



**Gamma-ray
Large Area Space
Telescope**



GLAST LAT PROJECT

**Cost & Schedule Information
for the
GLAST LAT PDR/Baseline Review
January 8-11, 2001**

**4.1.8 Mechanical Systems
Subsystem Manager – M. Nordby**

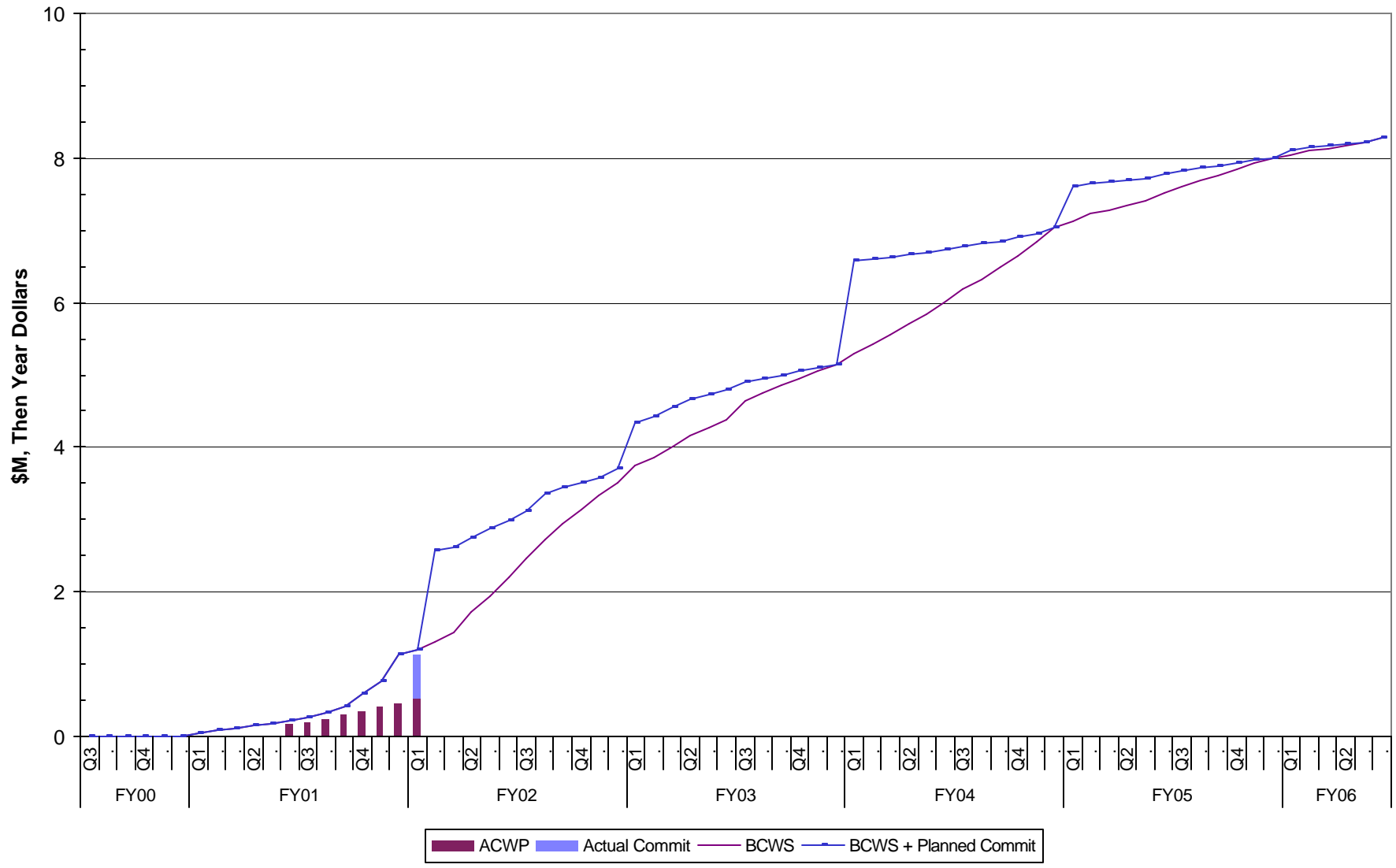


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Large Area Space
Telescope**

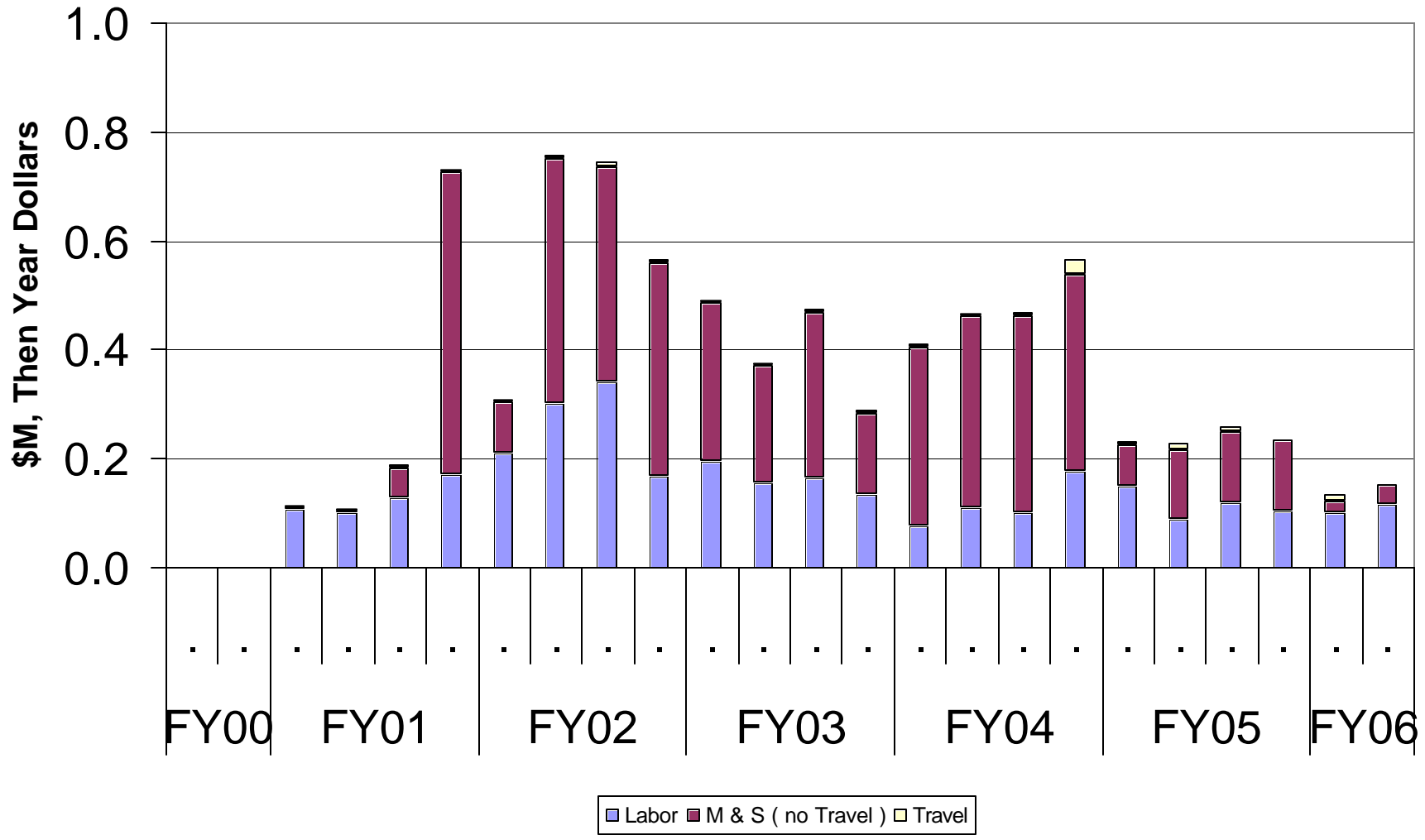


Cost & Commitment Profile

4.1.8 Mechanical Systems Costs and Commitments



4.1.8 Mechanical Systems Cost Type





**Gamma-ray
Large Area Space
Telescope**



Cost Detail @ Work Package Level

Program:	1001	Description:	GLAST LAT Project							
Run Date:	12/12/01	Status Date:	10/31/01							
		Approval:								
		Program Manager								
		Functional Manager								
		Cost Account Manager								

