



**Gamma-ray
Large Area Space
Telescope**



GLAST LAT PROJECT

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

4.1.7 Electronics
Subsystem Manager – G. Haller

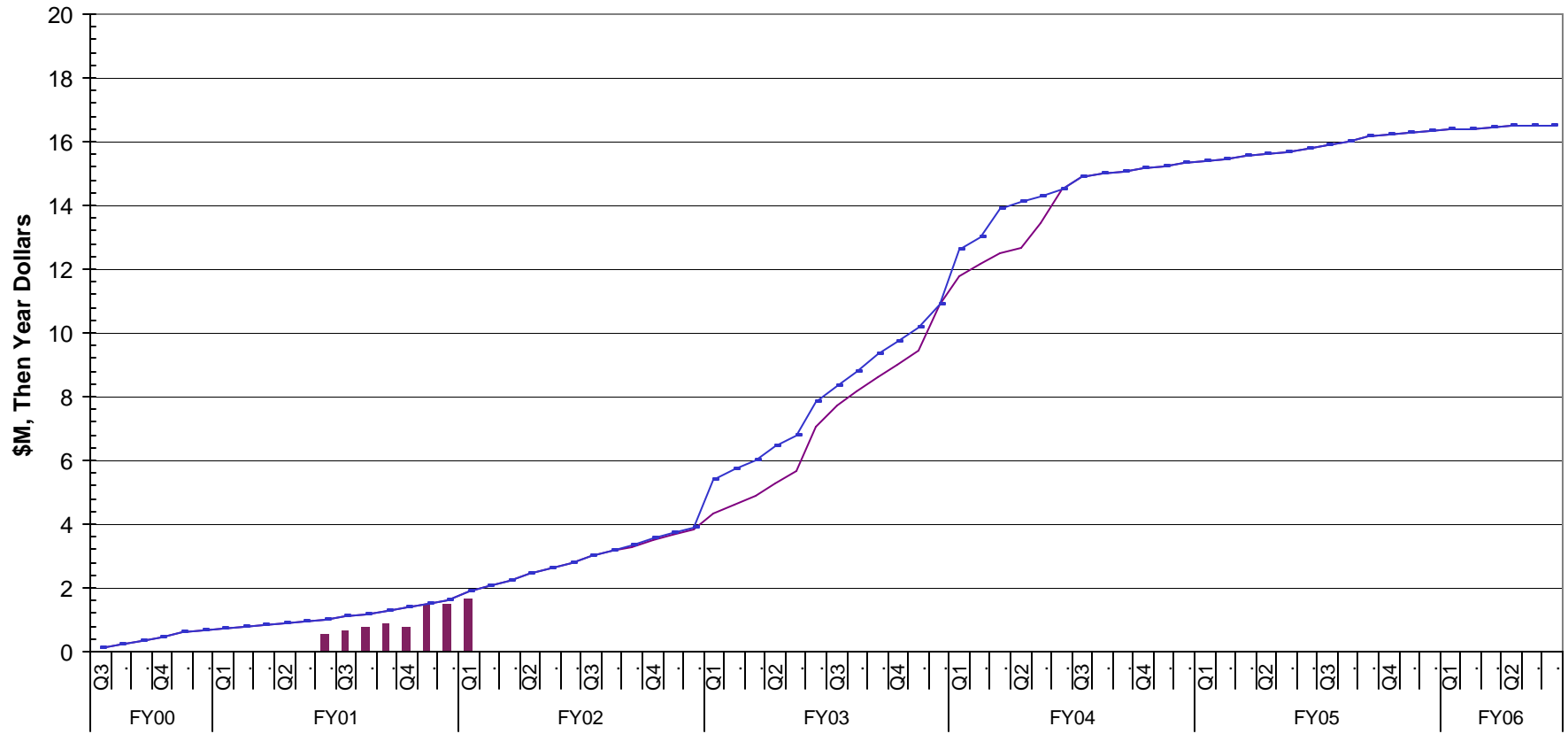


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Large Area Space
Telescope**



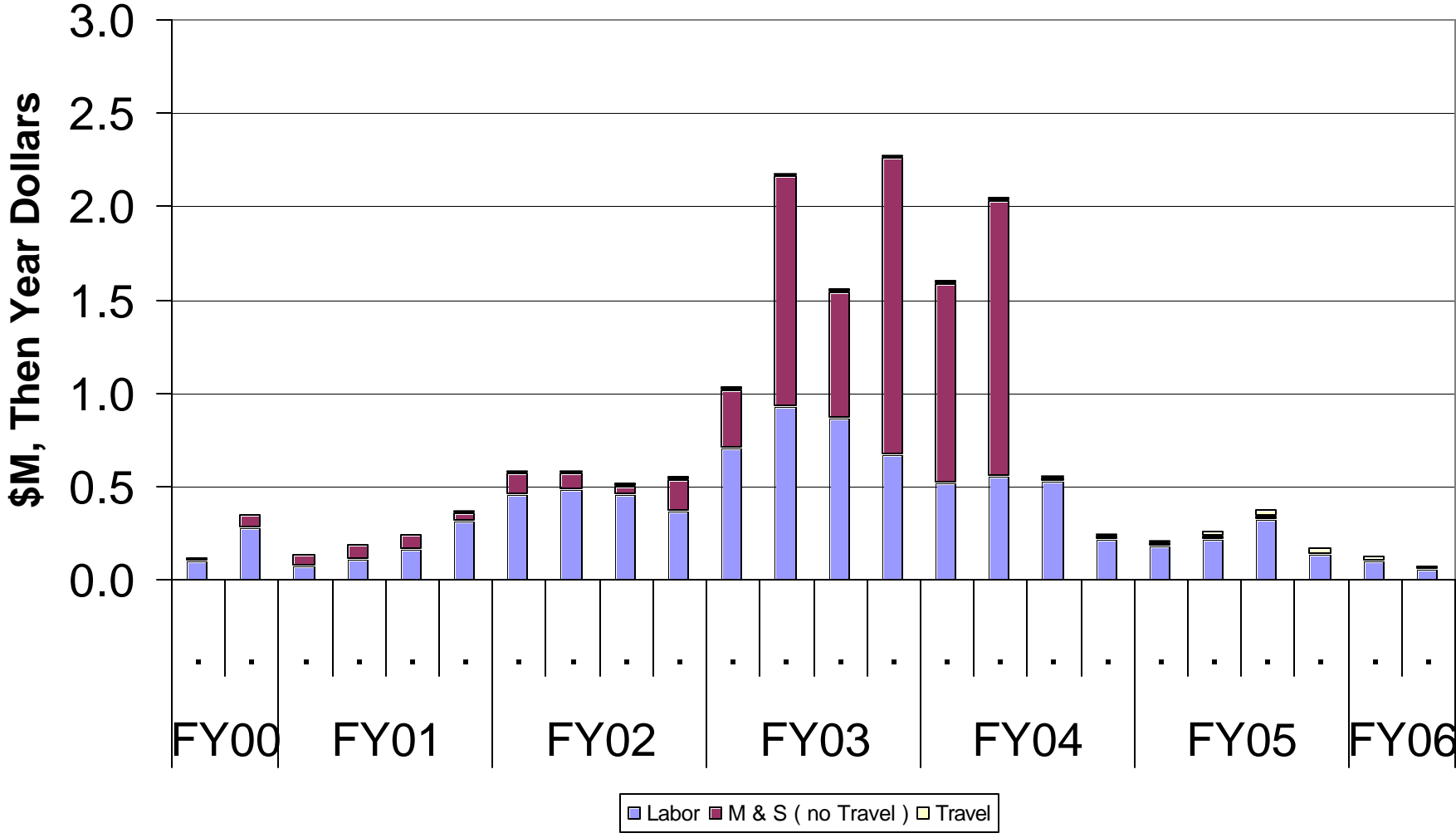
Cost & Commitment Profile

4.1.7 Electronics Costs and Commitments



ACWP
 Actual Commit
 BCWS
 BCWS + Planned Commit

4.1.7 Electronics 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	
4.1.7 ELECTRONICS												
DN NRL												
N417 4.1.7 Electronics NRL												
		CPN[1] Totals:	PLANNED	135	218	0	0	0	0	0	354	
			BUD+COM	135	218	0	0	0	0	0	354	
	OBS Totals:		PLANNED	135	218	0	0	0	0	0	354	
			BUD+COM	135	218	0	0	0	0	0	354	
CAPW[4] Totals:				PLANNED	135	218	0	0	0	0	354	
			BUD+COM	135	218	0	0	0	0	0	354	
4.1.7.1 ELECTRONICS MANAGEMENT												
DH SU-HEPL												
2WCA141 4.1.7.1 Electronic Mgmt - Labor												
		CPN[1] Totals:	PLANNED	0	70	0	0	0	0	0	70	
			BUD+COM	0	70	0	0	0	0	0	70	
2WCA142 4.1.7.1 Electronic Mgmt - M&S												
		CPN[1] Totals:	PLANNED	0	16	16	16	16	17	0	81	
			BUD+COM	0	16	16	16	16	17	0	81	
2WCA143 4.1.7.1 Electronic Mgmt - Travel												
		CPN[1] Totals:	PLANNED	0	6	10	11	11	11	0	50	
			BUD+COM	0	6	10	11	11	11	0	50	
	OBS Totals:		PLANNED	0	93	26	27	28	28	0	202	
			BUD+COM	0	93	26	27	28	28	0	202	
DL SU-SLAC												
2600059 4.1.7.1 Elec Management												
		CPN[1] Totals:	PLANNED	0	177	146	220	229	182	7	962	
			BUD+COM	0	177	146	220	229	182	7	962	
	OBS Totals:		PLANNED	0	177	146	220	229	182	7	962	
			BUD+COM	0	177	146	220	229	182	7	962	
DN NRL												
N71 4.1.7.1 ELECTRONICS MANAGEMENT												
		CPN[1] Totals:	PLANNED	0	41	96	99	102	95	0	434	
			BUD+COM	0	41	96	99	102	95	0	434	
	OBS Totals:		PLANNED	0	41	96	99	102	95	0	434	
			BUD+COM	0	41	96	99	102	95	0	434	
CAPW[4] Totals:				PLANNED	0	311	269	346	359	305	7	1,597
			BUD+COM	0	311	269	346	359	305	7	1,597	
4.1.7.2 RELIABILITY & QUALITY ASSURANCE												
DL SU-SLAC												
2600060 4.1.7.2 Reliability & Quality Assurance												
		CPN[1] Totals:	PLANNED	0	11	43	45	47	36	0	183	
			BUD+COM	0	11	43	45	47	36	0	183	
	OBS Totals:		PLANNED	0	11	43	45	47	36	0	183	
			BUD+COM	0	11	43	45	47	36	0	183	
CAPW[4] Totals:				PLANNED	0	11	43	45	47	36	0	183
			BUD+COM	0	11	43	45	47	36	0	183	
4.1.7.3 ELECTRONICS SYSTEM DESIGN												
DH SU-HEPL												
2WCA144 4.1.7.3 Electronic System Design												
		CPN[1] Totals:	PLANNED	557	85	0	0	0	0	0	642	
			BUD+COM	557	85	0	0	0	0	0	642	
	OBS Totals:		PLANNED	557	85	0	0	0	0	0	642	
			BUD+COM	557	85	0	0	0	0	0	642	
DL SU-SLAC												
2600061 4.1.7.3 Electronics System Design												
		CPN[1] Totals:	PLANNED	0	98	35	0	0	0	0	134	
			BUD+COM	0	98	35	0	0	0	0	134	
	OBS Totals:		PLANNED	0	98	35	0	0	0	0	134	
			BUD+COM	0	98	35	0	0	0	0	134	
CAPW[4] Totals:				PLANNED	557	183	35	0	0	0	776	
			BUD+COM	557	183	35	0	0	0	0	776	

