Project Overview

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Deputy Project Manager
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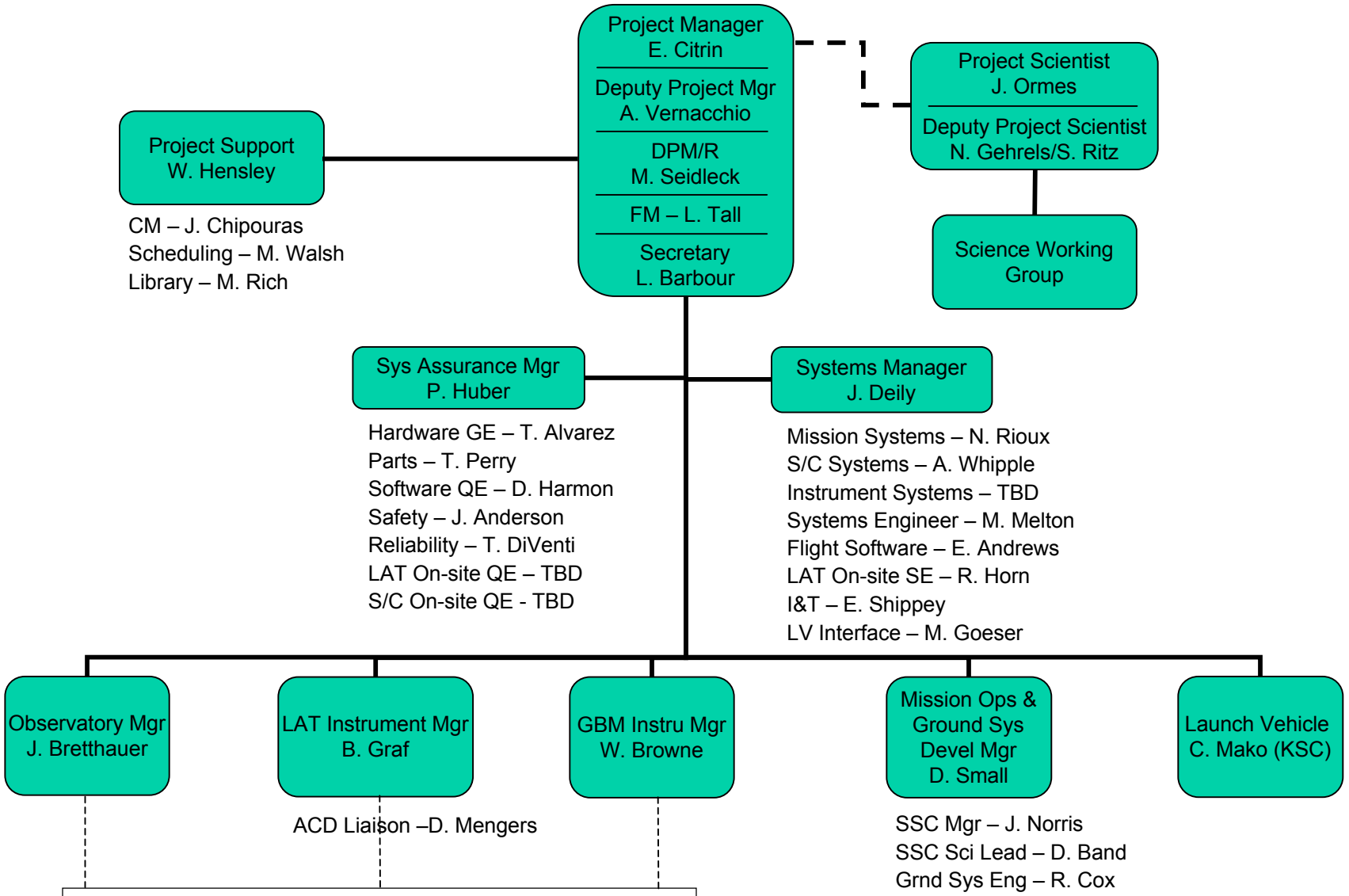
Topics

- **Project Status**
  - ***Organization***
  - ***Schedule***
- **Data Downlink**
- **Autonomous Repointing**
- **De-orbit System Redundancy**

Project Status

- ***Sept 06 Launch date baselined.***
  - *Accommodates current Observatory element schedules.*
  - *Funded in last budget POP cycle.*
- ***Spectrum Astro Inc. selected as spacecraft contractor.***
- ***LAT Delta PDR/Baseline Review was held at SLAC 7/30-8/1.***
  - *Excellent review with all systems at or beyond PDR level.*
- ***MOC and Operations Acquisition Strategy is near term focus.***



