

HST INS Work Item Data Sheet

1. SI/Title: COS/TagFlash PSS Implementation
2. INS Lead: Tony Keyes, Dave Soderblom
3. Description of Work:

Determine the requirements for onboard COS wavecal lamp exposures to monitor the OSM instability during a TIMETAG exposure. Implement these requirements into the Planning & Scheduling Systems (PSS), including the Phase II Proposal Instructions, APT, TRANS, and Commanding, as necessary. Test the PSS implementation from proposal specification (Proposal Instructions & APT/TRANS) through calendar building (includes TRANS), and SMS generation (TRANS and Commanding). Execute the capability against the COS SITS system to verify FSW compliance.

This capability is expected to be a new mode for the instrument, so as not to risk the already-completed TIMETAG mode.

Assumes that no SPSS or PASS changes will be required.
4. Schedule Constraints and Dependencies:

Must be ready by COS SMGT (March 2007); desire to be ready by COS Thermal Vac. (October 2006)

Depends on availability of COS IDT to assist with requirements
5. Risks and Open Issues:

Open Issue – The technical details, especially the number, of the wavecal exposures and their timing within the science exposure are still being worked out. (D. Soderblom, T. Keyes)

Risk – Need to ensure that the existing autowavecal capability is not impacted adversely by this development.
6. Priority: High
7. Priority Justification:

OSM instability will significantly degrade science data quality of long COS exposures. The capability needs to be ready at launch in order to minimize impact to COS science program. Also, this effort spans the entire PSS system, and therefore carries high effort and coordination needs.
8. Resources (including estimated calendar duration for each portion):
 - a. Requirements – 6 weeks
COS IDT
COS Instrument Scientist(s) (160 hours)
 - b. Development – ? weeks, to start in January 2006
APT Developer
TRANS Developer
Commanding Developer
 - c. Testing – ? weeks

APT Tester
TRANS Tester
Commanding Developer
Commanding Support (calendar and SMS generation)
SITS Support (Wheeler)

9. Documentation and Deliverables:

Requirements Document
Phase II Proposal Instructions
Test Plan
Test Report
APT Code Delivery
TRANS Code Delivery
Commanding Instructions Updates
SRT Code Delivery