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

CAPW[4]	OBS	CPN[1]	WP	FY00	FY01	FY02	FY03	FY04	FY05	FY06	Cumulative
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROCESSOR FARM)											
DH SU-HEPL											
2WCA201 4.1.7.4 Data Flow M&S											
		CPN[1] Totals:	PLANNED	0	8	0	0	0	0	0	8
			BUD+COM	0	8	0	0	0	0	0	8
2WCA147 4.1.7.4 Dataflow Labor											
		CPN[1] Totals:	PLANNED	0	1	127	171	34	0	0	332
			BUD+COM	0	1	127	171	34	0	0	332
	OBS Totals:		PLANNED	0	9	127	171	34	0	0	340
			BUD+COM	0	9	127	171	34	0	0	340
DL SU-SLAC											
2600193 4.1.4.8.4 Data Flow: GLT: Flight Units											
		CPN[1] Totals:	PLANNED	0	0	0	196	0	0	0	196
			BUD+COM	0	0	0	196	0	0	0	196
2600062 4.1.7.4 Data Flow Electronics											
		CPN[1] Totals:	PLANNED	0	74	7	0	0	0	0	81
			BUD+COM	0	74	7	0	0	0	0	81
2600183 4.1.7.4.1 Data Flow Design Requisites											
		CPN[1] Totals:	PLANNED	0	0	14	14	9	6	0	43
			BUD+COM	0	0	14	14	9	6	0	43
2600184 4.1.7.4.2 Data Flow: Front End Simulator											
		CPN[1] Totals:	PLANNED	0	0	33	11	0	0	0	44
			BUD+COM	0	0	33	11	0	0	0	44
2600185 4.1.7.4.3.1-3 Data Flow:TKR/CAL TEM Elec, EMs											
		CPN[1] Totals:	PLANNED	0	1	186	86	0	0	0	273
			BUD+COM	0	1	186	86	0	0	0	273
2600186 4.1.7.4.3.4 Data Flow:TKR/CAL TEM Flight Units											
		CPN[1] Totals:	PLANNED	0	0	4	807	91	0	0	902
			BUD+COM	0	0	4	807	91	0	0	902
2600187 4.1.7.4.4.1-3 Data Flow:ACD TEM Elec, EMs											
		CPN[1] Totals:	PLANNED	0	0	119	40	0	0	0	159
			BUD+COM	0	0	124	35	0	0	0	159
2600188 4.1.7.4.4.4 Data Flow:ACD TEM Elec: Flight Units											
		CPN[1] Totals:	PLANNED	0	0	0	162	28	0	0	191
			BUD+COM	0	0	0	162	28	0	0	191
2600189 4.1.7.4.5.1-3 Data Flow: GLT-CPU Inter Card: EMs											
		CPN[1] Totals:	PLANNED	0	3	99	195	0	0	0	297
			BUD+COM	0	3	103	192	0	0	0	297
2600190 4.1.7.4.5.4 Data Flow: GLT-CPU Inter Cards, FUs											
		CPN[1] Totals:	PLANNED	0	0	0	279	38	0	0	317
			BUD+COM	0	0	0	279	38	0	0	317
2600191 4.1.7.4.6 Data Flow: Data CPUs											
		CPN[1] Totals:	PLANNED	0	0	46	926	825	0	0	1,797
			BUD+COM	0	0	46	926	825	0	0	1,797
2600192 4.1.7.4.8.1-3 Data Flow: GLT: EMs											
		CPN[1] Totals:	PLANNED	0	0	139	24	0	0	0	163
			BUD+COM	0	0	139	24	0	0	0	163
2600194 4.1.7.4.9 Data Flow: Test Bed											
		CPN[1] Totals:	PLANNED	0	0	0	0	678	0	0	678
			BUD+COM	0	0	0	0	678	0	0	678
	OBS Totals:		PLANNED	0	78	646	2,740	1,669	6	0	5,139
			BUD+COM	0	78	654	2,731	1,669	6	0	5,139
DN NRL											
N74 4.1.7.4 Data Flow											
		CPN[1] Totals:	PLANNED	0	20	221	335	21	0	0	597
			BUD+COM	0	20	231	325	21	0	0	597
	OBS Totals:		PLANNED	0	20	221	335	21	0	0	597
			BUD+COM	0	20	231	325	21	0	0	597
CAPW[4] Totals:											
			PLANNED	0	107	994	3,245	1,724	6	0	6,076
			BUD+COM	0	107	1,012	3,227	1,724	6	0	6,076
4.1.7.5 SPACECRAFT INTERFACE UNIT											
DL SU-SLAC											
2600063 4.1.7.5 Spacecraft Interface Unit											
		CPN[1] Totals:	PLANNED	0	0	27	169	88	0	0	284
			BUD+COM	0	0	27	169	88	0	0	284
	OBS Totals:		PLANNED	0	0	27	169	88	0	0	284
			BUD+COM	0	0	27	169	88	0	0	284
DN NRL											
N75 4.1.7.5 SIU											
		CPN[1] Totals:	PLANNED	0	22	135	253	49	0	0	458
			BUD+COM	0	22	184	209	43	0	0	458

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			Approval: Program Manager Functional Manager Cost Account Manager								

CAPW[4]	OBS	CPN[1]	WP		FY00	FY01	FY02	FY03	FY04	FY05	FY06	Cumulative
	OBS Totals:			PLANNED	0	22	135	253	49	0	0	458
				BUD+COM	0	22	184	209	43	0	0	458
CAPW[4] Totals:					0	22	162	422	137	0	0	742
					0	22	211	378	131	0	0	742
4.1.7.6 POWER CONDITIONING												
DL SU-SLAC												
2600064 4.1.7.6 Power Conditioning												
	CPN[1] Totals:			PLANNED	0	0	170	617	519	0	0	1,307
				BUD+COM	0	0	170	617	519	0	0	1,307
	OBS Totals:			PLANNED	0	0	170	617	519	0	0	1,307
				BUD+COM	0	0	170	617	519	0	0	1,307
DN NRL												
N76 4.1.7.6 Power System												
	CPN[1] Totals:			PLANNED	0	0	0	118	0	0	0	119
				BUD+COM	0	0	0	118	0	0	0	119
	OBS Totals:			PLANNED	0	0	0	118	0	0	0	119
				BUD+COM	0	0	0	118	0	0	0	119
CAPW[4] Totals:					0	0	170	736	520	0	0	1,425
					0	0	170	736	520	0	0	1,425
4.1.7.7 ENCLOSURES												
DL SU-SLAC												
2600065 4.1.7.7 Enclosures												
	CPN[1] Totals:			PLANNED	0	0	6	411	94	0	0	512
				BUD+COM	0	0	6	411	94	0	0	512
	OBS Totals:			PLANNED	0	0	6	411	94	0	0	512
				BUD+COM	0	0	6	411	94	0	0	512
DN NRL												
N774 4.1.7.7.4 SIU ENCLOSURE												
	CPN[1] Totals:			PLANNED	0	0	0	128	6	0	0	134
				BUD+COM	0	0	0	128	6	0	0	134
	OBS Totals:			PLANNED	0	0	0	128	6	0	0	134
				BUD+COM	0	0	0	128	6	0	0	134
CAPW[4] Totals:					0	0	6	539	100	0	0	645
					0	0	6	539	100	0	0	645
4.1.7.8 CABLE HARNESS												
DL SU-SLAC												
2600066 4.1.7.8 Cable Harness												
	CPN[1] Totals:			PLANNED	0	0	0	176	353	0	0	529
				BUD+COM	0	0	0	176	353	0	0	529
	OBS Totals:			PLANNED	0	0	0	176	353	0	0	529
				BUD+COM	0	0	0	176	353	0	0	529
CAPW[4] Totals:					0	0	0	176	353	0	0	529
					0	0	0	176	353	0	0	529
4.1.7.9 FLIGHT SOFTWARE												
DH SU-HEPL												
H791 4.1.7.9.1 Flight Software: Infr-Struc Devel/Test												
	CPN[1] Totals:			PLANNED	0	0	64	69	72	74	18	297
				BUD+COM	0	0	64	69	72	74	18	297
	OBS Totals:			PLANNED	0	0	64	69	72	74	18	297
				BUD+COM	0	0	64	69	72	74	18	297
DL SU-SLAC												
2600067 4.1.7.9 Flight Software												
	CPN[1] Totals:			PLANNED	0	37	127	488	156	200	70	1,077
				BUD+COM	0	43	121	488	156	200	70	1,077
	OBS Totals:			PLANNED	0	37	127	488	156	200	70	1,077
				BUD+COM	0	43	121	488	156	200	70	1,077
DN NRL												
N79 4.1.7.9 Flight Software												
	CPN[1] Totals:			PLANNED	0	10	116	373	120	182	51	852
				BUD+COM	0	10	116	373	120	182	51	852
	OBS Totals:			PLANNED	0	10	116	373	120	182	51	852
				BUD+COM	0	10	116	373	120	182	51	852

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	
	DT Texas A&M											
		DT7911 4.1.7.9.2 Infra-Structure Development										
		CPN[1] Totals:	PLANNED	0	16	0	0	0	0	0	0	16
			BUD+COM	0	16	0	0	0	0	0	0	16
	OBS Totals:		PLANNED	0	16	0	0	0	0	0	0	16
			BUD+COM	0	16	0	0	0	0	0	0	16
CAPW[4] Totals:			PLANNED	0	63	307	931	348	455	139	2,242	
			BUD+COM	0	69	301	931	348	455	139	2,242	
4.1.7.A EGSE & OPERATIONS												
DH SU-HEPL												
		NH417A 4.1.7.A EGSE & Operations										
		CPN[1] Totals:	PLANNED	0	5	8	0	0	0	0	0	13
			BUD+COM	0	5	8	0	0	0	0	0	13
	OBS Totals:		PLANNED	0	5	8	0	0	0	0	0	13
			BUD+COM	0	5	8	0	0	0	0	0	13
DL SU-SLAC												
		2600068 4.1.7.A EGSE & Operations										
		CPN[1] Totals:	PLANNED	0	0	164	347	47	0	0	0	558
			BUD+COM	0	0	164	347	47	0	0	0	558
	OBS Totals:		PLANNED	0	0	164	347	47	0	0	0	558
			BUD+COM	0	0	164	347	47	0	0	0	558
DN NRL												
		N7A 4.1.7.A EGSE & Operations										
		CPN[1] Totals:	PLANNED	0	8	68	75	10	0	0	0	161
			BUD+COM	0	8	68	75	10	0	0	0	161
	OBS Totals:		PLANNED	0	8	68	75	10	0	0	0	161
			BUD+COM	0	8	68	75	10	0	0	0	161
CAPW[4] Totals:			PLANNED	0	13	240	422	57	0	0	0	732
			BUD+COM	0	13	240	422	57	0	0	0	732
4.1.7.C INSTRUMENT INTEGRATION & TEST												
DH SU-HEPL												
		H7C 4.1.7.C Instrument I&T										
		CPN[1] Totals:	PLANNED	0	0	0	79	225	0	0	0	305
			BUD+COM	0	0	0	79	225	0	0	0	305
	OBS Totals:		PLANNED	0	0	0	79	225	0	0	0	305
			BUD+COM	0	0	0	79	225	0	0	0	305
DL SU-SLAC												
		2600070 4.1.7.C Instrument integration & Test										
		CPN[1] Totals:	PLANNED	0	0	0	42	247	0	0	0	289
			BUD+COM	0	0	0	42	247	0	0	0	289
	OBS Totals:		PLANNED	0	0	0	42	247	0	0	0	289
			BUD+COM	0	0	0	42	247	0	0	0	289
DN NRL												
		N7C 4.1.7.C Instrument Integration and Test										
		CPN[1] Totals:	PLANNED	0	0	0	48	328	0	0	0	376
			BUD+COM	0	0	0	48	328	0	0	0	376
	OBS Totals:		PLANNED	0	0	0	48	328	0	0	0	376
			BUD+COM	0	0	0	48	328	0	0	0	376
CAPW[4] Totals:			PLANNED	0	0	0	168	800	0	0	0	969
			BUD+COM	0	0	0	168	800	0	0	0	969
4.1.7.D MISSION SYSTEMS INTEGRATION & TEST												
DH SU-HEPL												
		H7D 4.1.7.D Mission Systems Integration & Test										
		CPN[1] Totals:	PLANNED	0	0	0	0	0	72	18	0	90
			BUD+COM	0	0	0	0	0	72	18	0	90
	OBS Totals:		PLANNED	0	0	0	0	0	72	18	0	90
			BUD+COM	0	0	0	0	0	72	18	0	90
DL SU-SLAC												
		2600071 4.1.7.D Mission Systems Integration & Test										
		CPN[1] Totals:	PLANNED	0	0	0	0	0	67	19	0	86
			BUD+COM	0	0	0	0	0	67	19	0	86
	OBS Totals:		PLANNED	0	0	0	0	0	67	19	0	86
			BUD+COM	0	0	0	0	0	67	19	0	86

