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**KSC SAFETY AND MISSION ASSURANCE DIVISION**  
 NASA Kennedy Space Center, Kennedy Space Center, Florida



**STS-123 S&MA**  
**Launch Vehicle Processing CoFR Matrix**

Presenter J. Osgood	
Date 13 Feb. 2008	Page 1

Flight Preparation Element	Summary Description	Open Work	Constraint to Flight
Hazard Analysis and Reports	Hazard analysis and reports have been verified to have valid hazard causes, controls, and verification.	None	G
Critical Items List (CIL)	Critical item lists (CIL's) have been verified to have valid criticality, effects & operational controls.	None	G
HW S/W Design Certification	Certification of hardware requirements have been verified and documented.	None	G

G - Standard open work or completed	Y - Non-standard open work or exception	R - Constraint for flight
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## STS-123 S&MA Launch Vehicle Processing CoFR Matrix

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Flight Preparation Element	Summary Description	Open Work	Constraint to Flight
Risk, Probabilistic Reliability, Maintainability and Supportability Analysis	Any flight specific risk, probability, reliability, maintainability, and supportability analysis findings impacting safety or mission success have been resolved.	None	G
Audits / Surveillance Findings	Any flight specific audit or surveillance findings impacting safety and mission success have been resolved.	<u>Non-Compliance to NSTS 60538:</u> Rewrite/change request will be submitted by SSP Quality Manager. <b>Recommendation: Not a Constraint</b>	G
Interface Control Documents (ICD's)	ICD's have been verified to not invalidate certification, hazard controls, or CIL rationale.	None	G

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Flight Preparation Element	Summary Description	Open Work	Constraint to Flight
NSTS 08171 Operations and Maintenance Requirements and Specifications Document (OMRSD)	RCNs to OMRSD have been verified to not invalidate hazard and CIL controls.	None	G
Launch Commit Criteria (LCC)	LCC changes have been verified not to invalidate hazard controls or CIL retention rationale.	None	G
Problem Reporting and Corrective Action (PRACA) Reportable Items (HW & S/W)	HW & S/W program problem reporting and corrective action reportable items applicable to this mission have been dispositioned.	None	G
Waivers and Deviations (Level II / Level III)	Waivers, exceptions and deviations, have been verified to be acceptable for flight and any violation of any existing certification, hazard, and CIL rationale is documented.	None	G
Material Review Boards (MRB's)	MRB items requiring NASA S&MA disposition have been approved.	Standard Open Work	G

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Flight Preparation Element	Summary Description	Open Work	Constraint to Flight
Alerts	Alert notices have been assessed for applicability to this mission and have been disposition.	None	G
Mission Support	S&MA personnel supporting L&L, flight support, Mishap Investigation Team, and Mishap Rapid Response Team have been identified, trained, and qualified to support.	None	G
Integrated Vehicle Readiness	Verify Integrated Vehicle Readiness has been assessed through performance of GMIPS, and surveillance and any discrepancies identified have been satisfactorily dispositioned.	None	G
Critical Process Changes	Verify critical process changes have been assessed and are no safety impact to ground processing or mission success.	None	G
Contingency Planning	Verify Contingency Plans are current and in place for Launch and Landing.	None	G

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**KSC SAFETY AND MISSION ASSURANCE DIRECTORATE**  
**Launch Vehicle Processing Division**  
 NASA Kennedy Space Center, Kennedy Space Center, Florida



**Certificate of Flight Readiness (CoFR) Items Reviewed:**

1. Hazard Analysis for Ground Systems
2. FMEA/CIL
3. Hardware/Software Design Certification
4. Other Risk Analysis (GORA, PFMEA)
5. Audits
6. Interface Control Documents
7. OMRSDs for Ground Systems
8. Launch Commit Criteria
9. Integrated Vehicle Readiness
10. PRACA
11. Waivers, Variances, Deviations, Exceptions
12. Material Review Board
13. Alert Notification
14. Mission Support Training
15. Critical Process Changes
16. Contingency Planning

**Technical / Processing Items Reviewed:**

- Post Flight Tile Inspection
- Mishap Investigation Board(s)
- Mishap/Close Call Tracking

**ISS/Payload Items Reviewed:**

- Integrated Cargo Hazard Analysis
- Ground Safety Reviews
- Quality Assurance Surveillance
- Independent Mission Assessment
- Residual Risks

**Institutional S&MA Items Reviewed:**

- Construction/Safety Activities at Launch Critical Facilities
- Engineering Assurance
- Quality Assurance

**S&MA Integration Office Items Reviewed:**

- Range Safety

**Facility Readiness Reviewed:**

Walkdowns

KSC S&MA performed an internal review on 02/13/2008, identified no issues/concerns against this milestone, and will continue to track the satisfactory completion of open work and closure of open constraints

<b>Readiness Statement – “KSC Safety and Mission Assurance has conducted an internal review and is ready for the STS-123 Launch and Landing.”</b>			
 Mark Wiese 2/15/08 Chief, KSC S&MA Launch Vehicle Processing Division	 John Dellberg 2/15/08 Chief, KSC S&MA ISS & Spacecraft Processing Division	 David Barker 2/16/08 Chief, KSC Institutional S&MA Division	 Maria Collura 15 Feb 2008 Chief, KSC S&MA Integration Office

Pre-decisional - Internal Use Only

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