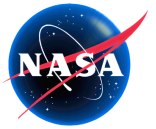
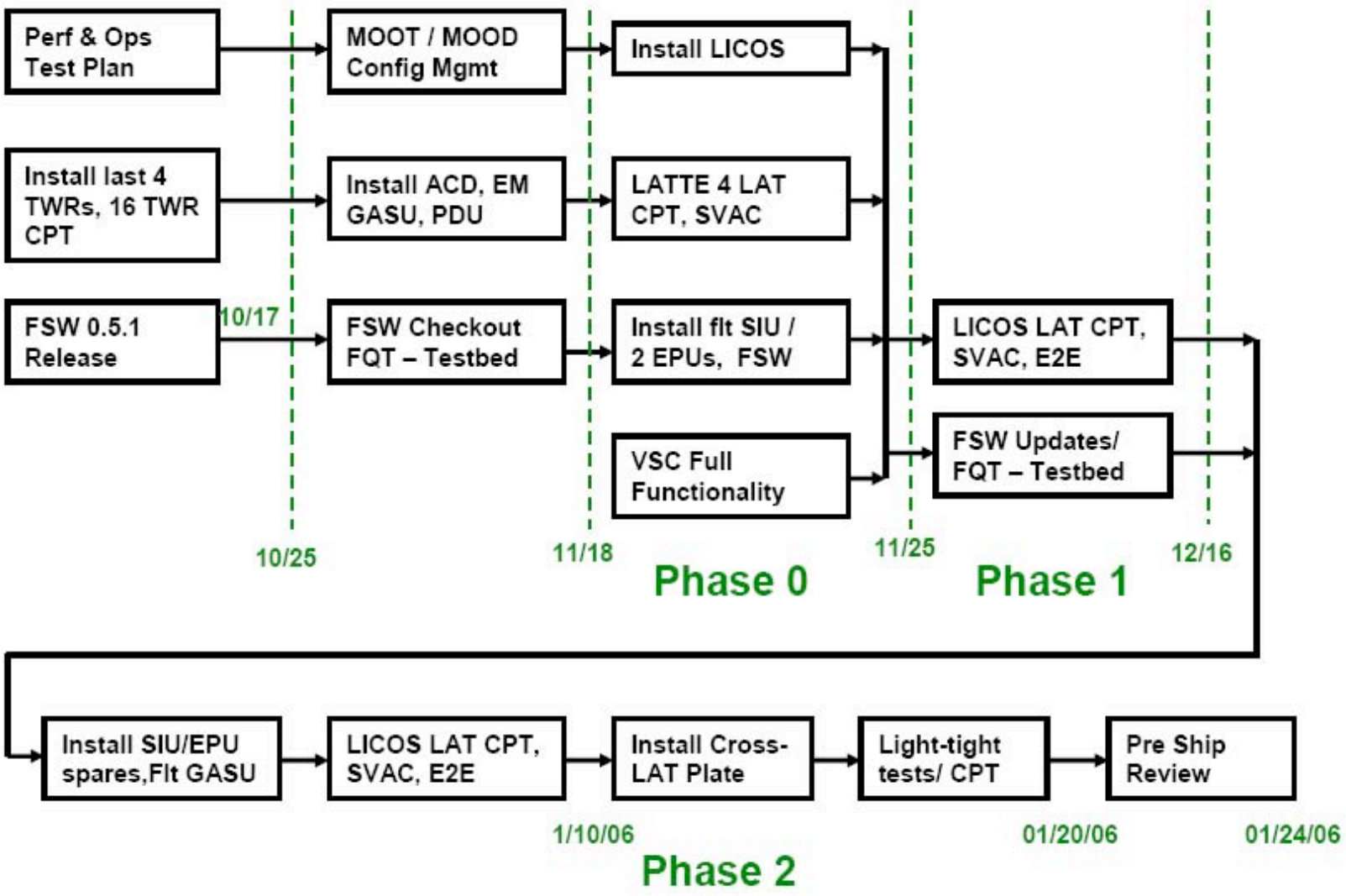
LAT Software Schedule