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

CAPW[4]	OBS DN NRL	CPN[1]	WP	FY00	FY01	FY02	FY03	FY04	FY05	FY06	Cumulative
		N7D 4.1.7.D Mission Systems Integration & Test									
		CPN[1] Totals:	PLANNED	0	0	0	0	0	61	13	74
			BUD+COM	0	0	0	0	0	61	13	74
	OBS Totals:		PLANNED	0	0	0	0	0	61	13	74
			BUD+COM	0	0	0	0	0	61	13	74
CAPW[4] Totals:			PLANNED	0	0	0	0	0	200	51	251
			BUD+COM	0	0	0	0	0	200	51	251



**Gamma-ray
Large Area Space
Telescope**



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
7 4.1.7 ELECTRONICS												
Subtotal		1,481	04/03/00A	03/28/06		16,517,824.05						16,517.82
7 4.1.7 ELECTRONICS												
Subtotal		1,709	04/03/00A	07/31/01A	C	353,652.78		353,652.78				
DN NRL												
Subtotal		1,709	04/03/00A	07/31/01A	C	353,652.78		353,652.78				
+ N417 4.1.7 Electronics NRL												
		1,709	04/03/00A	07/31/01A	C	353,652.78		353,652.78				
71 4.1.7.1 ELECTRONICS MANAGEMENT												
Subtotal		1,274	11/01/00A	01/03/06	A	1,595,999.55						1,595,999.55
DH SU-HEPL												
Subtotal		1,158	02/01/01A	09/30/05	A	201,673.24						201,673.24
+ 2WCA141 4.1.7.1 Electronic Mgnt - Labor												
		127	04/02/01A	09/28/01A	A	70,446.48		70,446.48				
+ 2WCA142 4.1.7.1 Electronic Mgnt - M&S												
		1,148	02/01/01A	09/16/05	A	81,246.14						81,246.14
+ 2WCA143 4.1.7.1 Electronic Mgnt - Travel												
		1,158	02/01/01A	09/30/05	A	49,980.62						49,980.62
DL SU-SLAC												
Subtotal		1,274	11/01/00A	01/03/06	A	960,934.40						960,934.40
+ 2600059 4.1.7.1 Elec Management												
		1,274	11/01/00A	01/03/06	A	960,934.40						960,934.40
DN NRL												
Subtotal		1,158	02/01/01A	09/30/05	A	433,391.91						433,391.91
+ N71 4.1.7.1 ELECTRONICS MANAGEMENT												
		1,158	02/01/01A	09/30/05	A	433,391.91						433,391.91
72 4.1.7.2 RELIABILITY & QUALITY ASSURANCE												
Subtotal		1,034	04/02/01A	06/03/05	A	182,744.71						182,744.71

Act ID	Activity Description	Dur	Start	Finish	PMT	Budgeted Cost	FY01	FY02	FY03	FY04	FY05	FY06
DL SU-SLAC												
Subtotal		1,034	04/02/01A	06/03/05	A	182,744.71						
+ 2600060 4.1.7.2 Reliability & Quality Assurance												
		1,034	04/02/01A	06/03/05	A	182,744.71						
73 4.1.7.3 ELECTRONICS SYSTEM DESIGN												
Subtotal		512	04/03/00A	04/25/02		775,685.05						
DH SU-HEPL												
Subtotal		247	04/03/00A	03/30/01A	A	642,097.50						
+ 2WCA144 4.1.7.3 Electronic System Design												
		247	04/03/00A	03/30/01A	A	642,097.50						
DL SU-SLAC												
Subtotal		363	11/01/00A	04/25/02	E	133,587.55						
+ 2600061 4.1.7.3 Electronics System Design												
		363	11/01/00A	04/25/02	E	133,587.55						
74 4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)												
Subtotal		1,147	10/02/00A	05/24/05		6,075,249.24						
DH SU-HEPL												
Subtotal		653	05/01/01A	12/16/03		339,796.78						
+ 2WCA147 4.1.7.4 Dataflow Labor												
		566	09/04/01A	12/16/03		332,222.78						
+ 2WCA201 4.1.7.4 Data Flow M&S												
		80	05/01/01A	09/28/01A	E	7,574.00						
DL SU-SLAC												
Subtotal		1,028	03/30/01A	05/24/05		5,138,245.12						
+ 2600062 4.1.7.4 Data Flow Electronics												
		152	03/30/01A	11/01/01		80,590.87						
+ 2600183 4.1.7.4.1 Data Flow Design Requisites												
		900	10/01/01A	05/24/05	A	42,703.62						
+ 2600184 4.1.7.4.2 Data Flow: Front End Simulator												
		146	05/23/02	12/19/02	E	43,528.08						
Run Date	12/12/01 15:24	GLAST - LAT PROJECT WorkPackagePlanningSummary (WBS4xOBSxWP)					Sheet 16					
© Primavera Systems, Inc.												

Act ID	Activity Description	Dur	Start	Finish	PMT	Budgeted Cost	FY01	FY02	FY03	FY04	FY05	FY06
+ 2600185 4.1.7.4.3.1-3 Data Flow:TKR/CAL TEM Elec, EMs												
		377	09/04/01A	03/19/03	E	272,579.69						
+ 2600186 4.1.7.4.3.4 Data Flow:TKR/CAL TEM Flight Units												
		330	08/06/02	12/03/03	E	901,780.51						
+ 2600187 4.1.7.4.4.1-3 Data Flow:ACD TEM Elec, EMs												
		323	12/04/01	04/01/03	E	158,680.96						
+ 2600188 4.1.7.4.4.4 Data Flow:ACD TEM Elec: Flight Units												
		217	01/03/03	11/10/03	E	190,565.26						
+ 2600189 4.1.7.4.5.1-3 Data Flow: GLT-CPU Inter Card: EMs												
		402	09/25/01A	05/14/03	E	297,397.03						
+ 2600190 4.1.7.4.5.4 Data Flow: GLT-CPU Inter Cards, FUs												
		251	10/31/02	11/05/03	E	317,165.90						
+ 2600191 4.1.7.4.6 Data Flow: Data CPUs												
		594	10/01/01A	03/03/04	E	1,797,080.79						
+ 2600192 4.1.7.4.8.1-3 Data Flow: GLT: EMs												
		279	12/04/01	01/28/03	E	162,798.29						
+ 2600193 4.1.4.8.4 Data Flow: GLT: Flight Units												
		201	10/23/02	08/18/03	E	195,738.41						
+ 2600194 4.1.7.4.9 Data Flow: Test Bed												
		160	12/17/03	08/11/04	E	677,635.71						
DN NRL												
Subtotal		760	10/02/00A	10/27/03	E	597,207.34						
+ N74 4.1.7.4 Data Flow												
		760	10/02/00A	10/27/03	E	597,207.34						
75 4.1.7.5 SPACECRAFT INTERFACE UNIT												
Subtotal		643	08/01/01A	03/12/04	E	742,059.45						
DL SU-SLAC												
Subtotal		437	06/04/02	03/12/04	E	284,236.45						
+ 2600063 4.1.7.5 Spacecraft Interface Unit												
		437	06/04/02	03/12/04	E	284,236.45						

Act ID	Activity Description	Dur	Start	Finish	PMT	Budgeted Cost	FY01	FY02	FY03	FY04	FY05	FY06
DN NRL												
Subtotal		602	08/01/01A	01/13/04	E	457,823.00						
+ N75 4.1.7.5 SIU												
		602	08/01/01A	01/13/04	E	457,823.00						
76 4.1.7.6 POWER CONDITIONING												
Subtotal		519	11/27/01	01/09/04	E	1,425,556.88						
DL SU-SLAC												
Subtotal		519	11/27/01	01/09/04	E	1,306,768.53						
+ 2600064 4.1.7.6 Power Conditioning												
		519	11/27/01	01/09/04	E	1,306,768.53						
DN NRL												
Subtotal		202	12/09/02	10/02/03	E	118,788.35						
+ N76 4.1.7.6 Power System												
		202	12/09/02	10/02/03	E	118,788.35						
77 4.1.7.7 ENCLOSURES												
Subtotal		335	09/03/02	01/15/04	E	645,448.28						
DL SU-SLAC												
Subtotal		335	09/03/02	01/15/04	E	511,480.24						
+ 2600065 4.1.7.7 Enclosures												
		335	09/03/02	01/15/04	E	511,480.24						
DN NRL												
Subtotal		255	10/01/02	10/10/03	E	133,968.04						
+ N774 4.1.7.7.4 SIU ENCLOSURE												
		255	10/01/02	10/10/03	E	133,968.04						
78 4.1.7.8 CABLE HARNESS												
Subtotal		314	10/01/02	01/14/04	E	529,170.17						
DL SU-SLAC												
Subtotal		314	10/01/02	01/14/04	E	529,170.17						
+ 2600066 4.1.7.8 Cable Harness												
		314	10/01/02	01/14/04	E	529,170.17						

Act ID	Activity Description	Dur	Start	Finish	PMT	Budgeted Cost	FY01	FY02	FY03	FY04	FY05	FY06	
79 4.1.7.9 FLIGHT SOFTWARE													
Subtotal		1,207	05/01/01A	03/20/06		2,241,445.03						2,241,445.03	
DH SU-HEPL													
Subtotal		1,032	10/01/01A	12/01/05	A	296,503.73						296,503.73	
+ H791 4.1.7.9.1 Flight Software: Infr-Struc Devel/Test													
		1,032	10/01/01A	12/01/05	A	296,503.73						296,503.73	
DL SU-SLAC													
Subtotal		1,207	05/01/01A	03/20/06		1,076,908.77						1,076,908.77	
+ 2600067 4.1.7.9 Flight Software													
		1,207	05/01/01A	03/20/06		1,076,908.77						1,076,908.77	
DN NRL													
Subtotal		1,112	09/04/01A	03/08/06		852,032.33	852,032.33						
+ N79 4.1.7.9 Flight Software													
		1,112	09/04/01A	03/08/06		852,032.33	852,032.33						
DT TAM													
Subtotal		19	09/04/01A	09/28/01A	E	16,000.20		16,000.20					
+ DT7911 4.1.7.9.2 Infra-Structure Development													
		19	09/04/01A	09/28/01A	E	16,000.20		16,000.20					
7A 4.1.7.A EGSE & OPERATIONS													
Subtotal		552*	08/15/01A	11/05/03	E	731,467.99						731,467.99	
DH SU-HEPL													
Subtotal		77*	08/15/01A	12/04/01	E	13,258.55		13,258.55					
+ NH417A 4.1.7.A EGSE & Operations													
		77*	08/15/01A	12/04/01	E	13,258.55		13,258.55					
DL SU-SLAC													
Subtotal		515*	10/08/01A	11/05/03	E	557,732.73						557,732.73	
+ 2600068 4.1.7.A EGSE & Operations													
		515*	10/08/01A	11/05/03	E	557,732.73						557,732.73	
DN NRL													
Subtotal		552*	08/15/01A	11/05/03	E	160,476.71						160,476.71	

Act ID	Activity Description	Dur	Start	Finish	PMT	Budgeted Cost	FY01	FY02	FY03	FY04	FY05	FY06
+ N7A 4.1.7.A EGSE & Operations												
		552*	08/15/01A	11/05/03	E	160,476.71						
7C 4.1.7.C INSTRUMENT INTEGRATION & TEST												
Subtotal		329	01/17/03	05/13/04	E	968,635.21						
DH SU-HEPL												
Subtotal		329	01/17/03	05/13/04	E	304,516.50						
+ H7C 4.1.7.C Instrument I&T												
		329	01/17/03	05/13/04	E	304,516.50						
DL SU-SLAC												
Subtotal		292	03/13/03	05/13/04	E	288,509.90						
+ 2600070 4.1.7.C Instrument integration & Test												
		292	03/13/03	05/13/04	E	288,509.90						
DN NRL												
Subtotal		292	03/13/03	05/13/04	E	375,608.81						
+ N7C 4.1.7.C Instrument Integration and Test												
		292	03/13/03	05/13/04	E	375,608.81						
7D 4.1.7.D MISSION SYSTEMS INTEGRATION & TEST												
Subtotal		258	03/15/05	03/28/06	E	250,709.71						
DH SU-HEPL												
Subtotal		258	03/15/05	03/28/06	E	90,354.89						
+ H7D 4.1.7.D Mission Systems Integration & Test												
		258	03/15/05	03/28/06	E	90,354.89						
DL SU-SLAC												
Subtotal		258*	03/15/05	03/28/06	E	86,170.75						
+ 2600071 4.1.7.D Mission Systems Integration & Test												
		258*	03/15/05	03/28/06	E	86,170.75						
DN NRL												
Subtotal		258*	03/15/05	03/28/06	E	74,184.07						
+ N7D 4.1.7.D Mission Systems Integration & Test												
		258*	03/15/05	03/28/06	E	74,184.07						



