



Science Working Group

April 20th, 2008

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

A NEW
FRONTIER
IN SOLAR
RESEARCH

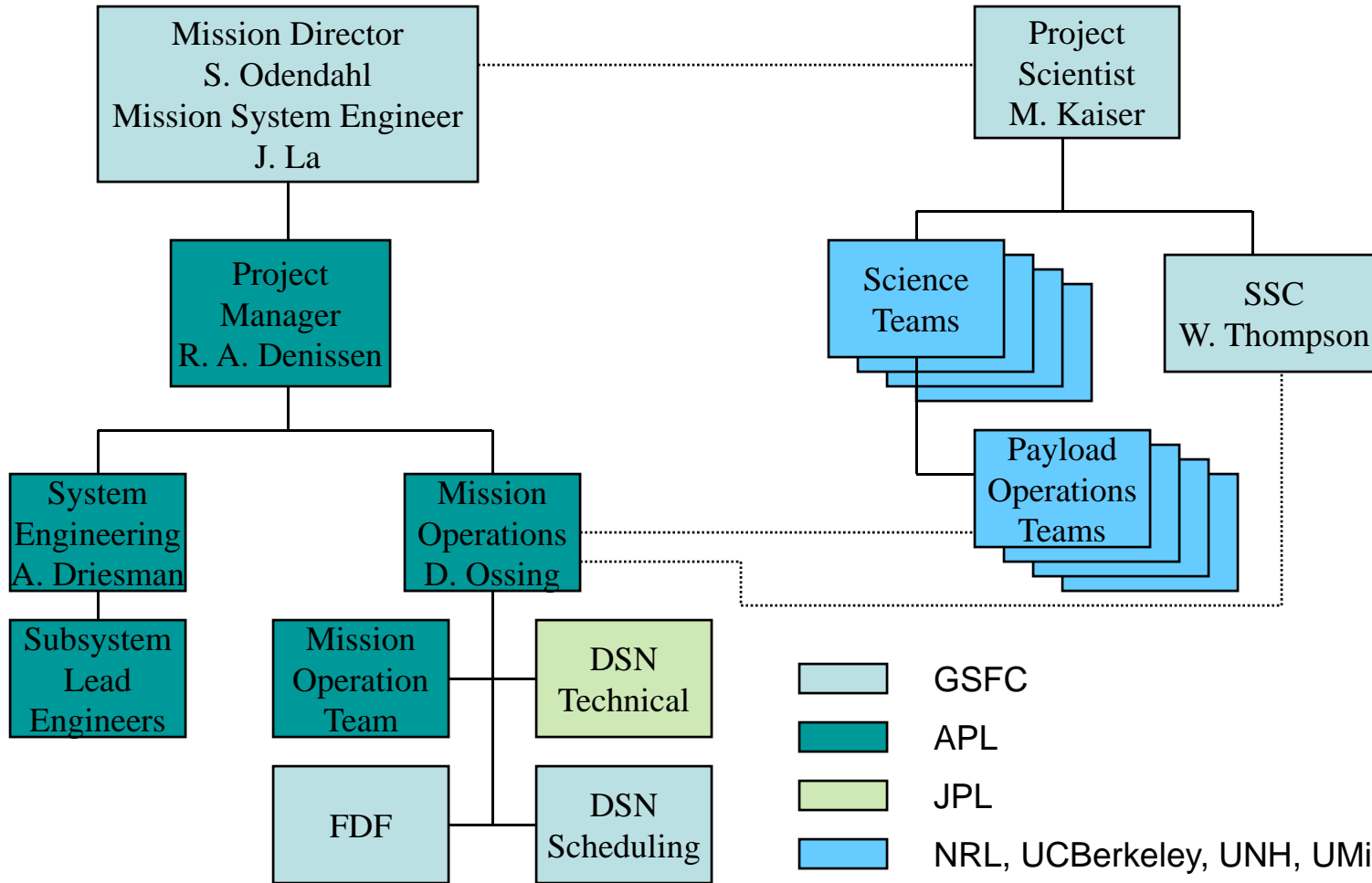
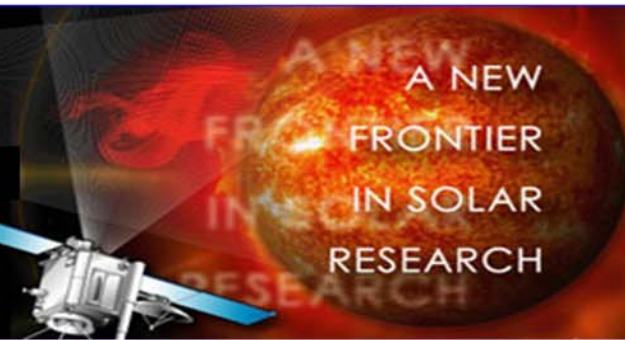
STEREO Project

