



# ***Spacecraft and Ground Segments Status***

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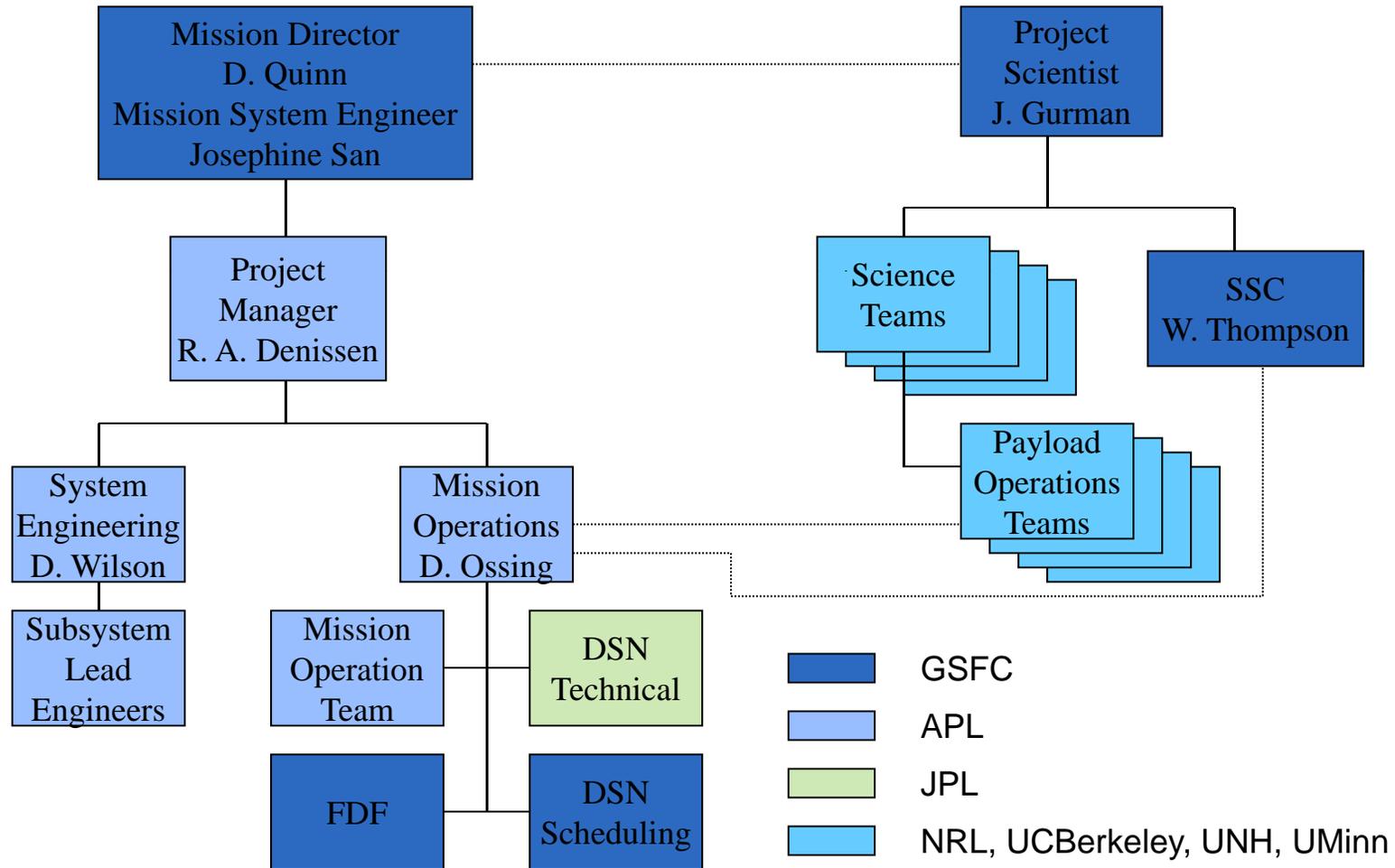
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# STEREO Phase E Organization Chart



# Program Status

## ❖ Operations

- *Began automated unattended tracks April 30,2007*
- *Operations team is 6 full time staff. Total manpower is approximately 11 MM/M*
- *Downlink rates: Varies, 720 to 120 Kbps depends on antenna size and track elevation*
- *Switched MOC to CCSDS SLE telemetry standard in July 2011*
- *Began using ESA stations (35 meter) in January 2012*
  - *Due to very high DSN loading*
  - *Awaiting new NASA/ESA agreement*
- *Mission operations center still collecting 3 – 5 Gbits per day in support of the science mission.*

## ❖ Special Observatory Events

- *36 instrument roll events to observe Comet ISON*
- *37 High Gain Antenna Calibrations (every 6 months)*
- *125 Momentum Dumps (~every 6 weeks on both spacecraft)*
- *>127 instrument calibration and roll events*

# Spacecraft Status

- Both observatories operating nominally using reduced gyro operations
- IMU status (gyros)
  - **AHEAD**
    - IMU-A – failed in April 2007
    - IMU-B – limited remaining life
  - **BEHIND**
    - IMU-A – limited remaining life
    - IMU-B – failed in January 2014
  - Reduced gyro operations uses IMU only when high rate data is required, i.e., momentum dumps, instrument rolls, etc.
- Reaction Wheel Stiction
  - **AHEAD** – Wheel 1
  - **BEHIND** – Wheels 3 & 4

# ***Ground Segment Status***

- **All MOC peripheral equipment, i.e., PCs, network equipment, UPS batteries, projectors, monitors, printers, and RAID arrays refreshed in 2012.**
- **Refresh of Solaris Unix systems in progress**
  - **Switching to Intel based Sun Unix systems**

# Concerns

- **Superior Solar Conjunction in 2015**
  - **Untested configuration**
- **MOC Unix system refresh**



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