Summary: Observatory and instruments continue to perform nominally and according to plan. COS NUV High-Voltage ramp-up is proceeding nominally. The results of iteration 1 of the FGS AMA Adjustment activity look good. Part 1 of the STIS FUV MAMA high-voltage recovery looks nominal. Analysis of Iteration 1 of the ACS Optimization Campaign looks quite good. The ACS Team recommends truncating the process after the first four iterations.

Observatory Status

- PCS/SAC
  - Nominal.
  - Gyro Bias trend plots presented by DMurphy (attached).

- EPS
  - Nominal (SKrol).
  - The load is centered around 72A and the system SOC is slowly continuing to increase and reached 510Ah.
  - The battery temperatures remain low ranging between -4 and -1.0 deg C with excursions to just below 0 deg C when the redundant heater cycles on (once every 24 hour period).
  - EPS is closely monitoring the system as HST enters a beta peak that will result in extended orbit day durations up to 69 minutes on DOY 158.

- TCS (JAbel)
  - 2 new HSTARS dealing with shelf temperatures.
  - Likely caused by WFC3 heat output. Analysis ongoing.
  - Still working STIS MEB temperature.

- I&C
  - Nominal

- DMS
  - Nominal.

- 486FSW
  - Nominal

- SAFING
  - Nominal. EMoy.
  - OPS Request 18462 was successfully executed on June 1, 2009 to perform preventative maintenance of the Retrieval Mode Gyro Assembly.
    - RMGA was powered on at GMT 152/18:35 to provide lubrication to the backup gyro's bearings.
    - Following completion of this maintenance an hour later, the RMGA was powered off.
- SIC&DH & P/L FSW
  - Nominal
  - 3 SBEs since last meeting
  - 73 total SBEs (in SMOV).

- SI Status
  - WFC3
    - WFC3; Protect Operate, waiting for BEA end.
    - Engineering
      - Nominal
      - Awaiting PI decision to proceed with normal operations after 21-day Protect period
    - Science
      - No change.
  - COS
    - Engineering: SSwain.
      - Status: Operate/FUV Operate.
      - Vacuum gauge ~4.1e-6 torr
      - NUV returned to Hold at 152/17:22 UTC following its initial HV checkout
        - Nominal Performance for both text exposures.
        - Count rate consistent with higher background on-orbit.
        - GO for visit 3 tomorrow @ 154/1750.
      - Forward Plan
        - OR 18469-0 submitted to clear COS event flag 2 between parts 2 and 3 for the NUV HV ramp before 154/17:50.
          - COS/STScI say GO for next visit.
        - NUV Fold Test scheduled for 154/17:50 UTC
      - Science
        - Dark exposures from the NUV Ramp-up activity
          - Nominal performance for both test exposures
          - See attached ppt COS_SMOV_update_02June2009 provided by Tony Keyes.
  - FGS/OTA
    - Engineering (ABradley, L Abramowicz-Reed)
      - Status; All hardware nominal, there are no new HSTARs.
      - There were 5 GSACQs (Guide star pairs) spanning the previous 24 hours, 3 were successful and 2 are pending ETR telemetry.
      - FGS 2 was used in Astrometry TRANS Mode 2 times, in preparation for the AMA move today.
      - There was 1 FGS 2 ITS test in support of the AMA move.
    - Up-coming 24 hours:
      - 11 GSACQs (Guide star pairs) and 8 sets of TRANS Mode scans with FGS 2 are planned over the next 24 hours.
      - There is also 1 FGS 2 ITS test in support of the AMA move.
      - AMA move #1 will occur later this evening, 5:45pm. Charts from Goodrich included in AMA ops briefing package.
Science

- ACS Engineering. SSwain.
  - Status; Operate/SBC LV
  - Forward Plan
    - Update to ASIC FSW values needed based on analysis of initial Oscilloscope data
    - Plan for update to be presented at SMOV morning meeting ~Tuesday [??]
    - OR 18471-0 submitted to update the ACS CEB-R ASIC offsets between 153/12:00 and 154/00:00 UTC
    - Oscilloscope mode optimization iteration 2 scheduled 154/00:15 UTC
    - Second End BEA check scheduled 156/06:32 UTC