CAPW[4]	OBS	CPN[1]	WP	FY00	FY01	FY02	FY03	FY04	FY05	FY06	Cumulative
4.1.8.1 MANAGEMENT											
DL SU-SLAC											
2600116 4.1.8.1.2 TRAVEL (SLAC)											
		CPN[1] Totals:	PLANNED	0	260	282	288	323	324	159	1,637
			BUD+COM	0	260	282	288	323	324	159	1,637
2600118 4.1.8.1.3 Mech Parts & Material Eng.											
		CPN[1] Totals:	PLANNED	0	79	34	12	0	0	0	124
			BUD+COM	0	79	34	12	0	0	0	124
2600119 4.1.8.1.4 Sub-Contractor Management & Travel (LM)											
		CPN[1] Totals:	PLANNED	0	125	361	250	274	136	22	1,169
			BUD+COM	0	125	382	229	274	136	22	1,169
	OBS Totals:		PLANNED	0	464	676	551	597	460	181	2,930
			BUD+COM	0	464	697	530	597	460	181	2,930
CAPW[4] Totals:											
			PLANNED	0	464	676	551	597	460	181	2,930
			BUD+COM	0	464	697	530	597	460	181	2,930
4.1.8.2 RELIABILITY & QUALITY ASSURANCE											
DL SU-SLAC											
2600122 4.1.8.2.3 (LM) RELIABILITY & QUALITY ASSURANCE											
		CPN[1] Totals:	PLANNED	0	38	65	0	0	0	0	102
			BUD+COM	0	38	65	0	0	0	0	102
	OBS Totals:		PLANNED	0	38	65	0	0	0	0	102
			BUD+COM	0	38	65	0	0	0	0	102
CAPW[4] Totals:											
			PLANNED	0	38	65	0	0	0	0	102
			BUD+COM	0	38	65	0	0	0	0	102
4.1.8.3 MECHANICAL SYSTEM DEVELOPMENT											
DL SU-SLAC											
2600123 4.1.8.3.1.1. DESIGN INTEGRATION											
		CPN[1] Totals:	PLANNED	0	129	211	71	7	0	0	418
			BUD+COM	0	129	211	71	7	0	0	418
2600124 4.1.8.3.2.1 GRID DEVELOPMENT											
		CPN[1] Totals:	PLANNED	0	80	19	0	0	0	0	99
			BUD+COM	0	80	19	0	0	0	0	99
	OBS Totals:		PLANNED	0	210	229	71	7	0	0	517
			BUD+COM	0	210	229	71	7	0	0	517
CAPW[4] Totals:											
			PLANNED	0	210	229	71	7	0	0	517
			BUD+COM	0	210	229	71	7	0	0	517
4.1.8.4 THERMAL SYSTEMS DEVELOPMENT (LM)											
DL SU-SLAC											
2600125 4.1.8.4.1 INSTRUMENT THERMAL ENGINEERING (LM)											
		CPN[1] Totals:	PLANNED	0	294	331	26	0	0	0	651
			BUD+COM	0	294	333	24	0	0	0	651
	OBS Totals:		PLANNED	0	294	331	26	0	0	0	651
			BUD+COM	0	294	333	24	0	0	0	651
CAPW[4] Totals:											
			PLANNED	0	294	331	26	0	0	0	651
			BUD+COM	0	294	333	24	0	0	0	651
4.1.8.5 THERMAL CONTROL SYSTEM (SLAC)											
DL SU-SLAC											
2600077 4.1.8.5.1 Thermal Control Sys. Develop. (SLAC)											
		CPN[1] Totals:	PLANNED	0	3	160	277	7	0	0	448
			BUD+COM	0	3	269	169	7	0	0	448
	OBS Totals:		PLANNED	0	3	160	277	7	0	0	448
			BUD+COM	0	3	269	169	7	0	0	448
CAPW[4] Totals:											
			PLANNED	0	3	160	277	7	0	0	448
			BUD+COM	0	3	269	169	7	0	0	448
4.1.8.6 RADIATORS (LM)											
DL SU-SLAC											
2600078 4.1.8.6.1 Heat Pipe EM Devel (LM)											
		CPN[1] Totals:	PLANNED	0	121	388	10	898	21	0	1,437
			BUD+COM	0	121	389	9	898	21	0	1,437
	OBS Totals:		PLANNED	0	121	388	10	898	21	0	1,437
			BUD+COM	0	121	389	9	898	21	0	1,437

Program:	1001	Description:	GLAST LAT Project								
Run Date:	12/12/01	Status Date:	10/31/01								
		Approval:	Program Manager Functional Manager Cost Account Manager								

CAPW[4]	OBS	CPN[1]	WP		FY00	FY01	FY02	FY03	FY04	FY05	FY06	Cumulative
CAPW[4] Totals:				PLANNED	0	121	388	10	898	21	0	1,437
				BUD+COM	0	121	389	9	898	21	0	1,437

4.1.8.7 GRID

DL SU-SLAC

2600130 4.1.8.7.1 GRID EM DEVELOPMENT & TESTING (SLAC)

CPN[1] Totals:	PLANNED	0	0	325	16	0	0	0	0	342
	BUD+COM	0	0	325	16	0	0	0	0	342

2600132 4.1.8.7.3 FLIGHT GRID FABRICATION (SLAC)

CPN[1] Totals:	PLANNED	0	0	4	251	0	0	0	0	255
	BUD+COM	0	0	20	235	0	0	0	0	255

2600134 4.1.8.7.5 GRID HEAT PIPE FABRICATION (LM)

CPN[1] Totals:	PLANNED	0	0	86	267	0	0	0	0	353
	BUD+COM	0	0	108	245	0	0	0	0	353

OBS Totals:

	PLANNED	0	0	416	535	0	0	0	0	950
	BUD+COM	0	0	454	496	0	0	0	0	950

CAPW[4] Totals:

	PLANNED	0	0	416	535	0	0	0	0	950
	BUD+COM	0	0	454	496	0	0	0	0	950

4.1.8.8 SUBSYSTEM INTEGRATION AND TEST

DL SU-SLAC

2600136 4.1.8.8.1 GRID ASSEMBLY & TEST (SLAC)

CPN[1] Totals:	PLANNED	0	0	71	133	1	0	0	0	205
	BUD+COM	0	0	91	113	1	0	0	0	205

2600138 4.1.8.8.4 THERMAL CONTRL SYS THERMAL TEST (LM)

CPN[1] Totals:	PLANNED	0	8	23	17	235	272	0	0	556
	BUD+COM	0	8	25	15	235	272	0	0	556

2600140 4.1.8.8.5 THERMAL ENGINEERING SUPPORT (SLAC)

CPN[1] Totals:	PLANNED	0	0	15	7	14	14	0	0	50
	BUD+COM	0	0	15	7	14	14	0	0	50

OBS Totals:

	PLANNED	0	8	109	156	250	287	0	0	810
	BUD+COM	0	8	131	135	250	287	0	0	810

CAPW[4] Totals:

	PLANNED	0	8	109	156	250	287	0	0	810
	BUD+COM	0	8	131	135	250	287	0	0	810

4.1.8.9 LAT I&T SUPPORT

DL SU-SLAC

2600081 Mission I & T Support

CPN[1] Totals:	PLANNED	0	0	0	0	150	65	0	0	215
	BUD+COM	0	0	0	0	150	65	0	0	215

OBS Totals:

	PLANNED	0	0	0	0	150	65	0	0	215
	BUD+COM	0	0	0	0	150	65	0	0	215

CAPW[4] Totals:

	PLANNED	0	0	0	0	150	65	0	0	215
	BUD+COM	0	0	0	0	150	65	0	0	215

4.1.8.A MISSION I&T SUPPORT

DL SU-SLAC

2600145 4.1.8.A.1 SC/LV I&T SUPPORT (SLAC)

CPN[1] Totals:	PLANNED	0	0	0	0	0	85	70	155
	BUD+COM	0	0	0	0	0	85	70	155

2600147 4.1.8.A.3 Mission Thermal Test Support (LM)

CPN[1] Totals:	PLANNED	0	0	0	0	0	37	36	72
	BUD+COM	0	0	0	0	0	37	36	72

OBS Totals:

	PLANNED	0	0	0	0	0	122	106	227
	BUD+COM	0	0	0	0	0	122	106	227

CAPW[4] Totals:

	PLANNED	0	0	0	0	0	122	106	227
	BUD+COM	0	0	0	0	0	122	106	227



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Work Package Planning (Resource Loaded Schedule @ Work Package Level)

Act ID	Activity Description	Dur	Start	Finish	PMT	Budgeted Cost	FY01	FY02	FY03	FY04	FY05	FY06	
8 4.1.8 MECHANICAL SYSTEMS													
Subtotal		1,357	10/02/00A	03/31/06		8,287,704.72						8,287.7	
81 4.1.8.1 MANAGEMENT													
Subtotal		1,357	10/02/00A	03/31/06		2,930,048.73						2,930.0	
DL SU-SLAC													
Subtotal		1,357	10/02/00A	03/31/06		2,930,048.73						2,930.0	
+ 2600116 4.1.8.1.2 TRAVEL (SLAC)													
		1,357	10/02/00A	03/31/06		1,636,705.09						1,636.7	
+ 2600118 4.1.8.1.3 Mech Parts & Material Eng.													
		662	02/01/01A	09/30/03		124,364.65						124,364.65	
+ 2600119 4.1.8.1.4 Sub-Contractor Management & Travel (LM)													
		1,216	05/01/01A	03/31/06		1,168,978.99						1,168.9	
82 4.1.8.2 RELIABILITY & QUALITY ASSURANCE													
Subtotal		248	09/28/01A	09/30/02	E	102,335.77						102,335.77	
DL SU-SLAC													
Subtotal		248	09/28/01A	09/30/02	E	102,335.77						102,335.77	
+ 2600122 4.1.8.2.3 (LM) RELIABILITY & QUALITY ASSURANCE													
		248	09/28/01A	09/30/02	E	102,335.77						102,335.77	
83 4.1.8.3 MECHANICAL SYSTEM DEVELOPMENT													
Subtotal		799	10/03/00A	01/02/04		516,849.10						516,849.10	
DL SU-SLAC													
Subtotal		799	10/03/00A	01/02/04		516,849.10						516,849.10	
+ 2600123 4.1.8.3.1.1. DESIGN INTEGRATION													
		799	10/03/00A	01/02/04		417,610.20						417,610.20	
+ 2600124 4.1.8.3.2.1 GRID DEVELOPMENT													
		170	04/16/01A	12/14/01	E	99,238.90						99,238.90	
84 4.1.8.4 THERMAL SYSTEMS DEVELOPMENT (LM)													
Subtotal		557	07/02/01A	09/30/03		651,286.17						651,286.17	

Act ID	Activity Description	Dur	Start	Finish	PMT	Budgeted Cost	FY01	FY02	FY03	FY04	FY05	FY06
DL SU-SLAC												
Subtotal		557	07/02/01A	09/30/03		651,286.17						
+ 2600125 4.1.8.4.1 INSTRUMENT THERMAL ENGINEERING (LM)												
		557	07/02/01A	09/30/03		651,286.17						
85 4.1.8.5 THERMAL CONTROL SYSTEM (SLAC)												
Subtotal		695	09/20/01A	07/15/04		447,955.97						
DL SU-SLAC												
Subtotal		695	09/20/01A	07/15/04		447,955.97						
+ 2600077 4.1.8.5.1 Thermal Control Sys. Develop. (SLAC)												
		695	09/20/01A	07/15/04		447,955.97						
86 4.1.8.6 RADIATORS (LM)												
Subtotal		1,082	05/21/01A	09/30/05		1,436,958.92						
DL SU-SLAC												
Subtotal		1,082	05/21/01A	09/30/05		1,436,958.92						
+ 2600078 4.1.8.6.1 Heat Pipe EM Devel (LM)												
		1,082	05/21/01A	09/30/05		1,436,958.92						
87 4.1.8.7 GRID												
Subtotal		473	10/30/01A	09/30/03		950,125.73						
DL SU-SLAC												
Subtotal		473	10/30/01A	09/30/03		950,125.73						
+ 2600130 4.1.8.7.1 GRID EM DEVELOPMENT & TESTING (SLAC)												
		327	10/30/01A	03/05/03		341,665.97						
+ 2600132 4.1.8.7.3 FLIGHT GRID FABRICATION (SLAC)												
		156	09/18/02	05/08/03	E	255,354.22						
+ 2600134 4.1.8.7.5 GRID HEAT PIPE FABRICATION (LM)												
		471	11/01/01	09/30/03	E	353,105.54						
88 4.1.8.8 SUBSYSTEM INTEGRATION AND TEST												
Subtotal		1,237	10/02/00A	09/30/05		810,570.14						
DL SU-SLAC												
Subtotal		1,237	10/02/00A	09/30/05		810,570.14						

Act ID	Activity Description	Dur	Start	Finish	PMT	Budgeted Cost	FY01	FY02	FY03	FY04	FY05	FY06
+ 2600136 4.1.8.8.1 GRID ASSEMBLY & TEST (SLAC)												
		355	05/23/02	10/24/03		205,411.32						
+ 2600138 4.1.8.8.4 THERMAL CONTRL SYS THERMAL TEST (LM)												
		1,237	10/02/00A	09/30/05		555,562.78						
+ 2600140 4.1.8.8.5 THERMAL ENGINEERING SUPPORT (SLAC)												
		640	04/19/02	11/12/04		49,596.04						
89 4.1.8.9 LAT I&T SUPPORT												
Subtotal		222	01/05/04	11/16/04		214,421.60						
DL SU-SLAC												
Subtotal		222	01/05/04	11/16/04		214,421.60						
+ 2600081 Mission I & T Support												
		222	01/05/04	11/16/04		214,421.60						
8A 4.1.8.A MISSION I&T SUPPORT												
Subtotal		368	10/01/04	03/31/06		227,152.59						
DL SU-SLAC												
Subtotal		368	10/01/04	03/31/06		227,152.59						
+ 2600145 4.1.8.A.1 SC/LV I&T SUPPORT (SLAC)												
		252	03/23/05	03/28/06	A	154,774.40						
+ 2600147 4.1.8.A.3 Mission Thermal Test Support (LM)												
		368	10/01/04	03/31/06	E	72,378.19						



