

TGS Closed Issues

- FHST handoffs should be allowed from start of GSACQ until start of FGS visibility.
 - Status: Closed 03/31/04
 - 03/03/04 – SPSS should use the existing scenario parameters to delay the start of the FHST GOB until FGS visibility begins. This will allow normal systemic single FHST coverage from the start of the GSACQ until the start of FGS visibility, thus allowing for FHST handoffs. Eventually, we should remove the GOB time offset parameter from ICD-26, Part 2 (maybe as part of the mag field parameter update).
 - 03/10/04 – Instead of using the existing scenario parameters to schedule the GOB, we settled on two database times (using the existing TGS_GOB_TIMES parameter with slightly different definitions): The first time defines the start of the GOB relative to the start of the GSACQ. The second time defines the duration of the GOB.
 - 03/31/04 – SPSS, PASS, and SPIKE have all adopted this scenario of scheduling the GOB with FHST handoffs allowed before the GOB but not during it.

- Delta time for turning off FHST availability before end of FHST visibility should be parameterized.
 - Status: Closed 03/31/04
 - 03/03/04 – New availability pad parameter: TGS_FHST_AVLEND_PAD needs to be added to the SCHF. Availability/shutter PLCPs should be separate PLCPs to allow use of the pad parameter when commanding the FHSTs.
 - 03/10/04 – Parameter TGS_FHST_AVLEND_PAD added to SCHF. Mary G. wrote email to M. Wenz and A. Bradley describing options for the FHST PLCPs that would provide maximum flexibility in commanding.
 - 03/31/04 – M. Wenz and A. Bradley modified the FHST PLCPs to remove the hardcoded delta and defined separate PLCPs for shutter open/close and availability. This provides the flexibility that we were looking for.

- FHST/GOB – Is it required and how does it work?
 - Status: Closed 01/14/04
 - 11/12/03 - No new information.
 - 12/03/03 – The current understanding is that SPSS/SCS will generate an FHST GOB statement in the SMS at a database-specified time (could be 0) before the guide star acquisition. The statement will, optionally, specify the FHST to use during the first part of the guide star acquisition. It will also, if required, put the FHST in observer mode.
 - 01/14/04 – At the 1/9/04 TGSOWG, PCS team lead D. Smith indicated that they do not need an FHST observer during the guide star acquisition sequence. An FHST is still needed for rate control purposes until fine lock is

achieved. The scheduling system will retain (and issue) the FHST GOB statement using the FHST_GOB_TIMES parameter, in case the need for an observer resurfaces, but the delta time pad can be set to 0.

- Handling of Type 2 slew FHST shutter/availability commanding.
 - Status: Closed 12/03/03
 - 11/12/03 - The OBADWG has concluded that the Type 2 slew command group should remain essentially unchanged, i.e. the command group will continue to command the FHST shutters closed (thus forcing M2G mode), regardless of the length or magnitude of the slew and regardless of FHST visibility during the slew. This means PASS needs to 1) turn off FHST availability (and close the FHST shutters?) prior to the Type 2 slew (maybe as part of the PCPTERM group?), and 2) open shutters and turn on availability at the beginning of FHST visibility only if we're not slewing.
 - 12/03/03 – Using the Autogroup feature, PASS will issue FHST shutter and availability commanding based on FHST visibility windows. PASS will adjust FHST visibility windows to not overlap Type 2 slews.
- Placement of Type 4 slews.
 - Status: Closed 11/12/03
 - 11/12/03 - SPSS will only schedule Type 4 slews between the second OBAD and the GSACQ. SPSS will limit the slew magnitude to .5 degrees.
- FHST maps/automaps.
 - Status: Closed 12/11/03
 - 11/12/03 - A suggestion from J. Wirzburger is to command an OBAD (map only, without an attitude correction). R. McCutcheon will assess how PASS would command this, including limiting the duration of the map (see Action Item list).
 - 12/03/03 – Bob M. wrote up a proposal for commanding FHST MAPS and AutoMAPS in two-gyro mode. The proposal was reviewed by the TGS project team and will be sent to the FSW and PCS groups for concurrence.
 - 12/10/03 – Proposal sent to FSW and PCS groups for concurrence.
 - 12/11/03 – Concurrence received at TGSOWG meeting.
- Is the second OAD always required?
 - Status: Closed 12/03/03
 - 11/12/03 - Consider adding a SCHF parameter to make the second OAD optional (for SPSS scheduling and PASS checking). The problem is more complicated than that, but at least this would give us a simple way in Phase I of turning the second OAD off.
 - 11/19/03 – Added a SCHF parameter to the proposed ST-ICD-26 updates to make the second OAD optional.
 - 12/03/03 – SPSS and PASS will use the SCHF database parameter to make the second OAD optional. The need to make it optional in SPIKE will be assessed later, if necessary.
- Earth Calibrations.
 - Status: Closed 11/12/03

- 11/12/03 - SPSS will schedule them in two-gyro mode in a similar fashion to how they are currently scheduled, using M2G pointing constraints.