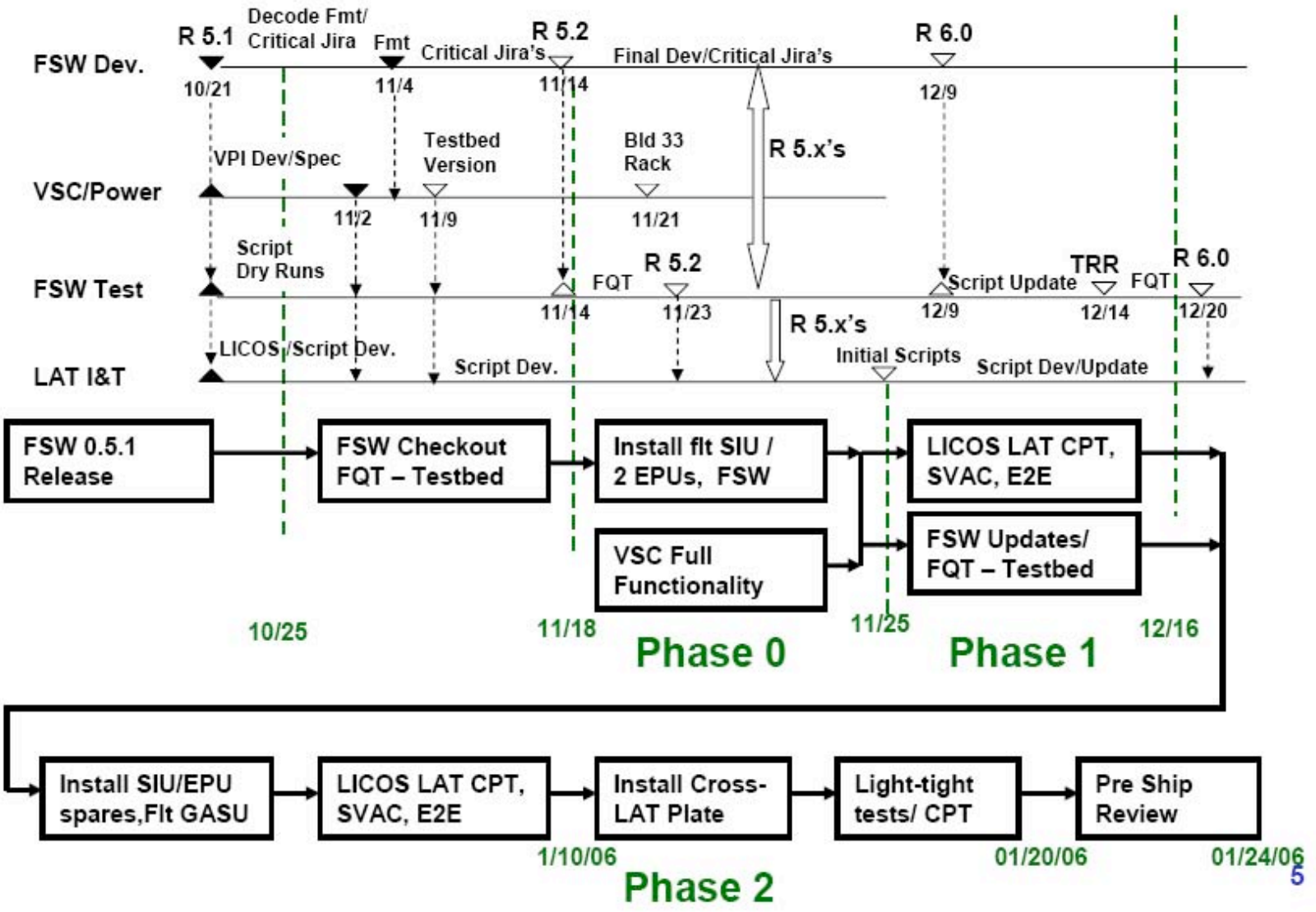


- ***Key FSW Milestone Dates***
  - ***PAST:***
    - ***Jan '02 / Jul '02 – Preliminary Design Review / Delta PDR***
    - ***May '03 – Critical Design Review***
    - ***Peer Reviews: EM1 (Mar '03), EM2 (Feb '04), Flight Unit (Sep '04)***
    - ***Sys Checkout TRR, All Test Procedures completed – Sep '05***
  - ***PRESENT (This/Next Month):***
    - ***Build 0.5.1 – 10/24/05 - All FSW functionality minus known liens***
    - ***Build 0.5.2 – 11/14/05 – To FSW Test Team***
      - ***Release planned for use in Phase I / System Test – To I&T on 11/23 (Happy Thanksgiving!)***
    - ***Build/Release 0.6.0 -12/9/05 –To FSW Test Team***
      - ***12/20/05 – Release to I&T for use with System Test Phase 2 – (Merry Christmas!)***
    - ***Test Scripts Complete; FQT (Formal Testing): 12/14 – 12/20***
  - ***FUTURE:***
    - ***Support I&T needs of FSW.***
    - ***Additional Development for GRB Processing & Test Scripts for same.***