**Gamma-ray
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Subsystem Milestones

Act ID	Activity Description	Start	Finish	FY00	FY01	FY02	FY03	FY04	FY05	FY06
4.1.8 MECHANICAL SYSTEMS										
Subsystem Managers (Level 4)										
8M0016002	AV: Delv PDR LAT TMM to GSFC		06/15/01A		▼					
8M0016402	AV: Delv CDR LAT TMM Model to GSFC		04/03/02			▼				
8M0001300	AV: Mech-CDR Material Ready	05/03/02				▼				
8M0029502	Order Cross-LAT HP's		09/17/02				▼			
8M0028910	Start Grid Mat'l Procurement	09/18/02					▼			
8M0029012	Start Grid Fab	09/18/02					▼			
8M0029526	Start X-Lat Plate Fab	09/18/02					▼			
8M0016508	AV: Delv Final LAT TMM to GSFC		12/11/02					▼		
8M0030800	IA: Grid Heat Pipes Ready for Delivery		12/11/02					▼		
8M0031100	IA: X-LAT Heat Pipes Ready for Delivery		01/21/03						▼	
8M0019510	IA: TCS Hardware Ready for I & T		01/24/03						▼	
8M0032404	IN: Receive Thermal Control System H/W		01/24/03						▼	
8M0029510	*IN: Receive X-LAT HP's		02/20/03						▼	
8M0032402	IN: Receive Grid Heat Pipes		04/04/03							▼
8M0019150	IA: TCS E-GSE Ready		05/20/03							▼
8M0038504	IN: Receive TCS GSE for Test		05/20/03							▼
8M0024712	Start Radiator Fab Work	10/01/03								▼
8M0038010	Start TCS Hardware Fab	10/01/03								▼
8M0038506	IN: T-VAC Chamber Available		07/15/04*							▼
8M0025000	*IA: Flight Radiators Ready for Delivery		07/23/04							▼
8M0038502	IN: Receive Radiators, Inspect		07/23/04							▼
8M0005200	Start Phase 1 of sub-contract	06/01/01A			▼					

Act ID	Activity Description	Start	Finish	FY00	FY01	FY02	FY03	FY04	FY05	FY06
8M0001210	Mech-PDR		08/15/01A			▼				
8M0031710	Mech Qual Readiness Review		10/31/01			▼				
8M0032012	Mech (Grid) Qual Review		10/31/01			▼				
8M0037904	Mech (TCS) Qual Review		10/31/01			▼				
8M0010000	Draft ICD's complete		11/21/01			▼				
8M0027206	Order HP EM		11/30/01			▼				
8M0001200	AV: I-PDR Material Ready	12/03/01				▼				
8M0005500	Final I-PDR Reports, Chart Package due	12/03/01				▼				
8M0001220	I-PDR		01/07/02			▼				
8M0021904	IA: EM HP ready for Delivery to SLAC		01/08/02			▼				
8M0026502	OIN: Receive Grid Heat Pipe		02/13/02			▼				
8M0005602	Mech-CDR Reports, Chart Pkg Due		05/01/02			▼				
8M0001240	Mech-CDR		05/22/02			▼				
8M0001402	AV: I-CDR Material Ready		07/12/02			▼				
8M0005700	I-CDR Reports, Chart Package due	07/15/02				▼				
8M0001230	I-CDR		08/05/02			▼				
8M0005800	Close out Phase 1 of sub-contract	10/01/02*				▼				
8M0006000	Start Phase 2 of sub-contract	10/01/02				▼				
8M0029520	AV: Flight Grid ready for ACD Fit Test		05/08/03				▼			
8M0036910	AV: X-LAT Thermal Plates RFI		07/14/03				▼			
8M0037302	*AV: Grid Assy RFI		10/24/03				▼			
8M0037310	Mech (Grid) RFI's		10/24/03				▼			
8M0001600	LAT Integration started (driven by 4.1.9)	01/05/04						▼		
8M0040700	Start LAT integration prep	01/05/04						▼		



**Gamma-ray
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Critical Activities with Total Float Less Than 80 Days

Act ID	Activity Description	Dur	Start	Finish	Total Float																		
						FY01	FY02	FY03	FY04	FY05	FY06												
4.1.8 MECHANICAL SYSTEMS																							
0																							
4.1.8.1 MANAGEMENT																							
8M0001220	I-PDR	0		01/07/02	0																		
8M0001240	Mech-CDR	0		05/22/02	0																		
8M0001402	AV: I-CDR Material Ready	0		07/12/02	0																		
8M0005700	I-CDR Reports, Chart Package due	0	07/15/02		0																		
8M0001230	I-CDR	0		08/05/02	0																		
8M0024720	Start Radiator Fab Work	1	10/01/03*	10/01/03	0																		
8M0005060	(PR) Phase 2 Program Management (NASA) FY06	1	10/03/05	10/03/05	0																		
8M0005070	(REC) Phase 2 Program Management (NASA) FY06	99	11/01/05	03/31/06	0																		
4.1.8.5 THERMAL CONTROL SYSTEM (SLAC)																							
8M0007108	Update Thermal Control Sys Design after I-PDR	20	01/08/02	02/05/02	0																		
8M0019120	Analyze TCS Performance	30	02/06/02	03/20/02	0																		
8M0018900	Develop control system prototype	20	03/21/02	04/17/02	0																		
8M0019000	Fab, assemble, and test control system prototype	20	04/18/02	05/15/02	0																		
8M0019300	Detail drawings, spec for hardware	30	05/16/02	06/27/02	0																		
8M0019100	Finalize design and assembly processes for I-CDR	10	06/28/02	07/12/02	0																		
4.1.8.6 RADIATORS (LM)																							
8M0023802	Finalize Radiator Dtd Dwg's (Dsgn) for I-CDR	20	05/23/02	06/20/02	0																		
8M0023804	Update Layouts, Charts for I-CDR (Dsgn)	15	06/21/02	07/12/02	0																		
4.1.8.7 GRID																							
8M0028704	Complete Grid/X-LAT Test Fix./Proc after I-CDR	30	08/06/02	09/17/02	0																		
8M0028910	Start Grid Mat'l Procurement	0	09/18/02		0																		
8M0028900	(PR) Procure raw material for Grids	60	09/18/02	12/12/02	0																		
8M0028902	(REC) Procure raw material for Grids	1	12/13/02	12/13/02	0																		
Run Date						12/12/01 13:58						GLAST - LAT PROJECT Critical Activities (TF < 80 days)						Sheet 88					
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Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
4.1.8.7 GRID															
8M0029400	*(PR) Fabricate Flight Grid	80	12/16/02	04/17/03	0										
8M0029402	(REC) Fabricate Flight Grid	1	04/18/03	04/18/03	0										
8M0029500	*Inspect, prep Flight Grid	14	04/21/03	05/08/03	0										
8M0029520	AV: Flight Grid ready for ACD Fit Test	0		05/08/03	0										
4.1.8.8 SUBSYSTEM INTEGRATION AND TEST															
8M0033300	Prep Flight Grid, HP's for assembly	10	05/09/03	05/22/03	0										
8M0033400	*Assemble heat pipes on Flight Grid	14	05/23/03	06/12/03	0										
8M0033500	*Inspect, test Flight Grid assembly	5	06/13/03	06/19/03	0										
8M0033600	*Integrate heaters, thermistors	10	06/20/03	07/03/03	0										
8M0033700	*Functional Test heaters, thermistors	5	07/07/03	07/11/03	0										
8M0033800	Survey Grid	10	07/14/03	07/25/03	0										
8M0037000	Prep Flight Grid for structural test	9	07/28/03	08/07/03	0										
8M0037100	*Structural test Flight Grid (load)	15	08/08/03	08/28/03	0										
8M0032002	Update FEA Model after Grid Struc Test	20	08/29/03	09/26/03	0										
8M0032004	Write Grid Test Report	20	09/29/03	10/24/03	0										
8M0037302	*AV: Grid Assy RFI	0		10/24/03	0										
8M0037310	Mech (Grid) RFI's	0		10/24/03	0										
4.1.8.A MISSION I&T SUPPORT															
8M0044422	(PR) Mission Thermal Test Supt (LM) FY06	1	10/03/05	10/03/05	0										
8M0044432	(REC) Mission Thermal Test Supt (LM) FY06	99	11/01/05	03/31/06	0										
8M0045200	Finish	0		03/31/06	0										
1															
4.1.8.7 GRID															
8M0026510	Develop Thermal Test Dsgn After I-PDR	10	01/08/02	01/22/02	1										
8M0026606	Detail Contact Test Dwgs	20	01/23/02	02/20/02	1										