**Gamma-ray
Large Area Space
Telescope**



Subsystem Milestones

Act ID	Activity Description	Start	Finish	Fiscal Year																			
				FY00	FY01	FY02	FY03	FY04	FY05	FY06													
7E1000020	IN: Acquire DAQ Interim Model		06/01/01A																				
7E4500050	IN: Front End System Interface Defined		07/02/01A																				
7E10000130	IN: Acquire DAQ EM 1 Description		09/04/01A																				
7E46210000	IN: Interface Defined		10/01/01A																				
7E10001060	Complete Determination of CPU Resources		10/11/01A																				
7E45000120	AV: VME Com Card (TEM Sim) to CAL		10/15/01A																				
7E4512EXT0	AV: Com Card for TKR EM Function Test		10/15/01A																				
7E4512XA00	AV: Com Card for ACD Prototype Test		10/15/01A																				
7E45000200	Complete Conceptual Design		10/30/01A																				
7E20000220	Major Review Requir./Conceptual Design		11/01/01*																				
7E43120000	AV: Deliver Pre Engr Model to TKR		11/01/01																				
7E4312E000	AV: Pre-EM TEM for CAL Integration		11/01/01																				
7E74311000	IN: Front End System Interface Defined		11/01/01																				
7E20004710	Complete Design Requisites		11/09/01																				
7E44000000	IN: Front End System Interface Defined		11/15/01*																				
7E8G000000	IN: Front End System Interface Defined		11/15/01*																				
7E20000530	Complete Conceptual Design		11/16/01																				
7EA0000140	EGSE Level III Specification Release		12/04/01																				
7E43220000	EM1 preliminary design Complete		12/10/01																				
7E44000150	AV: Deliver Pre Engr Model to ACD		12/17/01																				
7E44000160	IN: Front End System Interface Defined		12/17/01																				
7E44120000	IN: ACD Electronics for Pre Engr Model		12/17/01																				
7E8G000020	IA: Deliver Pre Engr Model to Front End Sys		12/17/01																				
7E8G000030	IN: Front End System Interface Defined		12/17/01																				



**Gamma-ray
Large Area Space
Telescope**



Critical Activities with Total Float Less Than 80 Days

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
4.1.7.5 SPACECRAFT INTERFACE UNIT															
7E53000230	Design/Simulate blocks VHDL	10	09/04/02	09/17/02	0										
7E53000240	Synthesis FPGA's	3	09/18/02	09/20/02	0										
7E53000250	Simulate Board	10	09/23/02	10/04/02	0										
7E53000280	Review EM1 preliminary design	1	10/07/02	10/07/02	0										
7E53000320	PR Procure Parts	1	10/08/02	10/08/02	0										
7ER5323000	Receive Procure Parts	1	11/18/02	11/18/02	0										
7E53000350	Test w Simulator/Electrical/Mechanical/Thermal	20	11/19/02	12/18/02	0										
7E53000360	Test with DAQ Electronics	10	12/19/02	01/10/03	0										
7E54000000	Produce Conceptual Design	110	08/01/02*	01/15/03	0										
7E53000370	Test with Subsystem Electronics	10	01/13/03	01/27/03	0										
7E53000390	Review Eng. Model 1	1	01/28/03	01/28/03	0										
7E53000430	IA: SIU Housekeeping Board EM1 Available	0		01/28/03	0										
7E53000520	Update Part Selection	1	01/29/03	01/29/03	0										
7E53000490	Check Thermal & Mechanical	10	01/30/03	02/12/03	0										
7E54000010	Produce Preliminary Design	20	01/16/03	02/13/03	0										
7E53000500	Review EM2 preliminary design	1	02/13/03	02/13/03	0										
7E54000030	PR Procure Parts	1	02/14/03	02/14/03	0										
7E53000680	Review parts selection and availability	20	02/14/03	03/14/03	0										
7E53000760	PR Procure Parts	1	03/17/03	03/17/03	0										
7ER5413000	Receive Procure Parts	1	03/28/03	03/28/03	0										
7E54000040	Assemble	5	03/31/03	04/04/03	0										
7E54000050	Test	20	04/07/03	05/02/03	0										
7E54000060	IA: EM1 Backplane Available	0		05/02/03	0										
7E54000070	Produce Conceptual Design	10	05/05/03	05/16/03	0										

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year														
						FY01	FY02	FY03	FY04	FY05	FY06									
7E7300080	PR Procure Parts	1	04/10/03	04/10/03	0															
7E71000140	Complete mechanical and thermal analysis	40	03/10/03	05/02/03	0															
7ER7313000	Receive Procure Parts	1	06/05/03	06/05/03	0															
7E73000090	Assemble/Inspect	5	06/06/03	06/12/03	0															
7E73000100	Review Eng. Model 1	1	06/13/03	06/13/03	0															
7E71000170	Modify Design	30	05/05/03	06/16/03	0															
7E71000180	Check Thermal & Mechanical	2	06/17/03	06/18/03	0															
7E71000190	PR Procure Parts	1	06/19/03	06/19/03	0															
7E73000120	Complete mechanical and thermal analysis	10	06/16/03	06/27/03	0															
7E73000140	Modify Design	20	06/30/03	07/28/03	0															
7E73000150	Check Thermal & Mechanical	2	07/29/03	07/30/03	0															
7E73000160	PR Procure Parts	1	07/31/03	07/31/03	0															
7ER7122000	Receive Procure Parts	1	09/12/03	09/12/03	0															
7E71000200	Assemble/Inspect	1	09/15/03	09/15/03	0															
7E71220000	IA: Qual Unit Available	0		09/15/03	0															
7ER7322000	Receive Procure Parts	1	09/25/03	09/25/03	0															
7E73000170	Assemble/Inspect	1	09/26/03	09/26/03	0															
7E73000180	IA: Qual Unit Available	0		09/26/03	0															
7EA0000130	Instrument Power System	77	08/15/01A	12/04/01	0															
7EA0000200	COTS Software Procurement	60	10/08/01A	01/10/02	0															
7EA0000600	IPS Conceptual Design	40	12/05/01	02/08/02	0															
7EA0000150	Cmd & Tlm Database Development	100	10/08/01A	03/11/02	0															
7EA0000160	Data Acquisition & Archive	100	10/08/01A	03/11/02	0															
7EA0000170	Data Distribution	100	10/08/01A	03/11/02	0															

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
4.1.7.A EGSE & OPERATIONS															
7EA0000700	AV: Qual Unit IPS Release	0		01/30/03	0										
7EA0000710	H/W Procurement	40	01/31/03	03/28/03	0										
7EA0000720	S/W Update	40	01/31/03	03/28/03	0										
7EA0000730	Documentation & Procedures	40	01/31/03	03/28/03	0										
7EA4300010	SLAC	40*	01/31/03	03/28/03	0										
7EA0000740	AV: Flight Unit Release	0		03/28/03	0										
7EA0000330	COTS Software Support	85	01/16/03	05/16/03	0										
7EA0000340	EGSE Hardware	85	01/16/03	05/16/03	0										
7EA2400000	SLAC	85*	01/16/03	05/16/03	0										
7EA2400010	NRL	85*	01/16/03	05/16/03	0										
7EA0000350	AV: EGSE Qual Unit Release for I&T	0		05/16/03	0										
7EA0000360	EGSE Debug & Test	120	05/19/03	11/05/03	0										
7EA0000370	COTS Software Support	120	05/19/03	11/05/03	0										
7EA0000380	EGSE Hardware	120	05/19/03	11/05/03	0										
7EA2500000	SLAC	120*	05/19/03	11/05/03	0										
7EA2500010	NRL	120*	05/19/03	11/05/03	0										
7EA0000390	AV: EGSE Flight Unit Release for I&T	0		11/05/03	0										
4.1.7.C INSTRUMENT INTEGRATION & TEST															
7EC1200000	Integrate	5	09/16/03	09/22/03	0										
7EC1200010	IN: Qual Unit Flight/GSE SW for Integration	0		09/22/03	0										
7EC12E0000	AV: Flight TEM Assembly Qual A&B	0		09/22/03	0										
7EC3000050	Integrate	5	09/29/03	10/03/03	0										
7EC3000060	IN: Qual Unit Flight/GSE SW for Integration	0		10/03/03	0										
7EC32E0000	AV: Qual CPU	0		10/03/03	0										
7EC1200020	Functional/Performance Test	10	09/23/03	10/06/03	0										

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
4.1.7.C INSTRUMENT INTEGRATION & TEST															
7EC400090	Acoustic Test	5	12/22/03	01/06/04	0										
7EC1300060	Thermal Vacuum Test	5	01/07/04	01/13/04	0										
7EC4000100	EMI/EMC Test	5	01/07/04	01/13/04	0										
7EC1300070	Review I&T Flight Unit	1	01/14/04	01/14/04	0										
7EC13E0000	AV: Flight TEM Assembly Mod 3,4 for I&T	0		01/14/04	0										
7EC4000110	Thermal Vacuum Test	5	01/14/04	01/21/04	0										
7EC4000120	Review I&T Qual Unit	1	01/22/04	01/22/04	0										
7EC4720000	AV: Qual Review SIU	0		01/22/04	0										
7EC3000160	Vibration Test	5	03/04/04	03/10/04	0										
7EC4000130	Integrate	2	03/15/04	03/16/04	0										
7EC4000140	IN: Qual Unit Flight/GSE SW for Integration	0		03/16/04	0										
7EC45E0000	AV: Flight SIU for I&T	0		03/16/04	0										
7EC3000170	Acoustic Test	5	03/11/04	03/17/04	0										
7EC4000150	Functional/Performance Test	2	03/17/04	03/18/04	0										
7EC4000160	Vibration Test	2	03/19/04	03/22/04	0										
7EC3000180	EMI/EMC Test	5	03/18/04	03/24/04	0										
7EC4000170	Acoustic Test	2	03/23/04	03/24/04	0										
7EC4000180	EMI/EMC Test	2	03/25/04	03/26/04	0										
7EC4000190	Thermal Vacuum Test	2	03/29/04	03/30/04	0										
7EC3000190	Thermal Vacuum Test	5	03/25/04	03/31/04	0										
7EC4000200	Review I&T Flight Unit	1	03/31/04	03/31/04	0										
7EC4372000	AV: RFI 1st Article SIU	0		03/31/04	0										
7EC3000200	Review I&T Flight Unit	1	04/01/04	04/01/04	0										
7EC3721000	AV: RFI 1st Article Event Proc	0		04/01/04	0										

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
1															
4.1.7.5 SPACECRAFT INTERFACE UNIT															
7E53000440	Modify blocks	10	01/29/03	02/11/03	1										
2															
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E43100080	Fabricate PCB	13	10/16/01A	11/01/01	2										
7E43100110	Test Function	20	11/02/01	12/03/01	2										
7E44000420	AV: EM1 Available to ACD	0		06/27/02	2										
4.1.7.9 FLIGHT SOFTWARE															
7E10000220	Tower to CPU	138	12/04/01	06/27/02	2										
7E10000230	CPU Processing	138	12/04/01	06/27/02	2										
7E10000240	Output Data	138	12/04/01	06/27/02	2										
7E934L0000	CPU Formating	138	12/04/01	06/27/02	2										
7E934N0000	CPU Formating	138	12/04/01	06/27/02	2										
7E10000860	Complete Data Flow	0		06/27/02	2										
3															
4.1.7.D MISSION SYSTEMS INTEGRATION & TEST															
7ED0000190	GLAST Launch	0	03/01/06*		3										
7ED0000200	S/C Activation & Checkout	10	03/01/06	03/14/06	3										
7ED4000000	NRL	144*	08/24/05	03/28/06	3										
7ED4000010	SLAC	144*	08/24/05	03/28/06	3										
7ED4000020	HEPL	144*	08/24/05	03/28/06	3										
7ED0000180	Launch Support	20	03/01/06	03/28/06	3										
7ED0000220	Observatory Commissioning	20	03/01/06	03/28/06	3										
7ED0000210	LAT Activation & Checkout	10	03/15/06	03/28/06	3										
7ED0000230	Commissioning Complete	0		03/28/06	3										