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



STEREO Phase E Organization Chart

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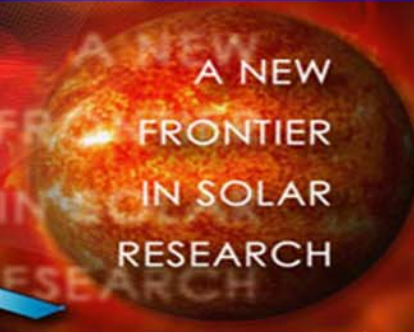
- GSFC
- APL
- JPL
- NRL, UC Berkeley, UNH, UMinn





Program Assessment

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| <u>Technical</u> | | | <u>Schedule</u> | | | <u>Resources</u> | | | <u>Programmatic</u> | | |
|------------------|-----|-----|-----------------|-----|-----|------------------|-----|-----|---------------------|-----|-----|
| Jan | Feb | Mar | Jan | Feb | Mar | Jan | Feb | Mar | Jan | Feb | Mar |
| Y | Y | G | G | G | G | G | G | G | G | G | G |

Detailed Description: (for items identified as yellow or red)

❖ Technical

- Both Observatories operational. And collecting prime science data
- ST Anomaly investigation complete. Report due out shortly. Mitigation in place.

❖ Schedule

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

❖ Resources

- No staffing or funding concerns at this time.

❖ Programmatic

- No issues at this time.

G No current problem
All commitments can be met

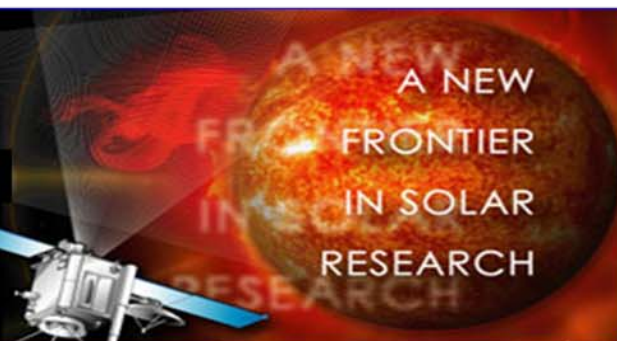
Y Major problem
Identified solution
Commitment is in jeopardy

R Major problem
No identified solution
Commitment cannot be met



Program Status

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❖ Mission Operations

- Operations team reduced 7
- MOC is manned 5 days a week, 8 hours a day
- 1 attended track per week on each observatory (more if requested)
- Mission operations center collecting, on average, 7 Gbits per day in support of the prime science mission.

❖ Special Observatory Events

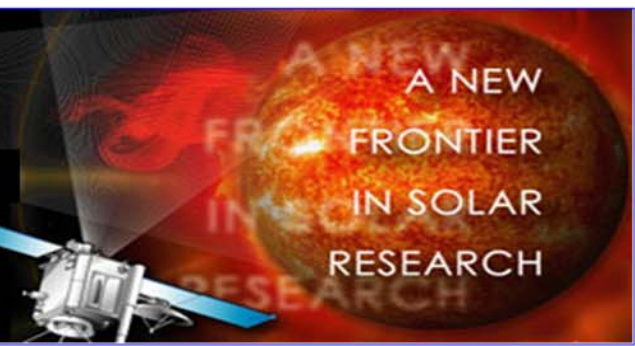
- *44 instrument calibration events*
- *14 High Gain Antenna Calibrations*
- *20 Momentum Dumps (~every 6 weeks on ahead, 8 weeks on behind)*
- *Software Patches and Parameter adjustments to RAM*
- *Autonomy Rule Changes in RAM and EEPROM*





Program Summary

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- ❖ Transitioned to Phase E January 22nd , 2007
- ❖ The observatories are in operational mode and about 47 degrees apart.
- ❖ No planned G&C or C&DH flight software loads.
- ❖ Spacecraft A operating on IMU2 due to failure of the X-gyro in IMU1
- ❖ Star Tracker anomaly occurred late December 2007.
- ❖ Data rate decrease about August 2008.