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
4.1.8.7 GRID															
8M0026602	Fab, Procure Thermal Test Coupons, Parts	20	02/21/02	03/20/02	1										
8M0026704	Assemble & Execute Contact Tests	20	03/21/02	04/17/02	1										
8M0026800	Write Test Report	10	04/18/02	05/01/02	1										
8M0028000	Update Grid X-LAT Plt design after EM Tests	19	05/02/02	05/29/02	1										
8M0030104	Update Grid, X-LAT HP Dsgn & Analy for I-CDR	20	05/30/02	06/26/02	1										
8M0030200	Finalize Heat Pipe Fab Proc/Proced for I-CDR	10	06/27/02	07/11/02	1										
2															
4.1.8.1 MANAGEMENT															
8M0001200	AV: I-PDR Material Ready	0	12/03/01		2										
8M0005500	Final I-PDR Reports, Chart Package due	0	12/03/01		2										
4.1.8.3 MECHANICAL SYSTEM DEVELOPMENT															
8M0013000	Update Grid dtls based on fab, proto results	5	11/01/01	11/07/01	2										
8M0013102	Update Grid Detail Design for I-PDR	5	11/08/01	11/14/01	2										
8M0013104	Detail Dwgs for Budget Estimate	20	11/15/01	12/14/01	2										
4.1.8.4 THERMAL SYSTEMS DEVELOPMENT (LM)															
8M0018206	Support Dev of HP Assy Processes	40	09/24/01A	11/14/01	2										
8M0018208	Prepare HP Report, Charts for I-PDR	10	11/15/01	11/30/01	2										
4.1.8.5 THERMAL CONTROL SYSTEM (SLAC)															
8M0007102	Dev. Thermal Control System Architecture for LAT	20	09/20/01A	11/07/01	2										
8M0007104	Finalize Interfaces for I-PDR	10	11/08/01	11/21/01	2										
8M0007106	Finalize TCS Functionality & H/W for I-PDR	10	11/08/01	11/21/01	2										
8M0019110	PrepTCS Charts for I-PDR	5	11/26/01	11/30/01	2										
4.1.8.7 GRID															
8M0027200	Detail drawings for Grid Mock-up after I-PDR	12	12/17/01	01/10/02	2										
8M0027402	(PR) Fab Grid Mock-up, Fab Fixtures	45	01/11/02	03/18/02	2										
8M0027404	(REC) Fab Grid Mock-up, Fab Fixtures	1	03/19/02	03/19/02	2										

Act ID	Activity Description	Dur	Start	Finish	Total Float	FY									
						FY01	FY02	FY03	FY04	FY05	FY06				
4.1.8.7 GRID															
8M0027600	Prep, assemble, inspect Grid Mock-up	10	03/20/02	04/02/02	2										
8M0027608	Test Grid Mock-up	10	04/03/02	04/16/02	2										
8M0027610	Write Test Report	10	04/17/02	04/30/02	2										
3															
4.1.8.1 MANAGEMENT															
8M0002300	Launch	0		03/01/06	3										▼
8M0006500	Close out Phase 2 of sub-contract	0	03/29/06*		3										▼
4.1.8.4 THERMAL SYSTEMS DEVELOPMENT (LM)															
8M0017200	Develop radiator structural design, mount method	15	10/15/01A	11/14/01	3										
8M0017500	Create prelim dwg's of radiator for I-PDR	15	10/31/01A	11/20/01	3										
8M0017602	Update Reports, Charts for I-PDR	5	11/21/01	11/29/01	3										
4.1.8.A MISSION I&T SUPPORT															
8M0045100	Thermal engineering support at LM	19	03/02/06	03/28/06	3										■
4															
4.1.8.1 MANAGEMENT															
8M0004500	Compile parts, materials lists for I-PDR	20	10/15/01A	11/28/01	4										
8M0001300	AV: Mech-CDR Material Ready	0	05/03/02		4										▼
4.1.8.7 GRID															
8M0027202	Develop Grid HP EM Design & Test Set-up	10	11/01/01	11/14/01	4										
8M0027204	Detail HP Spec Dwg, Spec for Grid HP EM	10	11/15/01	11/30/01	4										
8M0027208	Detail Dwgs for Grid HP EM Fixtures	15	12/03/01	12/21/01	4										
8M0026302	Fab Grid HP EM Parts, Test Apparatus	30	01/02/02	02/13/02	4										
8M0026502	OIN: Receive Grid Heat Pipe	0		02/13/02	4										▼
8M0026600	Prep, assemble, inspect Grid HP EM	10	02/14/02	02/28/02	4										
8M0027700	Test Grid HP EM	20	03/01/02	03/28/02	4										
8M0027800	Write HP EM Test Report	15	03/29/02	04/18/02	4										

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year														
						FY01	FY02	FY03	FY04	FY05	FY06									
4.1.8.8 SUBSYSTEM INTEGRATION AND TEST																				
8M0039700	Develop TCS thermal test plan for Mech-CDR	5	04/19/02	04/25/02	4															
8M0039900	Prep Charts for Mech-CDR	5	04/26/02	05/02/02	4															
5																				
4.1.8.1 MANAGEMENT																				
8M0005602	Mech-CDR Reports, Chart Pkg Due	0		05/01/02	5															
4.1.8.4 THERMAL SYSTEMS DEVELOPMENT (LM)																				
8M0017302	Update Radiator Thermal Design for I-PDR	30	10/05/01A	11/16/01	5															
8M0016500	Prepare Reports/Thermal charts for Mech-CDR	15	04/11/02	05/01/02	5															
8M0016502	Update LAT Radiation Analysis for I-CDR	20	05/23/02	06/20/02	5															
8M0016504	Prepare Thermal Charts for I-CDR	10	06/21/02	07/05/02	5															
4.1.8.6 RADIATORS (LM)																				
8M0023202	Complete Radiator Struc Dsgn & Analy after I-PDR	20	01/08/02	02/05/02	5															
8M0023300	Update Radiator struc design from SC Mods	40	02/06/02	04/03/02	5															
8M0023400	Prepare Reports/charts for Mech-CDR (Structural)	10	04/18/02	05/01/02	5															
8M0023002	Finalize Radiator Thermal Analysis for I-CDR	20	05/23/02	06/20/02	5															
8M0023402	Finalize Radiator Struc Dsgn for I-CDR	20	05/23/02	06/20/02	5															
8M0023004	Update Reports, Charts for I-CDR (Thermal)	10	06/21/02	07/05/02	5															
8M0023404	Update Reports, Charts for I-CDR (Struc)	10	06/21/02	07/05/02	5															
4.1.8.7 GRID																				
8M0030300	Update/finalize HP design after Mech-CDR	20	05/23/02	06/20/02	5															
8M0028300	Update/finalize Grid/X-LAT Plt dsgn before I-CDR	30	05/23/02	07/05/02	5															
8M0030302	Prep for I-CDR	10	06/21/02	07/05/02	5															
6																				
4.1.8.6 RADIATORS (LM)																				
8M0024712	Start Radiator Fab Work	0	10/01/03		6															
8M0024704	Develop Radiator Fab, Assy, Test Fixturing	30	10/01/03	11/11/03	6															