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year															
						FY01	FY02	FY03	FY04	FY05	FY06										
5																					
4.1.7.7 ENCLOSURES																					
7E73000110	Review parts selection and availability	5	06/16/03	06/20/03	5																
7E73000130	Review and update instrument internal interface	5	06/16/03	06/20/03	5																
4.1.7.A EGSE & OPERATIONS																					
7EA0000320	EGSE Debug & Test	80	01/16/03	05/09/03	5																
7																					
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)																					
7E44000140	Modify TRK CAL TEM	10	12/04/01	12/17/01	7																
7E44000150	AV: Deliver Pre Engr Model to ACD	0		12/17/01	7																
7E44000160	IN: Front End System Interface Defined	0		12/17/01	7																
7E44120000	IN: ACD Electronics for Pre Engr Model	0		12/17/01	7																
7E44000170	Update Preliminary Interface Document	1	12/18/01	12/18/01	7																
7E44000180	Design blocks	5	12/19/01	01/03/02	7																
7E44000190	Produce Conceptual Design Document	2	01/04/02	01/07/02	7																
7E44000200	Interim Parts Evaluation and Selection	3	01/08/02	01/10/02	7																
7E44000210	Complete Conceptual Design	0		01/10/02	7																
7E44000240	Design/Simulate blocks VHDL	5	01/11/02	01/17/02	7																
7E44000250	Design Board Schematics	5	01/11/02	01/17/02	7																
7E44000260	Synthesis FPGA's	5	01/18/02	01/25/02	7																
7E44000270	Simulate Board	5	01/28/02	02/01/02	7																
7E44000280	Review EM1 preliminary design	1	02/04/02	02/04/02	7																
7E44000340	PR Procure Parts	1	02/05/02	02/05/02	7																
7E4423C000	Receive Procure Parts	1	03/19/02	03/19/02	7																
7E44000360	Assemble PCB	10	03/20/02	04/02/02	7																
7E44000380	Test w Simulator/Electrical/Mechanical/Thermal	10	04/03/02	04/16/02	7																

Act ID	Activity Description	Dur	Start	Finish	Total Float	FY01		FY02		FY03		FY04		FY05		FY06	
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)																	
7E44000390	Test with DAQ Electronics	10	04/17/02	04/30/02	7												
7E45000360	Test with DAQ Electronics	10	05/01/02	05/14/02	7												
7E45000370	Test with Subsystem Electronics	15	05/15/02	06/05/02	7												
7E45000390	Review Eng. Model 1	1	06/06/02	06/06/02	7												
7E45000450	Synthesis into ASIC's/FPGA	10	06/07/02	06/20/02	7												
7E45000460	Place&Route ASICS/FPGA	15	06/21/02	07/12/02	7												
7E45000470	Simulate ASICS/FPGA	15	06/21/02	07/12/02	7												
7E45000480	Simulate Board	5	07/15/02	07/19/02	7												
7E45000510	Design ASIC Test Board (if need ASIC)	14	07/22/02	08/08/02	7												
7E45000500	Review EM2 preliminary design	37	08/09/02	10/01/02	7												
7E45000530	Fabricate ASIC Run 1 (if need ASIC)	60	10/02/02	01/06/03	7												
7E45000540	Test Run 1 (if need ASIC)	15	01/07/03	01/28/03	7												
7E45000610	Test w Simulator	15	01/29/03	02/19/03	7												
7E45000630	Test with DAQ Electronics	10	02/20/03	03/05/03	7												
7E45000640	Test with Subsystem Electronics	10	03/06/03	03/19/03	7												
7E45000660	Review Eng. Model 2	1	03/20/03	03/20/03	7												
7E45000710	Modify Design and Simulate	15	03/21/03	04/10/03	7												
7E45000740	Modify Layout	10	04/11/03	04/24/03	7												
7E45000750	Fabricate PCB	30	04/25/03	06/06/03	7												
7E45000770	Assemble/Inspect/Coat	10	06/09/03	06/20/03	7												
7E45000800	Functional Test	10	06/23/03	07/07/03	7												
7E45000810	Interface test	5	07/08/03	07/14/03	7												
7E45000820	Performance Test	10	07/15/03	07/28/03	7												
7E45000830	Ambient pressure thermal cycle test	5	07/29/03	08/04/03	7												

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E4500850	Procure Equipment for Thermal Test	5	07/29/03	08/04/03	7										
7E4500840	Functional Test	5	08/05/03	08/11/03	7										
7E4500720	IA: Deliver Qual Unit	0		08/11/03	7										
7E4500860	Fabrication PWB	15	08/12/03	09/02/03	7										
7E4500870	Assembly/Inspect/Coat	15	09/03/03	09/23/03	7										
7E4500890	Preliminary Test	10	09/17/03	09/30/03	7										
7E4500920	Interface test	4	10/01/03	10/06/03	7										
7E4500910	Functional Test	10	09/24/03	10/07/03	7										
7E4500930	Performance Test	10	10/02/03	10/15/03	7										
7E4500980	Procure Equipment for Thermal Test	5	10/16/03	10/22/03	7										
7E4500950	Functional Test	10	10/23/03	11/05/03	7										
7E4500970	IA: Last Flight Unit Available	0		11/05/03	7										
4.1.7.7 ENCLOSURES															
7E7100210	Fabrication	20	09/16/03	10/13/03	7										
7E7100220	Assembly/Inspect	20	10/14/03	11/10/03	7										
7E7130000	IA: Flight Unit Available	0		11/10/03	7										
8															
4.1.7.5 SPACECRAFT INTERFACE UNIT															
7E5300960	IA: 1st Flight Unit Available	0		03/02/04	8										
9															
4.1.7.6 POWER CONDITIONING															
7E20009050	Produce Conceptual Design Document	110	08/02/01A	12/10/01	9										
7E20008980	Produce Preliminary Interface Document	10	12/11/01	01/02/02	9										
7E20009000	Design PCC-housekeeping Interface block	10	01/03/02	01/16/02	9										
7E20009010	Design PCC-power switch Interface block	5	01/17/02	01/24/02	9										
7E20009020	Design PCC-CPU Interface block	5	01/25/02	01/31/02	9										

Act ID	Activity Description	Dur	Start	Finish	Total Float	FY01		FY02		FY03		FY04		FY05		FY06	
4.1.7.6 POWER CONDITIONING																	
7E20009030	Design Main block	30	02/01/02	03/15/02	9												
7E20009040	Design sub-system specific blocks	5	03/18/02	03/22/02	9												
7E20009060	Interim parts evaluation and selection complete	1	03/25/02	03/25/02	9												
7E20009080	Design blocks	30	03/26/02	05/06/02	9												
7E20009110	Review preliminary design	1	05/07/02	05/07/02	9												
7E20009120	Layout	10	05/08/02	05/21/02	9												
7E20009140	Fabricate PCB	15	05/22/02	06/12/02	9												
7E63300000	Assemble PCB	10	06/13/02	06/26/02	9												
7E20009160	Stand Alone test	30	06/27/02	08/08/02	9												
7E20009220	Test with sub-systems (TEM/SIU/etc)	30	08/09/02	09/20/02	9												
7E20009240	Review Test Prototype	1	09/23/02	09/23/02	9												
7E63300010	IA: Generic PCC	0		09/23/02	9												
7E67000000	Adopt Generic PCC Design	10	09/24/02	10/07/02	9												
7E67000010	Review EM1 preliminary design	1	10/08/02	10/08/02	9												
7E67000020	Fabricate / Assemble / Test	20	10/09/02	11/05/02	9												
7E67000030	Test in System	30	11/06/02	12/19/02	9												
7E67000040	Review Eng. Model 1	1	12/20/02	12/20/02	9												
7E67000060	Update requirements/Interface/Parts	10	12/23/02	01/14/03	9												
7E67000070	Modify/Simulate blocks	15	01/15/03	02/05/03	9												
7E67000090	Review EM2 preliminary design	1	02/06/03	02/06/03	9												
7E67000100	Fabricate / Assemble / Test	20	02/07/03	03/07/03	9												
7E67000110	Stand Alone test	10	03/10/03	03/21/03	9												
7E67000130	Test in Subsystem	20	03/24/03	04/18/03	9												
7E67000140	Review Eng. Model 2	1	04/21/03	04/21/03	9												

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
4.1.7.6 POWER CONDITIONING															
7E67000170	Complete mechanical and thermal analysis	10	04/22/03	05/05/03	9										
7E67000190	Modify Design and Simulate	10	05/06/03	05/19/03	9										
7E67000200	TEM PCC Fab/Assemble/Coat	60	05/20/03	08/13/03	9										
7E67000250	Data CPU PCC Fab/Assemble/Coat	60	05/20/03	08/13/03	9										
7E67000210	Qualification Unit Board Level Testing	15	08/14/03	09/04/03	9										
7E67000220	Ambient pressure thermal cycle test	3	09/05/03	09/09/03	9										
7E67000230	Functional Test	10	09/10/03	09/23/03	9										
7E67000240	IA: Qual Unit Available	0		09/23/03	9										
7E67000260	TEM PCC Fab/Assemble/Coat	60	09/24/03	12/18/03	9										
7E67000310	Data CPU PCC Fab/Assemble/Coat	60	09/24/03	12/18/03	9										
7E67000270	Flight Unit Board Level Acceptance Testing	1	12/19/03	12/19/03	9										
7E67000280	Ambient pressure thermal cycle test	3	12/22/03	01/02/04	9										
7E20007900	Major Review Flight Readiness	0		01/05/04	9										
7E65000420	AV: Flight TEM PS Assemble Mod 3/4 for I&T	0		01/05/04	9										
7E67000290	Functional Test	1	01/05/04	01/05/04	9										
7E67000300	IA: Flight Unit Available	0		01/05/04	9										
10															
4.1.7.5 SPACECRAFT INTERFACE UNIT															
7E53000300	Layout Board	10	10/08/02	10/21/02	10										
7E53000310	Fabricate PCB	10	10/22/02	11/04/02	10										
7E53000410	Assemble PCB	10	10/22/02	11/04/02	10										
4.1.7.A EGSE & OPERATIONS															
7EA0000220	Workstations	20	03/12/02	04/08/02	10										
7EA0000230	Peripherals	20	03/12/02	04/08/02	10										
7EA0000240	Network Hardware	20	03/12/02	04/08/02	10										

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year					
						FY01	FY02	FY03	FY04	FY05	FY06
12											
4.1.7.C INSTRUMENT INTEGRATION & TEST											
7EC13E1000	AV: Flight TEM Assembly Mod 5,6 for I&T	0		01/22/04	12				▼		
7EC13E1010	AV: Flight TEM Assembly Mod 7,8 for I&T	0		01/29/04	12				▼		
14											
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)											
7E44000230	Produce Preliminary Design Documents	8	01/11/02	01/23/02	14		█				
4.1.7.6 POWER CONDITIONING											
7E67000160	Review parts selection and availability	5	04/22/03	04/28/03	14			█			
15											
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)											
7E45000960	IA: 1st Flight Unit Available	0		10/24/03	15				▼		
4.1.7.5 SPACECRAFT INTERFACE UNIT											
7E53000270	Produce Preliminary Design Documents	8	09/04/02	09/13/02	15		█				
7E53000340	Software for Test-Setup	15	10/08/02	10/28/02	15		█				
16											
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)											
7E44000590	ND: ACD Electronics for EM2 from ACD to Elec	0		03/03/03	16				▼		
7E44000640	Test with Subsystem Electronics	20	03/04/03	03/31/03	16			█			
7E44000660	Review Eng. Model 2	1	04/01/03	04/01/03	16			█			
7E44000700	Modify Design and Simulate	15	04/02/03	04/22/03	16			█			
7E44000710	Complete Qualification Unit Design	0		04/22/03	16				▼		
7E44000730	Modify Layout	10	04/23/03	05/06/03	16			█			
7E44000750	Fabricate PCB	15	05/07/03	05/28/03	16			█			
7E44000760	Assemble/Inspect/Coat	10	05/29/03	06/11/03	16			█			
4.1.7.6 POWER CONDITIONING											
7E65000000	Adopt Generic PCC Design	10	09/24/02	10/07/02	16		█				
7E65000010	Review EM1 preliminary design	1	10/08/02	10/08/02	16		█				

