



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



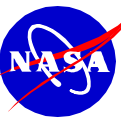
Flight Software Office (FSO) STS-132 In-Flight Anomaly Review SR 4780

David Rutishauser/MS4
SICB June 15, 2010
PRCB June 17, 2010

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STS-132 FSW Issues Overview

Presenter **D. RUTISHAUSER**

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Tracking #	Description	IFA?	IIFA?
STS-132-S-001, (MER-04, AR 4771)	Onboard Printer Problems	Y	N
STS-132-S-002, (MER-05, AR 4780)	STS4 PGSC Screen Cracked (RPOP1)	Y	N
STS-132-S-003	WLES_startup.bat file was missing from the STS13203 software load	Y	N

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FSO STS-132 IFA Review Discussion

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- **STS-132-S-001, (MER-04, AR 4771), Onboard Printer Problems**

- Multiple instances of partial-page printing occurred over the course of Flight Days 2,3, and 5. Ground testing during mission failed to reproduce problem.

- **IFA?** – Yes

- **IIFA?** – No, does not impact integrated hazards or multiple elements (per NSTS 08126)

- **Post flight activities** – Post-flight testing scheduled for week of June 14th. As-flown hardware and software will include full PGSC network and printer.

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- **STS-132-S-002, (MER-05, AR 4780) STS4 PGSC Screen Cracked (RPOP1)**
 - On Flight Day 8 the crew reported that the screen on the RPOP (STS4) PGSC was cracked and the display was unusable. The PGSC network was reconfigured per the STS-132 PGSC Backup Plan.
 - **IFA?** – Yes
 - **IIFA?** – No, does not impact integrated hazards or multiple elements (per NSTS 08126)
 - **Post flight activities** – Crew debrief occurred June 10th. Laptop power connector cover tethered to power cable floated between screen and keyboard when laptop closed. Broken laptop to be pulled from flight hardware inventory.



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- **STS-132-S-003 , WLES_startup.bat file was missing from the STS13203 software load**
 - On Flight Day 1, the crew informed the ground which PGSC was being used for WLES operations. The ground operator searched for but didn't find the pop-up file in the expected location on the PGSC. The pop-up reminder file was subsequently uplinked. No WLES operations were impacted.
 - After a few failures to restart the WLES application after reboot on prior missions, a pop-up reminder was added to the WLES PGSC and displays whenever the PGSC is restarted.
 - Initial procedure was to uplink pop-up batch file after the crew informs the ground which PGSC configured for WLES operations.
 - After a couple of flights, ground operators requested to make the pop-up a part of the standard pre-flight PGSC configuration.
 - PGSC and WLES engineers agreed to the request but subsequently failed to add it to the official PGSC and WLES configuration.
- **IFA?** – Yes
- **IIFA?** – No, does not impact integrated hazards or multiple elements (per NSTS 08126)
- **Post flight activities** –The pop-up .bat file has formally been added to the WLES application delivery and PGSC load.