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year													
						FY01	FY02	FY03	FY04	FY05	FY06								
4.1.8.6 RADIATORS (LM)																			
8M0024706	Radiator Fab, Test Fixturing	30	11/12/03	01/05/04	6														
8M0024708	*Fab, Test Radiator VCHP's	60	01/06/04	03/31/04	6														
8M0024800	*Fab, Assemble Radiators (HPPC)	40	04/01/04	05/26/04	6														
8M0024802	*Functional Test Radiators	20	05/27/04	06/24/04	6														
8M0024900	*Vibration Test (Radiators)	20	06/25/04	07/23/04	6														
8M0025000	*IA: Flight Radiators Ready for Delivery	0		07/23/04	6														
4.1.8.7 GRID																			
8M0027640	Dtl Parts, Fxtr Dwgs for Bolt Joint Shear Test	15	01/08/02	01/29/02	6														
8M0026508	Detail Dwg's for Thermal Test H/W Equip	10	01/23/02	02/05/02	6														
8M0026608	FEA Analysis of Contact Test	15	01/23/02	02/12/02	6														
8M0027650	Manage Bolted Joint Test Parts, Fixture Fab	15	01/30/02	02/20/02	6														
8M0026504	Fab, Procure Thermal Test H/W, Equip.	25	02/06/02	03/13/02	6														
8M0027660	Fab CAL-Grid Joint Test Parts, Fab Fixtures	20	02/21/02	03/20/02	6														
8M0027670	Run Bolted Joint Test	15	03/21/02	04/10/02	6														
8M0027680	Write Test Report	10	04/11/02	04/24/02	6														
4.1.8.8 SUBSYSTEM INTEGRATION AND TEST																			
8M0031602	Develop Grid Assy Processes, Dwgs After I-PDR	10	05/30/02	06/12/02	6														
8M0031604	Develop Grid Test Plan for I-CDR	10	06/13/02	06/26/02	6														
8M0031606	Dev X-LAT Plate Test Plan for I-CDR	10	06/13/02	06/26/02	6														
8M0031700	Detail Grid assembly dwgs for I-CDR	10	06/13/02	06/26/02	6														
8M0034300	Prep I-CDR Materials	5	06/27/02	07/03/02	6														
8M0038502	IN: Receive Radiators, Inspect	0		07/23/04	6														
8M0038900	*Set up TV/TB Test	19	07/26/04	08/19/04	6														
8M0039000	*Run T-Balance Test	20	08/20/04	09/17/04	6														
8M0039100	Correlate and update models after testing	25	09/20/04	10/22/04	6														
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Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
4.1.8.8 SUBSYSTEM INTEGRATION AND TEST															
8M0039200	Write test reports	20	10/25/04	11/19/04	6										
8M0039400	TCS testing complete	0		11/19/04	6										
8M0039500	AV: Radiators Ready for Mission I&T	0		11/19/04	6										
7															
4.1.8.3 MECHANICAL SYSTEM DEVELOPMENT															
8M0009600	Develop ACD/Grid interface	40	07/06/01A	11/07/01	7										
8M0010002	Complete Grid, X-LAT, Rad Details for I-PDR	30	09/05/01A	11/07/01	7										
8M0009602	Develop TKR/Grid Interface	20	10/19/01A	11/07/01	7										
8M0012100	Finalize SC interfaces for I-PDR	20	08/15/01A	11/21/01	7										
8M0011120	Finalize Thermal FEA Model for I-PDR	30	10/10/01A	11/21/01	7										
8M0009800	Finalize LAT interfaces	10	11/08/01	11/21/01	7										
8M0010004	Update Interface Details for I-PDR	10	11/08/01	11/21/01	7										
8M0010000	Draft ICD's complete	0		11/21/01	7										
8															
4.1.8.2 RELIABILITY & QUALITY ASSURANCE															
8M0007800	Write LM PAIP	20	10/05/01A	11/06/01	8										
8M0007900	Update LM PAIP prior to I-PDR & Prep PDR Mat'l	10	11/07/01	11/20/01	8										
4.1.8.4 THERMAL SYSTEMS DEVELOPMENT (LM)															
8M0018204	Analyze Thermal Performance of Grid, X-LAT HP's	20	09/24/01A	11/06/01	8										
9															
4.1.8.7 GRID															
8M0025600	Develop EM Grid designs	20	10/30/01A	12/05/01	9										
10															
4.1.8.2 RELIABILITY & QUALITY ASSURANCE															
8M0008702	Collect LM inputs to LAT PHA/FMEA	10	10/05/01A	11/02/01	10										
8M0008700	Update LM Inputs to LAT PHA/FMEA for I-PDR	10	11/05/01	11/16/01	10										

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year					
						FY01	FY02	FY03	FY04	FY05	FY06
11											
4.1.8.3 MECHANICAL SYSTEM DEVELOPMENT											
8M0010200	Update interfaces, verif plans during EM work	80	01/08/02	05/01/02	11		■				
8M0010300	Finalize ICD's for I-CDR	39	05/02/02	06/26/02	11		■				
4.1.8.7 GRID											
8M0027622	Detail Parts, Fixture Dwg's-CAL-Grid Joint Test	15	01/08/02	01/29/02	11		■				
8M0027626	Fab CAL-Grid Joint Test Parts, Fab Fixtures	30	01/30/02	03/13/02	11		■				
8M0027628	Run CAL-Grid Joint Tests	15	03/14/02	04/03/02	11		■				
8M0027630	Write Test Report	10	04/04/02	04/17/02	11		■				
8M0028400	Detail Grid drawings for I-CDR	20	05/30/02	06/26/02	11		■				
8M0028402	Detail X-LAT Plt Dwgs for I-CDR	20	05/30/02	06/26/02	11		■				
8M0028600	Finalize Grid fab process/proced for I-CDR	20	05/30/02	06/26/02	11		■				
4.1.8.8 SUBSYSTEM INTEGRATION AND TEST											
8M0040300	Correlate and update FEA models after testing	20	09/20/04	10/15/04	11					■	
8M0040400	Write TCS thermal test reports	20	10/18/04	11/12/04	11					■	
12											
4.1.8.4 THERMAL SYSTEMS DEVELOPMENT (LM)											
8M0017800	Provide manufacturing knowledge to design team	20	10/10/01A	11/07/01	12		■				
8M0016300	Update LAT radiation analysis for I-PDR	24	09/28/01A	11/14/01	12		■				
4.1.8.7 GRID											
8M0025700	Prep EM designs for I-PDR	5	11/08/01	11/14/01	12		■				
15											
4.1.8.6 RADIATORS (LM)											
8M0023600	Create detailed dwgs of Radiators after I-PDR	20	01/08/02	02/05/02	15		■				
8M0023700	Update detailed dwg's of radiators from SC Mods	40	02/06/02	04/03/02	15		■				
8M0023800	Prepare Layouts, Charts for Mech-CDR (Design)	10	04/04/02	04/17/02	15		■				
8M0024018	Update Test Plans for I-CDR	20	05/23/02	06/20/02	15		■				