Act ID	Activity Description	Dur	Start	Finish	Total Float	FY01		FY02		FY03		FY04		FY05		FY06	
4.1.7.6 POWER CONDITIONING																	
7E6500040	Fabricate / Assemble / Test	10	10/09/02	10/22/02	16												
7E6500080	Test in System	10	10/23/02	11/05/02	16												
7E6500090	Review Eng. Model 1	1	11/06/02	11/06/02	16												
7E6500110	Update requirements/Interface/Parts	10	11/07/02	11/20/02	16												
7E6500120	Modify/Simulate blocks	15	11/25/02	12/13/02	16												
7E6500140	Review EM2 preliminary design	1	12/16/02	12/16/02	16												
7E6500170	Fabricate / Assemble / Test	20	12/17/02	01/23/03	16												
7E6500190	Stand Alone test	10	01/24/03	02/06/03	16												
7E6500210	Test in Subsystem	20	02/07/03	03/07/03	16												
7E6500220	Review Eng. Model 2	1	03/10/03	03/10/03	16												
7E6500250	Complete mechanical and thermal analysis	10	03/11/03	03/24/03	16												
7E6500270	Modify Design and Simulate	10	03/25/03	04/07/03	16												
7E6500310	TEM PCC Fab/Assemble/Coat	90	04/08/03	08/13/03	16												
7E65320000	TKR PCC Fab/Assemble/Coat	90	04/08/03	08/13/03	16												
7E65320010	CAL PCC Fab/Assemble/Coat	90	04/08/03	08/13/03	16												
7E6500320	Qualification Unit Board Level Testing	15	08/14/03	09/04/03	16												
7E6500370	TEM PCC Fab/Assemble/Coat/Test	66	09/05/03	12/09/03	16												
4.1.7.7 ENCLOSURES																	
7E72000150	Check Thermal & Mechanical	2	06/12/03	06/13/03	16												
7E72000160	PR Procure Parts	1	06/16/03	06/16/03	16												
7ER7222000	Receive Procure Parts	1	08/11/03	08/11/03	16												
7E72000170	Assemble/Inspect	10	08/12/03	08/25/03	16												
7E72000180	IA: Qual Unit Available	0		08/25/03	16												
7E72000190	Fabrication	60	08/26/03	11/18/03	16												
7E72000200	Assembly/Inspect	10	11/19/03	12/04/03	16												
Run Date	12/12/01 13:58	GLAST - LAT PROJECT Critical Activities (TF < 80 days)										Sheet 68					
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Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
4.1.7.7 ENCLOSURES															
7E72000210	IA: Flight Unit Available	0		12/04/03	16										
4.1.7.9 FLIGHT SOFTWARE															
7E10000830	Blast Off	0		03/09/06	16										
4.1.7.C INSTRUMENT INTEGRATION & TEST															
7EC2000050	Integrate	20	08/26/03	09/23/03	16										
7EC2000060	IN: Qual Unit Flight/GSE SW for Integration	0		09/23/03	16										
7EC22E0000	AV: Qual ACD TEM	0		09/23/03	16										
7EC2000070	Functional/Performance Test	10	09/24/03	10/07/03	16										
7EC2000080	Vibration Test	5	10/08/03	10/14/03	16										
7EC2000090	Acoustic Test	5	10/15/03	10/21/03	16										
7EC2000100	EMI/EMC Test	5	10/22/03	10/28/03	16										
7EC2000110	Thermal Vacuum Test	5	10/29/03	11/04/03	16										
7EC2000120	Review I&T Qual Unit	1	11/05/03	11/05/03	16										
7EC2272000	AV: Qual Review ACD/GLT	0		11/05/03	16										
7EC2000130	Integrate	10	12/05/03	12/18/03	16										
7EC2000140	IN: Qual Unit Flight/GSE SW for Integration	0		12/18/03	16										
7EC2000150	Functional/Performance Test	5	12/19/03	01/05/04	16										
7EC2000160	Vibration Test	5	01/06/04	01/12/04	16										
7EC2000170	Acoustic Test	5	01/13/04	01/20/04	16										
7EC2000180	EMI/EMC Test	5	01/21/04	01/27/04	16										
7EC2000190	Thermal Vacuum Test	5	01/28/04	02/03/04	16										
7EC2000200	Review I&T Flight Unit	1	02/04/04	02/04/04	16										
7EC23E0010	AV: Flight ACD Elex Module for I&T	0		02/04/04	16										

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year					
						FY01	FY02	FY03	FY04	FY05	FY06
17											
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)											
7E44000220	Engineer Thermal & Mechanical	5	01/11/02	01/17/02	17						
7E44000320	Layout Board	10	02/05/02	02/19/02	17						
7E44000350	Fabricate PCB	10	02/20/02	03/05/02	17						
7E45000690	Complete mechanical and thermal analysis	5	03/21/03	03/27/03	17						
7E45000700	Review and update req and design documents	5	03/21/03	03/27/03	17						
4.1.7.6 POWER CONDITIONING											
7E67000180	Review and update instrument internal interface	2	04/22/03	04/23/03	17						
4.1.7.C INSTRUMENT INTEGRATION & TEST											
7EC13E1020	AV: Flight TEM Assembly Mod 9,10 for I&T	0		02/05/04	17						
18											
4.1.7.5 SPACECRAFT INTERFACE UNIT											
7E53000260	Engineer Thermal & Mechanical	5	09/04/02	09/10/02	18						
19											
4.1.7.5 SPACECRAFT INTERFACE UNIT											
7E53000570	Layout Modification	5	02/14/03	02/21/03	19						
7E53000580	Fabricate PCB	15	02/24/03	03/14/03	19						
7E53000670	Assemble PCB	5	03/17/03	03/21/03	19						
7E53000610	Test w Simulator	10	03/24/03	04/04/03	19						
7E53000640	Test with Subsystem Electronics	10	04/07/03	04/18/03	19						
7E53000660	Review Eng. Model 2	1	04/21/03	04/21/03	19						
7E53000710	Modify Design and Simulate	15	04/22/03	05/12/03	19						
7E53000720	Complete Qualification Unit Design	0		05/12/03	19						
7E53000740	Modify Layout	10	05/13/03	05/27/03	19						
7E53000750	Fabricate PCB	30	05/28/03	07/09/03	19						

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year														
						FY01	FY02	FY03	FY04	FY05	FY06									
4.1.7.6 POWER CONDITIONING																				
7E20009100	Engineer Thermal & Mechanical	20	03/26/02	04/22/02	19															
7E67000080	Check Thermal & Mechanical	5	01/15/03	01/22/03	19															
7E65000430	AV: Flight TEM PS Assemble Mod 5/6 for I&T	0		01/05/04	19															
20																				
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)																				
7E45000940	Ambient pressure thermal cycle test	5	10/03/03	10/09/03	20															
4.1.7.5 SPACECRAFT INTERFACE UNIT																				
7E53000590	PR Procure Parts	1	01/30/03	01/30/03	20															
7E54000020	Fabricate	15	02/14/03	03/07/03	20															
7ER5332000	Receive Procure Parts	1	03/13/03	03/13/03	20															
7E54000090	Fabricate	15	05/27/03	06/16/03	20															
4.1.7.7 ENCLOSURES																				
7E72000000	Produce Preliminary Interface Document	5	10/01/02*	10/07/02	20															
7E72000010	Produce Preliminary Conceptual Design	20	10/08/02	11/04/02	20															
7E72000020	Engineer Thermal & Mechanical	5	11/05/02	11/11/02	20															
7E72000030	Produce Conceptual Design	4	11/12/02	11/15/02	20															
7E72000040	Interim parts evaluation and selection complete	5	11/18/02	11/26/02	20															
7E71000070	Engineer Thermal & Mechanical	20	11/04/02	12/03/02	20															
7E72000050	Produce Preliminary Design	30	11/27/02	01/16/03	20															
7E72000070	Review EM1 preliminary design	1	01/17/03	01/17/03	20															
7E72000080	PR Procure Parts	1	01/21/03	01/21/03	20															
7ER7213000	Receive Procure Parts	1	03/18/03	03/18/03	20															
7E72000090	Assemble/Inspect	5	03/19/03	03/25/03	20															
7E72000100	Review Eng. Model 1	1	03/26/03	03/26/03	20															
7E72000120	Complete mechanical and thermal analysis	30	03/27/03	05/07/03	20															

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
4.1.7.7 ENCLOSURES															
7E72000140	Modify Design	20	05/08/03	06/05/03	20										
4.1.7.C INSTRUMENT INTEGRATION & TEST															
7EC13E1030	AV: Flight TEM Assembly Mod 11,12 for I&T	0		02/12/04	20										
21															
4.1.7.6 POWER CONDITIONING															
7E65000240	Review parts selection and availability	5	03/11/03	03/17/03	21										
7E65330000	TKR PCC Fab/Assemble/Coat/Test	66	09/05/03	12/09/03	21										
7E65330010	CAL PCC Fab/Assemble/Coat/Test	66	09/05/03	12/09/03	21										
22															
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E44000780	Functional Test	10	06/12/03	06/25/03	22										
7E44000790	Interface test	5	06/26/03	07/02/03	22										
7E44000800	Performance Test	20	07/03/03	07/31/03	22										
7E44000810	Ambient pressure thermal cycle test	5	08/01/03	08/07/03	22										
7E44000820	Thermal Test M&S	5	08/01/03	08/07/03	22										
7E44000830	Functional Test	5	08/08/03	08/14/03	22										
7E45430000	Procure Parts	15	08/12/03	09/02/03	22										
7E44000860	Fabrication PWB	15	08/15/03	09/05/03	22										
7E44000870	Assembly/Inspect/Coat	15	09/08/03	09/26/03	22										
7E44000910	Interface test	4	10/06/03	10/09/03	22										
7E44000890	Preliminary Test	20	09/22/03	10/17/03	22										
7E44000900	Functional Test	20	09/29/03	10/24/03	22										
7E44000920	Performance Test	20	10/07/03	11/03/03	22										
7E44000940	Thermal Test M&S	5	11/04/03	11/10/03	22										
7E44000950	Functional Test	10	11/11/03	11/24/03	22										
7E44000970	IA: Last Flight Unit Available	0		11/24/03	22										

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
4.1.7.7 ENCLOSURES															
7E73000190	Fabrication	60	09/29/03	12/23/03	22										
7E73000200	Assembly/Inspect	10	01/02/04	01/15/04	22										
7E73000210	IA: Flight Unit Available	0		01/15/04	22										
4.1.7.C INSTRUMENT INTEGRATION & TEST															
7EC3000130	Integrate	5	01/16/04	01/23/04	22										
7EC3000140	IN: Flight/GSE SW for Integration	0		01/23/04	22										
7EC33E0000	AV: Flight Event Processor Units for I&T	0		01/23/04	22										
7EC3000150	Functional/Performance Test	5	01/26/04	01/30/04	22										
23															
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E20001160	Modify Layout	10	03/26/03	04/08/03	23										
7E45000550	Fabricate ASIC Run 2 (if need ASIC)	60	01/29/03	04/23/03	23										
7E20001170	Fabricate PCB	15	04/09/03	04/29/03	23										
7E20001190	Assemble/Inspect/Coat	10	04/30/03	05/13/03	23										
7E45000560	Test Run 2 (if need ASIC)	15	04/24/03	05/14/03	23										
7E44000840	IA: Deliver Qual Unit	0		08/14/03	23										
7E20001400	Ambient pressure thermal cycle test	5	10/15/03	10/21/03	23										
4.1.7.5 SPACECRAFT INTERFACE UNIT															
7E53000940	Ambient pressure thermal cycle test	5	01/26/04	01/30/04	23										
4.1.7.9 FLIGHT SOFTWARE															
7E10001050	Complete Test Bench Support	0		06/03/05	23										
4.1.7.D MISSION SYSTEMS INTEGRATION & TEST															
7ED0000110	Ground Systems Interface Test	4	03/15/05*	03/18/05	23										
7ED0000240	Domestic Travel	238	03/15/05	02/28/06	23										
7ED0000250	International Travel	238	03/15/05	02/28/06	23										
7ED5000000	NRL	238*	03/15/05	02/28/06	23										