LAT System Test w/ FSW



LAT SW Schedule Presented 11/3



GBM Software Schedule

Key FSW Milestone Dates

- ***PAST:***
  - *April '02 – Preliminary Design Review (PDR)*
  - *Aug '03 – Data Processing Unit and FSW Critical Design Review (CDR)*
  - *Aug '04 – Instrument CDR*
  - *Mar '05 – Delivery of Build 1.1 FSW- Version placed in PROM*
  - *Aug '05 – Development of Burst Algorithms Completed*
- ***PRESENT (This/Next Month):***
  - *10/15/05 – Complete SW to provide all Burst Related Telemetry Records*
  - *11/14/05 – Complete SW to provide all Burst Related info to LAT per ICD.*
  - *12/1/05 – FSW mods to resolve connector misplacement on PSB.*
  - *12/1/05 – Feature Freeze for Build 1.9 to be used in T-V testing in January.*
  - *12/15/05 – Turnover to Testing team for installation/checkout on Flight DPU*
- ***FUTURE:***
  - *GRB Telemetry rate management on 1553 (sharing the 1 kbps link with LAT)*
  - *AGC Algorithm (low Priority)*

GBM FSW Requirements As of 10/28

KEY:
Done
High Priority - Next
Medium Priority
Low Prioity

Rqmnt #	Requirement Title	"Group"	Remaining (Weeks)
91	Background Model.	BG Model	n/a
92	Background Model Quality.	BG Model	n/a
93	Background Estimate.	BG Model	n/a
94	Background Estimate Quality.	BG Model	n/a
107	Coordinate Transformations.	Location	n/a
xx	Determining SC Side - Cmd/EEPROM	SC Side	1.0
95	Quick Location Algorithm.	Location	2.0
96	Refined Location Algorithm.	Location	"same"
xx	Diagnostic Telemetry Modifications	Diag TM	0.8
97	Spectrum and Intensity.	Location	3.0
98	Trigger Classifcation.	Location	wks for all three
99	Reliability Estimates.	Location	
44	TRIGDAT Format.	TRIGDAT	0.2
45	TRIGDAT Trigger ID.	TRIGDAT	0.2
46	TRIGDAT Immediate Summary Information to Ground Record.	TRIGDAT	0.2
47	TRIGDAT Trigger Rates to Ground Record.	TRIGDAT	0.4
48	TRIGDAT Calculated Information to Ground Records.	TRIGDAT	0.4
49	TRIGDAT Max Rates to Ground Records.	TRIGDAT	0.6
51	TRIGDAT Time History to Ground Records	TRIGDAT	0.8

Note: All High Priority Requirements Completed

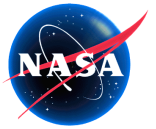
GBM FSW Requirements Remaining (10/28/05)

KEY:

- Done
- High Priority - Next
- Medium Priority
- Low Prioity

Rqmnt #	Requirement Title	"Group"	Remaining Effort (Weeks)
52	TRIGDAT Calculated Information to LAT Record.	TRIGDAT	0.4
53	Repoint Recommendation Process.	TRIGDAT	2.0
54	TRIGDAT Repoint Recommendation to LAT Record.	TRIGDAT	As a group of 3
54.5	Closeout Record to LAT	TRIGDAT	
55	TRIGDAT Bandwidth.	TRIGDAT	3.0
20	Trigger Enable Suspend. (a,b,c)	BG Model	0.6
100	AGC	AGC	2.0
101	Accumulation for AGC.	AGC	For all AGC
102	AGC Accuracy.	AGC	
103	AGC Times of Operation.	AGC	
104	AGC Response to External Changes.	AGC	
105	105. AGC Data Age.	AGC	
106	106. AGC Data Quality Test.	AGC	

Spacecraft Flight Software



- ***Key FSW Milestone Dates***
  - ***PAST:***
    - ***Jan & May '03 – FSW Requirements Review & Preliminary Design Review***
    - ***April '04 – SC FSW CDR***
    - ***Dec '03, Summer '04, Spring '05 – Code Walk Throughs / Peer Reviews***
    - ***Oct '05 – Delivery of Build 3 (Release 1) for Flight Hardware testing.***
  - ***PRESENT (This/Next Month):***
    - ***10/21/05 – Formal Testing of Release 1; Delivery of CDRL 18 (VDD)***
  - ***FUTURE:***
    - ***11/05 – 2/06 – Development & implementation of POAL.***
    - ***1/06 – Integrate 'final' GNC FSW build from MATLAB/Simulink Model.***
    - ***2/06 – Test Ready Review (TRR) and Formal Qual Testing (FQT) of FSW***
    - ***3/06 – Delivery of Release 2 to SC I&T – FSW final planned release.***
      - ***Bug fixes to R2 as necessary***
    - ***6/06 – First release of Software User & Maintenance Manual (CDRL 19)***