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
4.1.8.8 SUBSYSTEM INTEGRATION AND TEST															
8M0034302	Update Assy, Test Plan for I-CDR	20	05/23/02	06/20/02	15										
16															
4.1.8.7 GRID															
8M0027612	Detail Dwgs.Processes for Grid HP Process Test	15	01/08/02	01/29/02	16										
8M0027616	Fab Grid HP Process Test Parts, Fab Fixtures	20	01/30/02	02/27/02	16										
8M0027618	Run Grid HP Process Tests	20	02/28/02	03/27/02	16										
8M0027620	Write Test Report	10	03/28/02	04/10/02	16										
17															
4.1.8.1 MANAGEMENT															
8M0002100	AV: I-PSR Material Ready	0		11/19/04	17										
8M0006400	Final LAT PSR Reports, Chart Package due	0	11/22/04		17										
18															
4.1.8.7 GRID															
8M0027602	Detail Dwg's, Processes for Mock-up Tests	10	01/11/02	01/25/02	18										
8M0027604	Fab Grid Mock-up Test Equip	20	01/28/02	02/25/02	18										
8M0027606	Assemble, Test Mock-up Test Equip	10	02/26/02	03/11/02	18										
19															
4.1.8.3 MECHANICAL SYSTEM DEVELOPMENT															
8M0012300	Update SC interfaces during EM development	40	12/03/01	02/06/02	19										
8M0012302	Finalize SC Interfaces/ICD's for Mech-CDR	20	02/07/02	03/07/02	19										
8M0012400	Finalize SC interfaces/ICD's for I-CDR	70	03/08/02	06/14/02	19										
20															
4.1.8.1 MANAGEMENT															
8M0001800	LAT to thermal testing (driven by 4.1.9)	0		09/14/04	20										
4.1.8.9 LAT I&T SUPPORT															
8M0041700	Deliver LAT to T-V test contractor	0	09/15/04		20										
8M0042000	Finalize Thermal Model for I-PSR	20	10/13/04	11/09/04	20										
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Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
4.1.8.9 LAT I&T SUPPORT															
8M0042100	Prep for I-PSR	5	11/10/04	11/16/04	20										
21															
4.1.8.7 GRID															
8M0028602	Finalize X-LAT Plt Assy Proc/Proced for I-CDR	10	05/30/02	06/12/02	21										
23															
4.1.8.7 GRID															
8M0029012	Start Grid Fab	0	09/18/02		23										
8M0029100	Grid procurement process	38	09/18/02	11/08/02	23										
4.1.8.8 SUBSYSTEM INTEGRATION AND TEST															
8M0037200	Break down Grid Test Set-ups	3	08/29/03	09/03/03	23										
8M0037102	Integrate X-LAT Plates	4	09/04/03	09/09/03	23										
8M0037300	Final inspect, survey Flight Unit	10	09/10/03	09/23/03	23										
24															
4.1.8.3 MECHANICAL SYSTEM DEVELOPMENT															
8M0011200	Update FEA models during EM development	40	11/26/01	01/30/02	24										
8M0011202	Complete Struc FEA Modeling for Mech-CDR	20	01/31/02	02/28/02	24										
8M0011204	Complete Thermal FEA Modeling for Mech-CDR	20	01/31/02	02/28/02	24										
8M0011206	Update FEA Models for I-CDR	70	03/01/02	06/07/02	24										
4.1.8.7 GRID															
8M0030400	Finalize HP fab processes/procedures after I-CDR	9	08/06/02	08/16/02	24										
8M0030502	Prep Fixtures, Material, for Grid Heat Pipe Fab	20	08/19/02	09/16/02	24										
8M0030602	* Fab Grid Heat Pipes	40	09/17/02	11/11/02	24										
8M0030700	*Test Grid Heat Pipes	20	11/12/02	12/11/02	24										
8M0030800	IA: Grid Heat Pipes Ready for Delivery	0		12/11/02	24										
4.1.8.8 SUBSYSTEM INTEGRATION AND TEST															
8M0032402	IN: Receive Grid Heat Pipes	0		04/04/03	24										

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year															
						FY01	FY02	FY03	FY04	FY05	FY06										
25																					
4.1.8.8 SUBSYSTEM INTEGRATION AND TEST																					
8M0037900	Finalize TCS Test Plans for I-CDR	10	05/23/02	06/06/02	25																
26																					
4.1.8.6 RADIATORS (LM)																					
8M0022800	Comp Radiator therm analysis & trades After I-PD	49	01/08/02	03/19/02	26																
8M0023000	Prepare Reports/Charts for Mech CDR (Thermal)	10	03/20/02	04/02/02	26																
8M0022900	Update Radiator Thermal Analysis before Mech-CDR	19	03/20/02	04/15/02	26																
4.1.8.7 GRID																					
8M0026506	Manage Fab, Assy of Test H/W, Equip	25	02/06/02	03/13/02	26																
8M0026604	Manage Fab of Test Coupons	15	02/21/02	03/13/02	26																
28																					
4.1.8.7 GRID																					
8M0027212	Manage Grid Mock-up parts fab	40	01/11/02	03/11/02	28																
29																					
4.1.8.6 RADIATORS (LM)																					
8M0021400	Technical support for EM HP design & Test	40	11/01/01*	01/08/02	29																
8M0021904	IA: EM HP ready for Delivery to SLAC	0		01/08/02	29																
30																					
4.1.8.5 THERMAL CONTROL SYSTEM (SLAC)																					
8M0019700	Develop control system I&T procedures	79	05/16/02	09/06/02	30																
8M0019800	Develop dummy heat loads and controls for Grid I	59	09/09/02	12/02/02	30																
8M0019900	(PR) Procure GSE for control system I&T	1	12/03/02	12/03/02	30																
8M0019902	(REC) Procure GSE for control system I&T	1	04/08/03	04/08/03	30																
8M0019130	Assemble, Test TCS Hardware GSE	30	04/09/03	05/20/03	30																
8M0019150	IA: TCS E-GSE Ready	0		05/20/03	30																
4.1.8.9 LAT I&T SUPPORT																					
8M0041900	Update procedures, write reports after test	10	10/13/04	10/26/04	30																