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
4.1.7.D MISSION SYSTEMS INTEGRATION & TEST															
7ED5000010	SLAC	238*	03/15/05	02/28/06	23										
7ED5000020	HEPL	238*	03/15/05	02/28/06	23										
24															
4.1.7.6 POWER CONDITIONING															
7E65000260	Review and update instrument internal interface	2	03/11/03	03/12/03	24										
7E65000440	AV: Flight TEM PS Assemble Mod 7/8 for I&T	0		01/12/04	24										
4.1.7.C INSTRUMENT INTEGRATION & TEST															
7EC13E1040	AV: Flight TEM Assembly Mod 13,14 for I&T	0		02/20/04	24										
7EC13E1050	AV: Flight TEM Assembly Mod 15,16 for I&T	0		02/27/04	24										
25															
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E20001240	Functional Test	10	05/14/03	05/28/03	25										
7E20001250	Interface test	5	05/29/03	06/04/03	25										
7E20001260	Performance Test	20	06/05/03	07/02/03	25										
7E20001270	Ambient pressure thermal cycle test	5	07/03/03	07/10/03	25										
7E43420000	Procure Equipment for Thermal Test	5	07/03/03	07/10/03	25										
7E20001280	Functional Test	5	07/11/03	07/17/03	25										
7E20001300	Fabrication PWB	15	07/18/03	08/07/03	25										
26															
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E44000680	Complete mechanical and thermal analysis	5	04/02/03	04/08/03	26										
7E44000690	Review and update req and design documents	5	04/02/03	04/08/03	26										
4.1.7.6 POWER CONDITIONING															
7E65000130	Check Thermal & Mechanical	5	11/25/02	11/29/02	26										
7E67000120	Thermal & Mechanical Test	3	03/24/03	03/26/03	26										

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
27															
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E43100120	Test Performance	18	10/09/01A	11/01/01	27										
7E43120000	AV: Deliver Pre Engr Model to TKR	0		11/01/01	27										
7E4312E000	AV: Pre-EM TEM for CAL Integration	0		11/01/01	27										
7E45000440	Modify blocks	5	06/07/02	06/13/02	27										
28															
4.1.7.5 SPACECRAFT INTERFACE UNIT															
7E53000290	Prepare manufacturing traveler	2	10/08/02	10/09/02	28										
7E53000900	Update Test Plan	2	11/20/03	11/21/03	28										
29															
4.1.7.5 SPACECRAFT INTERFACE UNIT															
7E53000330	Assemble Test-setup	1	10/08/02	10/08/02	29										
7E53000400	Procure Equipment	1	10/08/02	10/08/02	29										
7E53000690	Complete mechanical and thermal analysis	5	04/22/03	04/28/03	29										
7E53000700	Review and update req and design documents	5	04/22/03	04/28/03	29										
4.1.7.6 POWER CONDITIONING															
7E65000330	Ambient pressure thermal cycle test	3	09/05/03	09/09/03	29										
7E65000340	Functional Test	10	09/10/03	09/23/03	29										
7E65000350	AV: Flight TEM PS Assembly Mod 1/2 for I&T	0		09/23/03	29										
7E65000450	AV: Flight TEM PS Assemble Mod 9/10 for I&T	0		01/20/04	29										
30															
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E44000960	IA: 1st Flight Unit Available	0		11/12/03	30										
4.1.7.7 ENCLOSURES															
7E73000060	Engineer Thermal & Mechanical	10	02/11/03	02/25/03	30										

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E44000600	Test Run 1 (if need ASIC)	15	11/11/02	12/03/02	32										
7E44000620	Fabricate ASIC Run 2 (if need ASIC)	60	12/04/02	03/10/03	32										
7E44000650	Test Run 2 (if need ASIC)	15	03/11/03	03/31/03	32										
4.1.7.6 POWER CONDITIONING															
7E65000460	AV: Flight TEM PS Assemble Mod 11/12 for I&T	0		01/27/04	32										
33															
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E20000910	Fabricate ASIC Run 1	60	08/06/02	10/29/02	33										
7E20000920	Test Run 1	15	10/30/02	11/19/02	33										
4.1.7.6 POWER CONDITIONING															
7E65000200	Thermal & Mechanical Test	3	02/07/03	02/11/03	33										
34															
4.1.7.6 POWER CONDITIONING															
7E20009090	Produce Preliminary Design Documents	5	03/26/02	04/01/02	34										
35															
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E20001090	Review parts selection and availability	47	08/06/02	10/10/02	35										
7E20001180	PR Procure Parts	1	10/11/02	10/11/02	35										
7E44000610	Test w Simulator	15	12/04/02	01/02/03	35										
7E44000670	Review parts selection and availability	2	01/03/03	01/06/03	35										
7E44000720	PR Procure Parts	1	01/07/03	01/07/03	35										
7E4342C000	Receive Procure Parts	1	04/11/03	04/11/03	35										
7E4442C000	Receive Procure Parts	1	04/30/03	04/30/03	35										
7E45000900	Update Test Plan	2	08/12/03	08/13/03	35										
4.1.7.6 POWER CONDITIONING															
7E20009150	PR Procure Parts	1	03/26/02	03/26/02	35										
7ER6330000	Receive Procure Parts	1	05/06/02	05/06/02	35										
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Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year					
						FY01	FY02	FY03	FY04	FY05	FY06
4.1.7.7 ENCLOSURES											
7E71000130	Review parts selection and availability	5	03/10/03	03/14/03	35						
7E71000150	Review and update instrument internal interface	5	03/10/03	03/14/03	35						
36											
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)											
7E44000630	Test with DAQ Electronics	20	01/03/03	01/31/03	36			■			
4.1.7.6 POWER CONDITIONING											
7E65000470	AV: Flight TEM PS Assemble Mod 13/14 for I&T	0		02/03/04	36				▼		
7E65000480	AV: Flight TEM PS Assemble Mod 15/16 for I&T	0		02/10/04	36				▼		
38											
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)											
7E20000950	Layout Modification	10	10/02/02	10/15/02	38			■			
7E20000960	Fabricate PCB	15	10/16/02	11/05/02	38			■			
40											
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)											
7E44000980	AV: EM2 Available to ACD	0		01/02/03	40				▼		
7E46000530	Fabricate ASIC Run 1 (if need ASIC)	60	10/01/02	01/03/03	40			■			
7E43320120	AV: 6 EM2 TEM to CAL	0		01/16/03	40				▼		
7E46000540	Test Run 1 (if need ASIC)	15	01/06/03	01/27/03	40			■			
7E46000550	Fabricate ASIC Run 2 (if need ASIC)	60	01/28/03	04/22/03	40			■			
7E46000560	Test Run 2 (if need ASIC)	15	04/23/03	05/13/03	40				■		
7E46000770	Assemble/Inspect/Coat	10	05/14/03	05/28/03	40				■		
7E47320040	Test	10	05/29/03	06/11/03	40				■		
7E47320050	IA: Qual Unit Available for Data CPU	0		06/11/03	40				▼		
7E46000800	Functional Test	10	06/12/03	06/25/03	40				■		
7E46000810	Interface test	5	06/26/03	07/02/03	40				■		
7E46000820	Performance Test	10	07/03/03	07/17/03	40				■		
Run Date						12/12/01 13:58					
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Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year														
						FY01	FY02	FY03	FY04	FY05	FY06									
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)																				
7E46000830	Ambient pressure thermal cycle test	5	07/18/03	07/24/03	40															
7E46000850	Procure Equipment for Thermal Test	5	07/18/03	07/24/03	40															
7E46000840	Functional Test	5	07/25/03	07/31/03	40															
7E46000720	IA: Deliver Qual Unit	0		07/31/03	40															
4.1.7.7 ENCLOSURES																				
7E72000060	Engineer Thermal & Mechanical	10	11/27/02	12/10/02	40															
41																				
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)																				
7E20001100	Complete mechanical and thermal analysis	5	01/17/03	01/24/03	41															
7E20001110	Review and update req and design documents	5	01/17/03	01/24/03	41															
7E20001210	IA: Deliver Qual Unit	0		07/17/03	41															
4.1.7.5 SPACECRAFT INTERFACE UNIT																				
7E54000210	Procure Parts	10	12/01/03	12/12/03	41															
7E54000220	Assemble	10	12/15/03	01/06/04	41															
7E54000230	Test	5	01/07/04	01/13/04	41															
7E54000240	IA: Flight Unit Available	0		01/13/04	41															
42																				
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)																				
7E44000440	Modify blocks	5	07/18/02	07/24/02	42															
44																				
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)																				
7E44000300	Assemble Test-setup	3	02/05/02	02/07/02	44															
45																				
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)																				
7E44000930	Ambient pressure thermal cycle test	5	10/08/03	10/14/03	45															
4.1.7.7 ENCLOSURES																				
7E72000110	Review parts selection and availability	5	03/27/03	04/02/03	45															

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
4.1.7.7 ENCLOSURES															
7E72000130	Review and update instrument internal interface	5	03/27/03	04/02/03	45										
46															
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E44000290	Procure Equipment	1	02/05/02	02/05/02	46										
7E44000430	Update Part Selection	1	07/18/02	07/18/02	46										
7E44000460	Check Thermal & Mechanical	5	07/19/02	07/25/02	46										
7E20000240	Major Review Final Design	0		01/16/03	46					▼					
4.1.7.C INSTRUMENT INTEGRATION & TEST															
7EC13E1060	AV: Flight TEM Assembly Mod 1,2 for I&T	0		10/29/03	46							▼			
47															
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E45000790	Develop Test Plan	10	04/11/03	04/24/03	47										
7E44000740	Develop Test Plan	10	04/23/03	05/06/03	47										
4.1.7.6 POWER CONDITIONING															
7E20007890	Major Review Final Design	0		02/06/03	47							▼			
49															
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E45000430	IA: EM1 Available	0		06/06/02	49					▼					
7E45000520	Update Part Selection	1	06/07/02	06/07/02	49										
7E45000490	Check Thermal & Mechanical	1	06/10/02	06/10/02	49										
7E46000610	Test w Simulator	10	01/28/03	02/10/03	49										
7E46000630	Test with DAQ Electronics	10	02/11/03	02/25/03	49										
7E46000640	Test with Subsystem Electronics	10	02/26/03	03/11/03	49										
7E46000660	Review Eng. Model 2	1	03/12/03	03/12/03	49										
7E46000710	Modify Design and Simulate	15	03/13/03	04/02/03	49										
7E46000740	Modify Layout	10	04/03/03	04/16/03	49										

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E46000750	Fabricate PCB	10	04/17/03	04/30/03	49										
50															
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E20001230	Develop Test Plan	10	03/26/03	04/08/03	50										
7E44000850	Update Test Plan	2	08/15/03	08/18/03	50										
4.1.7.9 FLIGHT SOFTWARE															
7E10000810	Flight Software Flight Unit SLAC Based Flight I&T	0		06/22/05	50										
7E10000820	Non-SLAC based I & T	140	06/23/05	01/19/06	50										
7E963N0000	Non-SLAC based I & T	140	06/23/05	01/19/06	50										
4.1.7.C INSTRUMENT INTEGRATION & TEST															
7EC53H0000	Integrate	5	04/02/04	04/08/04	50										
7EC53N0000	Integrate	5	04/02/04	04/08/04	50										
51															
4.1.7.5 SPACECRAFT INTERFACE UNIT															
7E54000200	Fabricate	10	12/01/03	12/12/03	51										
52															
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E45000570	Layout Modification	1	10/02/02	10/02/02	52										
7E45000580	Fabricate PCB	15	10/03/02	10/23/02	52										
7E45000670	Assemble PCB	5	10/24/02	10/30/02	52										
7E45000680	Review parts selection and availability	10	10/31/02	11/13/02	52										
7E45000760	PR Procure Parts	1	11/14/02	11/14/02	52										
7E43320110	ND: CAL AFEE Engr Model	0		01/08/03	52										
7E20000930	Fabricate ASIC Run 2	60	11/20/02	02/26/03	52										
7E20000940	Test Run 2	15	02/27/03	03/19/03	52										
7ER4542000	Receive Procure Parts	1	04/03/03	04/03/03	52										