Science (DGolimowski)
  - Charts of Optimization Campaign Iteration 1 provided and spoken to by Ed Cheng. They are attached: 090602 ACS-R Optimization Campaign, Iteration1
    - Summary; Mission Accomplished.
    - Recommend shortening Optimization Campaign
    - Discussion about lowering detector temperature more is ongoing, but no decision reached yet. STScI concurs that there are still too many issues to understand before entertaining such a step.
    - Recommend DSI over C&S readout modes.
    - Question of why Quadrant C (Amp C) appears to be "hypersensitive" to Vod.
  - OC analysis is ongoing.
    - David Golimowski provided an analysis update
      - His charts are attached: ACS SMOV060209

- STIS Engineering. SSwain.
  - Status: Operate/MAMAs 1&2 LVOn (SAA cycling)
  - Late last night, the STScI and the SI SEs noted that the setting of the MCE reset flag from a few days ago would not be cleared as normal prior to Part 0 of the HV recovery, preventing any MAMA1 commanding from the SMS.
    - The SMOV special commanding for the "anomalous" recovery does not contain the handling of an MCE reset as the nominal "anomalous" recovery commanding would
    - ROP NS-14 contains the necessary commanding to recover the MCE in real-time
    - OR 18472-1 was submitted and executed at 153/06:29:32 to execute the necessary portions of ROP NS-14 to restore communications between the MAMA and the MEB
    - Ops Note 1842-0 was also submitted to temporarily rescind the routine status of MCE resets for the duration of the SMOV special commanding for the MAMAs
• Visit 1 of 4 for the MAMA1 (FUV) HV recovery (Proposal 11350, Part 0) successfully completed at 153/12:25 UTC. (report provided by Tom Wheeler)
  o Reviewed the data
    ▪ all voltages, currents, and temperatures are within expected values.
  o When the threshold voltage was reduced to 0.28V,
    ▪ the number of ORCounts received (~4800 counts/second) for the charge amplifier temperature (~39 degC) is within the expected value.
  o This test is almost identical (stored commanding v. real-time commanding in SM4) to the version of the test that was executed in STIS's SM4 FT.
  o Signal processing electronics appears to be alive and functioning properly.
  o From my examination, the first phase of the FUV turn-on (the signal processing test) passed.
  o I recommend that Flag 2 be cleared to allow the next phase to proceed.

• Forward Plan
  o Visit 2 of 4 for the MAMA1 (FUV) HV recovery (Part 2) scheduled for 154/22:36 UTC
  o OR 18466-0 submitted to clear STIS event flag 2 to allow the MAMA1 HV commanding to proceed with Part 2 following Part 0 between 153/12:25 and 154.22:36 UTC

- Science.
  • An intercept SMS was produced and delivered yesterday for the purpose of correcting an error in the gain specifications for the STIS-to-FGS Alignment (1138405)
  o The update produced no other effects on the schedule.

  o NICMOS/NCS
    ▪ No change

- P&S Status

  o Calendar/SMS builds (No change)
    ▪ Intercept SMS generated (See STIS science note, above)
    ▪ SMS09159 – TDRS and Fastrack items being worked today/tomorrow
    ▪ SMS09166 - Work will start tomorrow morning.
  o Replans
    ▪ SMS09166 will contain
      • STIS activities resulting from the earlier one-week start-up delay.
      • Investigation of possible ACS advances afforded by a curtailed OC.

- Operations

  o FOT
    ▪ Nominal
    ▪ Completed Ops Requests:
- #18462-0  RMGA Power On/Off (06/09) @ 152/19:36z
  #18396-0  Ephemeris Uplink Override (Generic) @ 153/00:01z
  #18472-1  ROP NS-14, STIS MAMA Recovery after MCE Reset @ 152/06:29z

  **Ops Notes Executed:**
  - #1821-0  Notification for SSR ENG Dumps @ 153/03:45z
  - #1841-0  Increase EFHST18T and ESHLF20T Yellow Limits @ 152/21:56z

- **PACOR (BPatel)**
  - From June 1 (8am) to June 2 (8am), Pacor-A received one event with fast-track observations.
  - The data was processed and delivered to OPUS without any problems.

- **OPUS**
  - No OPUS issues to report.
  - Will be fast-tracking data for iteration 2 of the ACS optimization campaign (proposal 11810) starting late tonight.

- **Archive**
  - Nominal