



GLAST Large Area Telescope

Instrument Flight Software

LAT Monthly Jan 5, 2006

Dick Horn



FSW/Test Status

- Release 6.1 Complete/System Checkout FQT in progress
 - Completed planned initial FQT successfully (25/43 scripts), 16 Dec
 - Plan to run science (Event Processing) suite this week (10 additional scripts)
 - 127 of 184 total requirements demonstrated by this week
 - Current lien is related to LCI (5 scripts, 21 Requirements) due to a TBD data output discrepancy
 - 12 January (TBR): FSW System Checkout FQT completion
- Scripts deferred to System Test FQT now in work (GRB-related, thermal control, filters, plus repeat of System C/O scripts)
 - 8 scripts for deferred items, 36 requirements (Total FQT 51 Scripts)
- Release 7.0 Target For Formal FQT
 - Incorporate Lessons Learned
 - Deferred Jira Items
 - GRB, Initial Filters and data compression
 - FQT ECD 20 Dec -> 16 Jan -> 2 Feb TBR*
 - *Need a credible plan that reflects impact of System C/O FQT slip, personnel loss and supports earliest NRL delivery



Transition to FSW System Test Flow

ID	Ι	Task Name	Start	Finish	<u> </u>	
"		Task Name	Otart	1 1111311		ebruary 2006
	0	Flight Onton	W140/44/0	F:: 4/40/0	3 6 9 12 15 18 21 24 27 30 2 5 8 11 14 17 20 23 26 29 1	4 7 10 13
1		Flight Software	Wed 12/14/0	Fri 1/13/0		
2	<u> </u>	FSW 6.1 FQT	Wed 12/14/0	Mon 12/19/0		
3		New Release for SIU/EPU PwrControl	Tue 12/20/0	Tue 12/20/0		
4	111	Prelim FSW 6.2 FQT'ed Release	Fri 1/13/0	Fri 1/13/0	1/13	
5		SIU Installation on LAT	Wed 12/14/0	Wed 1/11/0		
6	/	Verify PCB	Wed 12/14/0	Wed 12/14/0	100%	
7		establish boot load tools inB33	Thu 12/15/(Thu 12/29/0	25%	
8	_	develop boot load procedure	Wed 12/14/(Fri 12/16/0	100%	
9	111	write boot load procedure	Thu 12/22/(Thu 12/22/0	□ • • • • • • • • • • • • • • • • • • •	
10		demo proc on test hardware in data lab	Tue 12/27/0	Tue 12/27/0	0%	
11	111	demo proc on test hardware in B33	Mon 1/9/0	Mon 1/9/0	1 <u>1</u> 0%	
12		Mgmt / QA review	Mon 1/9/0	Mon 1/9/0	<u> </u>	
13		load flt boot code into SIUs/EPUs (2hr/CPU)	Tue 1/10/0	Wed 1/11/0	□ 10%	
14		SIUs/EPU Handoff to I&T	Wed 1/11/0	Wed 1/11/0	1/111/11	
15		LICOS Version of boot load procedure	Wed 1/11/0	Fri 2/3/0		0%
16		Develop System Level (LICOS) version of boot I	Wed 1/11/0	Wed 2/1/0		0%
17		Test System Level boot load on testbed	Wed 2/1/0	Fri 2/3/0		<u></u> 0%
18		Flight Ops version of boot load available before	Fri 2/3/0	Fri 2/3/0		2/3
19		FSW load procedure	Wed 12/14/0	Thu 1/12/0	11%	
20	<u> </u>	Develop FSW Load Sequence	Wed 12/14/(Thu 12/15/0	100%	
21		FSW Load LICOS Script	Fri 12/16/0	Wed 1/11/0		
22		Testbed verification	Thu 1/12/0	Thu 1/12/0	1 0%	



Transition to FSW System Test Flow (Cont)

I.D.	1	Task Name	Ctant	Finink	
ID	_	Task Name	Start	Finish	cember 2005 January 2006 February 2006
	0	Power Park	NA - 1 40/4 4/05	NA - 1 40/00/05	3 6 9 12 15 18 21 24 27 30 2 5 8 11 14 17 20 23 26 29 1 4 7 10 13
23		Power Rack		Wed 12/28/05	
29	<u> </u>	VSC	Wed 12/14/05	Thu 1/12/06	43%
30	<u> </u>	Separate VSC Software Config Mgmt from FSW		Wed 12/14/05	
31	_	Complete Acceptance Test Proc and dry run	Wed 12/14/05		l — - +
32		Install in B33	Mon 12/19/05		100%
33	<u> </u>	Config VSC Zyplex	Mon 12/19/05		100%
34		Functional test - miniLAT-like article	Thu 1/5/06	Fri 1/6/06	
35		Handoff to I&T (Paperwork)	Fri 1/6/06	Fri 1/6/06	
36		Create Safe to Mate Procedure	Mon 1/9/06	Tue 1/10/06	_ 0%
37		Install / route cables on LAT	Mon 1/9/06	Tue 1/10/06	0%
38		Available to Safe to Mate - LAT	Wed 1/11/06	Thu 1/12/06	0%
39		Mobile Computing Rack	Wed 12/14/05	Fri 1/13/06	ρ%
40		Configure software management	Wed 12/14/05	Wed 12/14/05	
41		Instal LICOS	Thu 12/15/05	Fri 12/30/05	
42		LICOS Check of VSC S/C, Power housekeeping	Fri 1/13/06	Fri 1/13/06	<u></u> 0%
43		Configure Sun Workstations/ FSW Env in B33	Thu 12/15/05	Fri 12/30/05	0%
44		Phase 0	Thu 12/15/05	Thu 1/19/06	9%
45	111	LATTE 4 Testing	Thu 12/15/05	Fri 1/13/06	11%
46		Install SIUs/ EPUs	Mon 1/16/06	Thu 1/19/06	0%
47		Phase 1	Tue 1/17/06	Thu 2/2/06	0%
48		Power Up LICOS script (thru PBC)	Fri 1/20/06	Fri 1/20/06	<u> </u>
49		Demo Backdoor Activation Script	Mon 1/23/06	Mon 1/23/06	□ 0%
50		FSW Load Script	Tue 1/24/06	Tue 1/24/06	0%
51		Baseline Test Config	Tue 1/24/06	Tue 1/24/06	1/24 □
52	111	Final FSW Rel 7.0	Tue 1/17/06	Mon 1/30/06	0%
53		FSW 7.0 FQT	Tue 1/31/06	Thu 2/2/06	0%
54		Phase 2	Thu 2/2/06	Thu 2/2/06	2/2
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Test Summary

- System Checkout FQT
 - Run against build V0-6-1
 - 25 of 43 scripts run to successful completion
 - 1 partially successful (expected)
 - 1 not completed
 - 1 requires "autoboot"
 - 10 more planned for today (event processing)
 - 5 LCI scripts will be updated and run pending completion of LCI development
- Scripts deferred to System Test FQT now in work (GRB-related, thermal control, standards, those needing additional filters)
- Test schedule
 - 5 January: FSW System Checkout FQT continued: event processing
 - 12 January (TBR): FSW System Checkout FQT completion: LCI plus stragglers
 - 2 Feb (TBR): FSW System Test FQT



JIRA Metrics