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year					
						FY01	FY02	FY03	FY04	FY05	FY06
53											
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)											
7E20001360	Update Test Plan	2	07/18/03	07/21/03	53						
54											
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)											
7E74311000	IN: Front End System Interface Defined	0		11/01/01	54						
7E20000480	Update Preliminary Interface Document	1	11/02/01	11/02/01	54						
7E20000500	Design blocks	5	11/05/01	11/09/01	54						
7E20000510	Produce Conceptual Design Document	2	11/12/01	11/13/01	54						
7E20000520	Interim Parts Evaluation and Selection	3	11/14/01	11/16/01	54						
7E20000530	Complete Conceptual Design	0		11/16/01	54						
7E20000540	Design Board Schematics	5	11/19/01	11/27/01	54						
7E20000550	Design/Simulate blocks VHDL	5	11/19/01	11/27/01	54						
7E20000570	Synthesis FPGA's	3	11/28/01	11/30/01	54						
7E20000580	Simulate Board	5	12/03/01	12/07/01	54						
7E20000610	Review EM1 preliminary design	1	12/10/01	12/10/01	54						
7E20000660	PR for Procure Parts	1	12/11/01	12/11/01	54						
7E4323C000	Receive Procure Parts	1	01/31/02	01/31/02	54						
7E43230010	Assemble PCB	5	02/01/02	02/07/02	54						
7E20000710	Test w Simulator/Electrical/Mechanical/Thermal	10	02/08/02	02/22/02	54						
4.1.7.6 POWER CONDITIONING											
7E20007870	Major Review Requir./Conceptual Design	0		01/16/02	54						
55											
4.1.7.5 SPACECRAFT INTERFACE UNIT											
7E54000150	Fabricate	15	08/06/03	08/26/03	55						
4.1.7.C INSTRUMENT INTEGRATION & TEST											
7EC5000130	Integrate	5	04/02/04	04/08/04	55						

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year					
						FY01	FY02	FY03	FY04	FY05	FY06
57											
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)											
7E45000600	Layout/Fab/Assemble ASIC Test Board (need ASIC?)	10	10/02/02	10/15/02	57						
4.1.7.C INSTRUMENT INTEGRATION & TEST											
7EC23E0000	AV: Flight ICM/GLT Elex Module for I&T	0		02/04/04	57						
59											
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)											
7E20000590	Produce Preliminary Design Documents	8	11/19/01	11/30/01	59						
7E46000690	Complete mechanical and thermal analysis	5	03/13/03	03/19/03	59						
7E47310050	Update Design	5	04/03/03	04/09/03	59						
7E47320020	Procure Parts	10	04/10/03	04/23/03	59						
7E47320030	Assemble	5	04/24/03	04/30/03	59						
4.1.7.5 SPACECRAFT INTERFACE UNIT											
7E53000790	Develop Test Plan	10	05/13/03	05/27/03	59						
60											
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)											
7E45000590	PR Procure Parts	1	06/06/02	06/06/02	60						
7E4532C000	Receive Procure Parts	1	10/11/02	10/11/02	60						
4.1.7.D MISSION SYSTEMS INTEGRATION & TEST											
7ED0000030	LRR Preparations	20	10/03/05*	10/28/05	60						
7ED0000040	Launch Readiness Review (LRR)	0	10/31/05		60						
7ED0000050	LRR Discrepancy Closeouts	20	10/31/05	11/29/05	60						
62											
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)											
7E45000220	Design Board Schematics	10	10/31/01A	11/13/01	62						
7E45000230	Design/Simulate blocks VHDL	10	10/31/01A	11/13/01	62						
7E45000240	Synthesis FPGA's	3	11/14/01	11/16/01	62						
7E20000585	Engineer Thermal & Mechanical	5	11/19/01	11/27/01	62						

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E45000250	Simulate Board	10	11/19/01	12/04/01	62										
7E45000280	Review EM1 preliminary design	1	12/05/01	12/05/01	62										
7E45000320	PR Procure Parts	1	12/06/01	12/06/01	62										
7E4523C000	Receive Procure Parts	1	01/28/02	01/28/02	62										
7E45000350	Test w Simulator/Electrical/Mechanical/Thermal	10	01/29/02	02/11/02	62										
7E44000375	ND: High Voltage Power Supply (board and parts)	0		06/03/02	62										
4.1.7.5 SPACECRAFT INTERFACE UNIT															
7E53000380	Thermal & Mechanical Engineering	8	10/08/02	10/17/02	62										
7E53000650	Thermal & Mechanical Engineering	2	02/14/03	02/18/03	62										
63															
4.1.7.7 ENCLOSURES															
7E74000000	Produce Preliminary Interface Document	5	10/01/02*	10/07/02	63										
7E74000010	Produce Preliminary Conceptual Design	20	10/08/02	11/04/02	63										
7E74000020	Engineer Thermal & Mechanical	20	11/05/02	12/04/02	63										
7E74000030	Produce Conceptual Design	20	12/05/02	01/10/03	63										
7E74000040	Interim parts evaluation and selection complete	20	01/13/03	02/10/03	63										
7E74000050	Produce Preliminary Design	20	02/11/03	03/11/03	63										
7E74000070	Review EM1 preliminary design	1	03/12/03	03/12/03	63										
7E74000080	PR Procure Parts	1	03/13/03	03/13/03	63										
7ER7413000	Receive Procure Parts	1	05/07/03	05/07/03	63										
7E74000090	Assemble/Inspect	5	05/08/03	05/14/03	63										
7E74000100	Review Eng. Model 1	1	05/15/03	05/15/03	63										
7E74000120	Complete mechanical and thermal analysis	10	05/16/03	05/30/03	63										
7E74000140	Modify Design	20	06/02/03	06/27/03	63										
7E74000150	Check Thermal & Mechanical	2	06/30/03	07/01/03	63										

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year									
						FY01	FY02	FY03	FY04	FY05	FY06				
4.1.7.7 ENCLOSURES															
7E74000160	PR Procure Parts	1	07/02/03	07/02/03	63										
7ER7422000	Receive Procure Parts	1	08/27/03	08/27/03	63										
7E74000170	Assemble/Inspect	1	08/28/03	08/28/03	63										
7E74000180	IA: SIU Enclosure Qual Unit Available	0		08/28/03	63										
64															
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E43220000	EM1 preliminary design Complete	0		12/10/01	64										
7E20000630	Layout Board	10	12/11/01	01/02/02	64										
7E20000650	Fabricate PCB	10	01/03/02	01/16/02	64										
7E47320010	Fabricate	10	04/10/03	04/23/03	64										
66															
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E44000520	PR Procure Parts	1	07/18/02	07/18/02	66										
7E4432C000	Receive Procure Parts	1	10/10/02	10/10/02	66										
7E44000580	Assemble PCB	5	10/11/02	10/17/02	66										
68															
4.1.7.7 ENCLOSURES															
7E74000110	Review parts selection and availability	5	05/16/03	05/22/03	68										
7E74000130	Review and update instrument internal interface	5	05/16/03	05/22/03	68										
69															
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E44000510	Design ASIC Test Board (if need ASIC)	14	08/15/02	09/04/02	69										
7E44000570	Layout/Fab/Assemble ASIC Test Board (need ASIC?)	10	09/05/02	09/18/02	69										
70															
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)															
7E46000360	Test with DAQ Electronics	10	05/15/02	05/29/02	70										
7E46000370	Test with Subsystem Electronics	15	05/30/02	06/19/02	70										

Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year											
						FY01	FY02	FY03	FY04	FY05	FY06						
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)																	
7E46000390	Review Eng. Model 1	1	06/20/02	06/20/02	70												
7E46000450	Synthesis into ASIC's/FPGA	10	06/21/02	07/05/02	70												
7E46000460	Place&Route ASICS/FPGA	10	07/08/02	07/19/02	70												
7E46000470	Simulate ASICS/FPGA	10	07/08/02	07/19/02	70												
7E46000480	Simulate Board	5	07/22/02	07/26/02	70												
7E46000510	Design ASIC Test Board (if need ASIC)	14	07/29/02	08/15/02	70												
7E46000500	Review EM2 preliminary design	1	08/16/02	08/16/02	70												
71																	
4.1.7.8 CABLE HARNESS																	
7E20014020	Instrument Data Bus Harness Fab & Assy	30	09/12/03	10/23/03	71												
7E20014050	Power Harness Fab & Assembly	10	10/24/03	11/06/03	71												
7E83000000	Harness Test	40	11/07/03	01/14/04	71												
7E83000010	AV: Flight Cable Harness for I&T	0		01/14/04	71												
72																	
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)																	
7E45000300	Layout Board	10	12/06/01	12/19/01	72												
7E45000310	Fabricate PCB	10	12/20/01	01/11/02	72												
7E47110000	Produce Conceptual Design	20	02/01/02*	03/01/02	72												
7E47120000	Produce Preliminary Design	15	03/04/02	03/22/02	72												
7E47130010	Procure Parts	10	03/25/02	04/05/02	72												
7E47130020	Assemble	5	04/08/02	04/12/02	72												
7E47130030	Test	20	04/15/02	05/10/02	72												
7E47130040	IA: EM1 Backplane Available for Data CPU	0		05/10/02	72												
7E74000060	Engineer Thermal & Mechanical	10	02/11/03	02/25/03	73												
Run Date: 12/12/01 13:58						GLAST - LAT PROJECT Critical Activities (TF < 80 days)						Sheet 86					
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Act ID	Activity Description	Dur	Start	Finish	Total Float	Fiscal Year					
						FY01	FY02	FY03	FY04	FY05	FY06
75											
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)											
7E433E0000	AV: EM2 TEM for Qual Towers A/B to TKR	0		01/16/03	75						
76											
4.1.7.8 CABLE HARNESS											
7E20014030	GLB TRG Harness Fab & Assy	5	10/24/03	10/30/03	76						
7E20014040	Health Monitoring Harness Fab & Ass.	5	10/24/03	10/30/03	76						
7E20014060	SC Harness Fab & Assembly	5	10/24/03	10/30/03	76						
77											
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)											
7E45000270	Produce Preliminary Design Documents	8	10/31/01A	11/09/01	77						
7E45000340	Software for Test-Setup	15	12/06/01	01/04/02	77						
7E45000410	Assemble PCB	5	12/20/01	01/04/02	77						
7E47130000	Fabricate	10	03/25/02	04/05/02	77						
79											
4.1.7.4 DATAFLOW ELECTRONICS (TEMs + PROC FARM)											
7E46000790	Develop Test Plan	10	04/03/03	04/16/03	79						
7E46000860	Fabrication PWB	15	08/01/03	08/21/03	79						
7E46000870	Assembly/Inspect/Coat	15	08/22/03	09/12/03	79						
7E46000890	Preliminary Test	10	09/08/03	09/19/03	79						
7E46000920	Interface test	4	09/22/03	09/25/03	79						
7E46000910	Functional Test	10	09/15/03	09/26/03	79						
7E46000930	Performance Test	10	09/23/03	10/06/03	79						
7E46000980	Procure Equipment for Thermal Test	5	10/07/03	10/13/03	79						
7E46000960	IA: 1st Flight Unit Available	0		10/15/03	79						
7E46000950	Functional Test	10	10/14/03	10/27/03	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
4.1.7	ELECTRONICS										
	DH SU-HEPL										
	FY_FTE	PLANNED	0.0	3.0	0.9	1.6	2.2	2.2	0.9	0.2	10.9
	DL SU-SLAC										
	FY_FTE	PLANNED	0.0	0.0	3.6	8.7	13.0	5.8	2.6	0.5	34.2
	DN NRL										
	FY_FTE	PLANNED	0.0	0.0	0.4	2.8	5.1	2.6	1.3	0.3	12.3
CAPW[3] Totals:		PLANNED	0.0	3.0	4.9	13.0	20.2	10.7	4.7	0.9	57.5