

STEREO Project

Ron Denissen – APL Project Manager Andy Driesman – APL Mission System Engineer

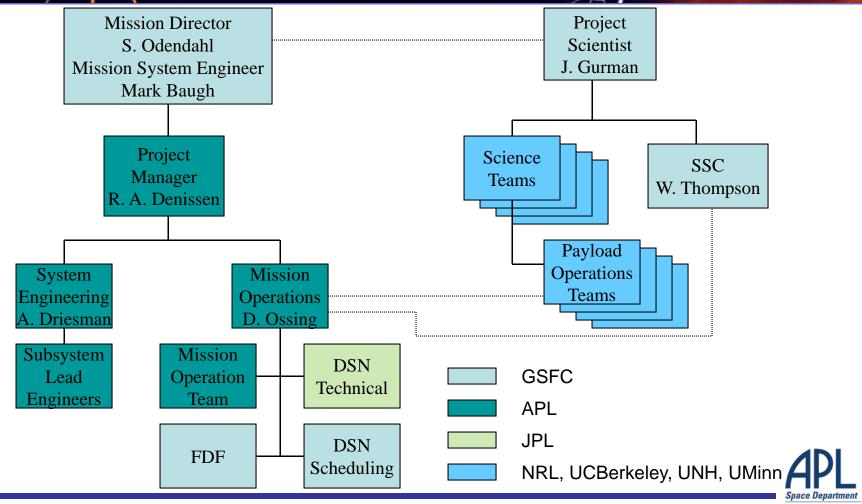




STEREO Phase E Organization Chart

A NEW
FRONTIER
IN SOLAR
RESEARCH

UNH • UCB • NRL • Obs. Paris • UMN • JHU/APL • NASA GSFC





<u>Technical</u>

Nov



















<u>Programmatic</u>







❖ Technical

 Both Observatories operational. Completed the prime science mission successfully and are now in our first extended mission.

Schedule

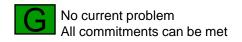
- Routine operations - HGA and instrument cals, momentum dumps.

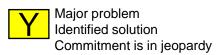
Resources

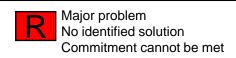
 Extended mission proposal has been accepted and APL is under contract until the end of September 2010.

❖ Programmatic

No issues at this time.











Mission Operations

- Operations team reduced 6
- 1 attended track per week on each observatory (more if requested)
- Collecting on Average over 6 Gbits/day

Special Observatory Events

- 91 instrument calibration events
- 20 High Gain Antenna Calibrations
- 43 Momentum Dumps (~every 6 weeks on each spacecraft)
- Loaded new G&C Software





From STEREO Mission Events Schedule

	Spacecraft A	Spacecraft B
Begin 6 hour daily DSN tracks	10-Aug-2009	10-Aug-2009
Switch downlink rate to 360 kbps downlink rate	17-Aug-2009	8-Sept-2009
Begin 7 hour daily DSN tracks(when possible)	19-Apr-2010	30-Nov-2009
Switch downlink rate to 240 kbps downlink rate	26-Apr-2010	7-Dec-2009
Begin 8 hour daily DSN tracks (when possible)	13-Sept-2010	13-Sept-20010
Switch downlink rate to 160 kbps downlink rate	20-Sept-2010	20-Sept-20010





- ❖ Began extended mission January 22nd, 2009
- The observatories are in operational mode and about 120 degrees apart.
- APL Team activities:
 - Guidance interaction anomaly
 - SLE Telemetry testing
 - Internet Security
 - Other Spacecraft Emergencies (LCROSS, Messenger)
- Continuing to collect science data, averaging about 6.5 Gbits/day.
- Supporting science team any way necessary.
 - Let us know how we can help
- Yesterday was the 3 year anniversary of the launch of the STEREO spacecraft.