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year						
						FY01	FY02	FY03	FY04	FY05	FY06	
35												
4.1.8.8 SUBSYSTEM INTEGRATION AND TEST												
8M0034304	Detail Grid Assy Fixture Dwgs after I-CDR	20	07/15/02	08/09/02	35							
8M0034306	Detail Grid Test Fixtures after I-CDR	30	08/12/02	09/23/02	35							
8M0032200	(PR) Fab, procure assembly fixtures, Test Equip	50	09/24/02	12/04/02	35							
8M0032202	(REC) Fab, procure assembly fixtures, Test Equip	1	02/05/03	02/05/03	35							
8M0032300	Assemble, Test Fixtures, Test Equip	20	02/06/03	03/06/03	35							
8M0032400	Trial run assembly procedures	10	03/07/03	03/20/03	35							
36												
4.1.8.6 RADIATORS (LM)												
8M0024710	*Procure Radiator Materials	60	11/12/03	02/18/04	36							
4.1.8.7 GRID												
8M0027624	Manage CAL-Grid Joint Test Parts, Fixture Fab	20	01/30/02	02/27/02	36							
4.1.8.8 SUBSYSTEM INTEGRATION AND TEST												
8M0032000	Revise drawings to show Grid as-built	28	07/28/03	09/04/03	36							
40												
4.1.8.4 THERMAL SYSTEMS DEVELOPMENT (LM)												
8M0016404	Update Radiation Analysis for Mech-CDR	30	01/08/02	02/20/02	40							
41												
4.1.8.1 MANAGEMENT												
8M0003700	Travel for Mech Systems Env. Testing	9	09/15/04	09/27/04	41							
4.1.8.8 SUBSYSTEM INTEGRATION AND TEST												
8M0039300	Ship Radiators to SLAC	10	09/20/04	10/01/04	41							
42												
4.1.8.1 MANAGEMENT												
8M0001700	LAT to structural testing (driven by 4.1.9)	0	07/13/04		42							
4.1.8.9 LAT I&T SUPPORT												
8M0041100	Deliver LAT to Structural test contractor	0	07/13/04*		42							
8M0041400	Update FEA model after test	30	08/23/04	10/04/04	42							
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Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
4.1.8.9 LAT I&T SUPPORT															
8M0041500	Prep for I-PSR	9	10/05/04	10/15/04	42										
44															
4.1.8.6 RADIATORS (LM)															
8M0021902	Ver. Test EM HP (HPPC)	10	10/25/01A	12/07/01	44										
4.1.8.7 GRID															
8M0027206	Order HP EM	0		11/30/01	44										
45															
4.1.8.6 RADIATORS (LM)															
8M0024004	Finalize Radiator Mfg Processes	30	01/08/02	02/20/02	45										
8M0024006	Prepare Mfg Plans for Mech-CDR	10	02/21/02	03/06/02	45										
4.1.8.8 SUBSYSTEM INTEGRATION AND TEST															
8M0037802	Prep TCS Therm test plan & Mech-CDR charts	10	02/21/02	03/06/02	45										
46															
4.1.8.7 GRID															
8M0027614	Manage Grid HP Process Test Parts, Fixture Fab	10	01/30/02	02/12/02	46										
50															
4.1.8.7 GRID															
8M0029000	(PR) Test, inspect raw material for Grids	30	12/16/02	02/05/03	50										
8M0029002	(REC) Test, inspect raw material for Grids	1	02/06/03	02/06/03	50										
52															
4.1.8.9 LAT I&T SUPPORT															
8M0041300	Update procedures, write reports after test	20	08/23/04	09/20/04	52										
55															
4.1.8.6 RADIATORS (LM)															
8M0024014	Develop Vibe Test plan & Procedure	20	01/08/02	02/05/02	55										
8M0024016	Finalize Vibe Test Plan for Mech-CDR	10	02/06/02	02/20/02	55										
8M0024002	Radiator Post-PDR Mfg. Support	60	01/08/02	04/03/02	55										

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year																	
						FY01	FY02	FY03	FY04	FY05	FY06												
56																							
4.1.8.6 RADIATORS (LM)																							
8M0024700	Eng. Support of Radiator Fab (LM-L925)	150	10/01/03	05/12/04	56																		
59																							
4.1.8.7 GRID																							
8M0029526	Start X-Lat Plate Fab	0	09/18/02		59																		
8M0029516	*(PR) Parts for X-LAT Plates	80	09/18/02	01/21/03	59																		
8M0029518	(REC) Parts for X-LAT Plates	1	01/22/03	01/22/03	59																		
8M0029504	Inspect, Prep X-LAT Plate Parts	20	01/23/03	02/20/03	59																		
8M0029508	Qual Assy Processes	20	02/21/03	03/20/03	59																		
8M0029512	*Assemble X-LAT Thermal Plates	15	03/21/03	04/10/03	59																		
8M0029514	*Inspect X-LAT Thermal Plates	15	04/11/03	05/01/03	59																		
4.1.8.8 SUBSYSTEM INTEGRATION AND TEST																							
8M0036902	Trial Run X-LAT Structural Test	10	05/02/03	05/15/03	59																		
8M0036904	*Structural Test X-LAT Plates (Load, Proof)	10	05/16/03	05/30/03	59																		
8M0036914	Trial run X-LAT thermal-vac test	5	06/02/03	06/06/03	59																		
8M0036916	*Thermal Test X-LAT Plates (T-VAC)	10	06/09/03	06/20/03	59																		
8M0035300	Write X-LAT Plate Test Report	15	06/23/03	07/14/03	59																		
8M0036910	AV: X-LAT Thermal Plates RFI	0		07/14/03	59																		
60																							
4.1.8.1 MANAGEMENT																							
8M0002210	Glast Delivered to LV Integration	0		10/03/05*	60																		
4.1.8.2 RELIABILITY & QUALITY ASSURANCE																							
8M0008000	Update LM PAIP post PDR	10	01/08/02	01/22/02	60																		
8M0008100	Update LM PAIP prior for Mech-CDR	15	01/23/02	02/12/02	60																		
4.1.8.6 RADIATORS (LM)																							
8M0024010	Finalize Radiator Test Plans & Procedures	20	01/08/02	02/05/02	60																		

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year																	
						FY01	FY02	FY03	FY04	FY05	FY06												
4.1.8.6 RADIATORS (LM)																							
8M0024012	Prepare Test Plans for Mech-CDR	5	02/06/02	02/12/02	60																		
8M0024008	Radiator Post-PDR Test Planning Support	60	01/08/02	04/03/02	60																		
4.1.8.A MISSION I&T SUPPORT																							
8M0044700	Engineering support at KSC	40	10/04/05	11/30/05	60																		
8M0043900	LV I&T support complete	0	12/01/05		60																		
8M0044800	LV I&T support complete	0	12/01/05		60																		
66																							
4.1.8.2 RELIABILITY & QUALITY ASSURANCE																							
8M0008704	Update LM inputs to PHA/FMEA Post PDR	10	01/08/02	01/22/02	66																		
8M0008800	Update LM Inputs to FMECA prior to Mech-CDR	5	01/23/02	01/29/02	66																		
8M0008900	Prepare/review CDR chart	4	01/30/02	02/04/02	66																		
4.1.8.7 GRID																							
8M0028702	Close Out Grid/X-LAT Plt Dsgn Actions from I-CDR	10	08/06/02	08/19/02	66																		
70																							
4.1.8.1 MANAGEMENT																							
8M0003900	Travel for LV I&T	30	10/04/05	11/14/05	70																		
72																							
4.1.8.8 SUBSYSTEM INTEGRATION AND TEST																							
8M0036908	Break Down X-LAT Test Set-Ups	2	06/23/03	06/24/03	72																		
73																							
4.1.8.5 THERMAL CONTROL SYSTEM (SLAC)																							
8M0019400	(PR) Procure flight hardware for control system	1	05/03/02	05/03/02	73																		
8M0019402	(REC) Procure flight hardware for control system	1	10/22/02	10/22/02	73																		
8M0019500	Assemble, test hardware prior to assembly	58	10/23/02	01/24/03	73																		
8M0019510	IA: TCS Hardware Ready for I & T	0		01/24/03	73																		
4.1.8.8 SUBSYSTEM INTEGRATION AND TEST																							
8M0032404	IN: Receive Thermal Control System H/W	0		01/24/03	73																		
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Act ID	Activity Description	Dur	Start	Finish	Total Float	FY01		FY02		FY03		FY04		FY05		FY06	
4.1.8.9 LAT I&T SUPPORT																	
8M0040900	Revise drawings to show as-built	40	07/08/04	09/01/04	73												
79																	
4.1.8.7 GRID																	
8M0029510	*IN: Receive X-LAT HP's	0		02/20/03	79												



**Gamma-ray
Large Area Space
Telescope**



FTEs

Program: 1001	Description: GLAST LAT Project	Approval: Program Manager Functional Manager Cost Account Manager
Run Date: 12/13/01	Status Date: 10/31/01	

CAPW[3] OBS[3]		START	FY00	FY01	FY02	FY03	FY04	FY05	FY06	Cumulative	
4.1.8 MECHANICAL SYSTEMS											
DL SU-SLAC											
	FY_FTE	PLANNED	0.0	0.0	3.5	7.4	4.5	2.6	2.3	1.0	21.3
CAPW[3] Totals:		PLANNED	0.0	0.0	3.5	7.4	4.5	2.6	2.3	1.0	21.3