
539	TKR trig diag. not latched in TkrDataTaking	Schema error, corrected and retest passed	resolved



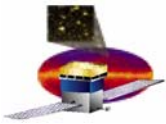
NCR Report (Continued)

NCR#	Description of problem	Status	Category
549	Tracker alarm over temperature, out of family temps, and telemetry glitches	Temps not an issue, telemetry glitches in work	in work
550	TEM errors were observed during TE704 test set up; no errors on rerun	FIFO full messages, similar to 477	track
562	GLAT 1752 / 1753 TEM/TPS assys have not been reworked	TPS replaced	resolved
579	Sheared stud in Grid 2	Alternate parts defined and used. Similar parts already installed in Grid 1 left in place.	resolved
592	Thermistors for the odd numbered bays are rotated 180 degrees	Documentation corrected, FSW updated	resolved
601	EMI tape scuffed	Tape repaired	resolved
604	Bay 4 TkrReadingConfigurationTest failure on x0, FE0;	Test run without light tight cover, light leak	resolved
607	LAT CPT- CAL section, data acquisition TEM errors - test software mods	online CCB approved mods	resolved
608	LAT CPT - CAL section, range disc. scan, some miss transition	online CCB approved mods	resolved
609	LAT CPT - CAL section, FLE disc. scan analysis, fail on fit parameter	Test software update	resolved
617	LAT CPT- TKR section, bay 12 TkrLayerTriggerRate failure - new hot strip	same cause as NCR700	resolved



NCR Report (Continued)

NCR#	Description of problem	Status	Category
618	ACD CPT - software CNO counters show excess counts from injection	Resolved, due to characteristics of EM GASU	resolved
621	Clean tent temperature low	Defective heater strip replaced	resolved
624	ACD Thermistor reading fluctuating between 5 degrees to a negative 50	No issues detected post test by ACD, will check to ensure the problem does not repeat	ACD track
625	AcdVetoHitmapPha - Garc11 Gafe17 High TCI HW Count of 2 (expect 0)	In work	In work
626	Rates exceeded 1 kHz between -10 C to -15 C in tile 320	Wait for TV	ACD track
648	ACD CPT - AcdGafeNoise algorithm fails to find 10% and 90% levels	Test software algorithm update in work	resolved
652	ACD triggered ops shows event number skipping between events	Known problem in the EM GASU, verify the issue is gone at first test of ACD on LAT	resolved
654	ACD Triggered Ops, single adc hit tiles	L.Wai to analyze TKR+ACD, but likely ribbon tiles	ACD track
667	GEM discarded events due to CAL trigger requests during deadtime	Source understood, events do not extend beyond deadtime	resolved
684	Bay 14 TKR layer X11 shows transient large occupancy in lowest ladder	Tracker team studying	TKR track
685	ACD. AcdHidCal causes excess counts in GARC11, GAFE13	In work	In work
689	ADCs in bay 9 TEM show commanding problems	Connector saver had poor connection	resolved



NCR Report (Continued)

NCR#	Description of problem	Status	Category
690	PDU LPT issues, likely test cable length	Verify proper operation at LAT level	PDU track
692	Jackpost missing	Jackpost removed from connector saver and reinstalled	resolved
698	Kapton tape on Flex cable scuffed	Additional Kapton tape applied	resolved
700	Incompatibility between TKR CPT scripts on hot strip definition	hot strip list locked down to avoid false alarms	resolved
706	Excessive ACD veto retriggers after injection of "large" charge levels	Cause determined to be charge injection circuit reset, no operational impact	resolved
708	EMI shield screws galled	Resolution in work	in work
709	16 bay CAL CPT socket timeout	workaround determined	resolved
711	Power on current measurement for grid 16 tower, exceeded limits.	Limit unnecessarily tight coupled with voltage drop as power consumption increases	resolved
712	16 Tower performance test data acquisition crashes (same as NCR709)	workaround determined	resolved