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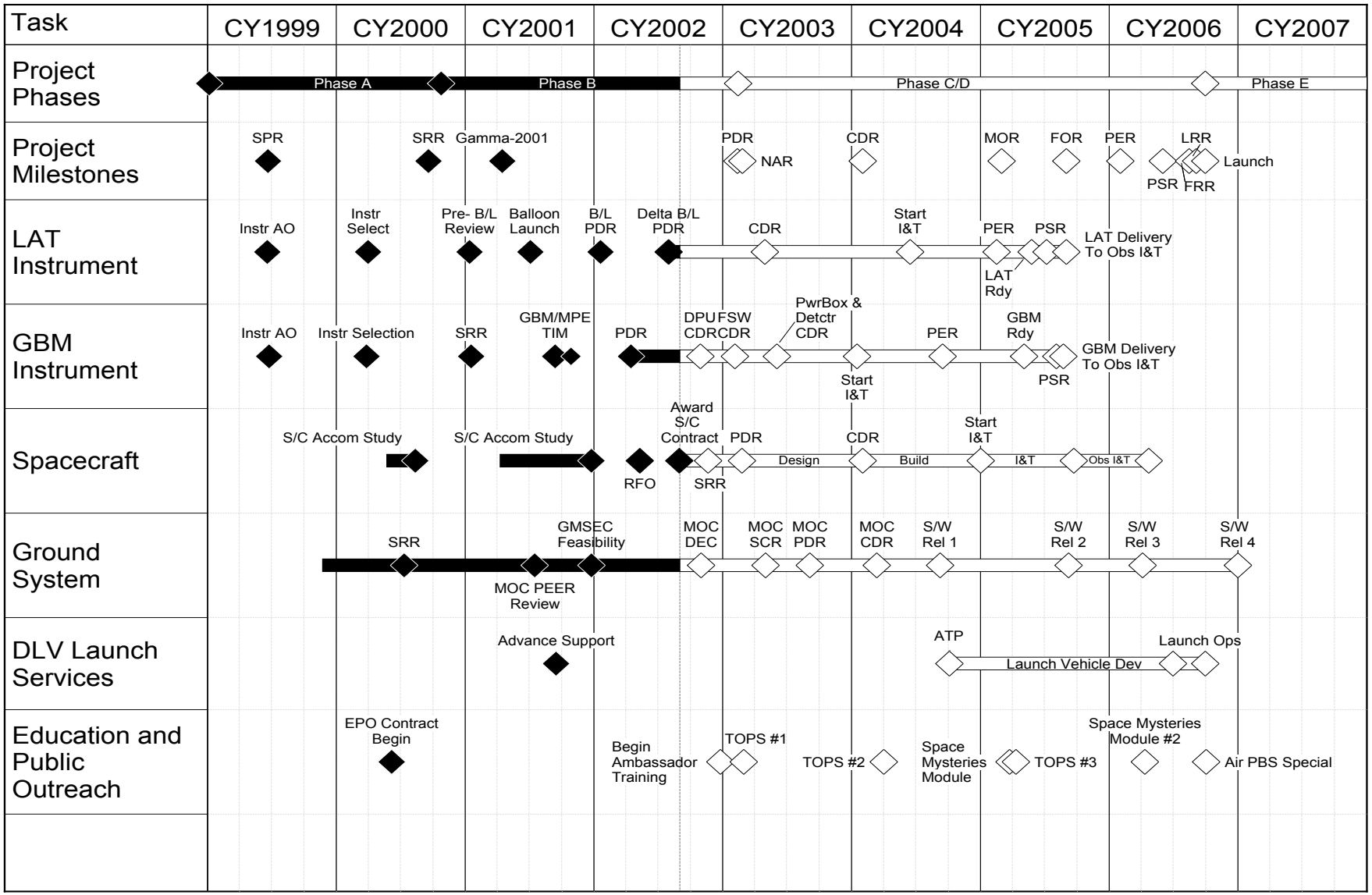
Elizabeth A. Citrin
GLAST Project Manager

Project Schedule



X-band Data Downlink

- **Baseline X-band System:**
  - *2 cross-strapped transmitters and a Medium Gain Antenna (MGA).*
  - *Malindi 6m antenna.*
  - *10 Mhz Bandwidth.*
  - *Nominal data volume (32.5 gbits/day) requires all good Malindi passes and 1-2 commercial passes.*
  - *Margin and contingencies require additional commercial passes.*
- **Pursuing 20 MHz Waiver:**
  - *GSFC Spectrum Allocation Group supports need for waiver.*
  - *Space Frequency Coordination Group meeting in October.*
  - *6 meter Malindi antenna decreases contact duration due to decrease in link margin with higher frequency. Initial analysis with baseline system indicates marginal for Malindi only operations.*
  - *10 meter antenna with a 20 MHz link supports nominal downlink volume with significant margin.*

Spacecraft Requirements Issues

- **Autonomous Repointing:**
  - *This capability is included in SAI's baseline.*
  - *No cost savings can be realized by removing the capability.*
  - *Significant Swift algorithm and software heritage.*
- **De-orbit System Redundancy:**
  - *Project has funded a task with SAI to analyze system for methods to increase functional redundancy of spacecraft systems required for both science and re-entry.*
  - *Goal is, to the extent practical, to eliminate single faults that would cause a premature re-entry.*