



SPACE SHUTTLE PROGRAM
Flight Software Office
NASA Johnson Space Center, Houston, Texas



Flight Software Office (FSO) STS-127 In-Flight Anomaly Review SR 4555

Alan Currie/MS4
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PRCB July 30, 2009



FSO STS-127 IFA Review Summary

Presenter **Chris Hickey**

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- **One FSW anomaly had no impact on the STS-127 mission**
 - **Bearing Display MFE Cycle Overrun (INT-4)**
 - Experienced a FSW cycle overrun (one execution of a program took longer than allocated time) during Ascent. This is a known condition documented by a User Note (DR 110892) and had no effect on vehicle performance.
- **FSW provided assistance in the analysis of the following anomalies**
 - **Left OME GN2 Leak status (MER-Funny-1)**
 - Developed and verified a GMEM to eliminate nuisance alarms associated with Left OMS nitrogen Leak
 - BFS GMEM also developed to support elimination of OPS 3 nuisance alarms on Right (“and Left because of commonality of K-loads”) OMS N2 Tank depending on MOD burn plan.
 - **3 MADS Measurements Reverse Sign (MER-Funny-7)**
 - Participating in the investigation of the MADS sign reversal issue. Confirmed that calibration data has not changed for the affected measurements
- **One PGSC anomaly had no impact on the STS-127 mission**
 - **OCA Router Hard Drive Failure (MER-10)**
 - The hard drive failed on the A31P PGSC that performs the router function for the Orbiter Communication Adapter (OCA). The failed drive was replaced with a spare and OCA functionality was restored. A FIAR has been written and the drive will be tested upon return.



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Tracking #	Description	IFA	IIFA
MER-10	OCA Router Hard Drive Failure	Y	N