



SPACE SHUTTLE PROGRAM
Space Shuttle Vehicle Engineering Office
NASA Johnson Space Center, Houston, Texas



STS-104

FLIGHT READINESS REVIEW

FERRY READINESS

JUNE 28, 2001



STS-104 Flight Readiness Review Ferry Readiness

Presenter **Don L. McCormack, Jr.**

Date **June 28, 2001**

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Ferry Plan Summary

- **Ferry Planning Readiness Review conducted on 5/25/01 with no issues identified**
- **Ferry Flight Readiness Review to be conducted one day prior to planned ferry date**
- **Hardware summary:**
 - **Orbiter: OV-104 (Atlantis)**
 - **NEOM Ferry Weight (lbs): 207223 (no fluids off-loaded)**
 - **NEOM Ferry Center of Gravity (in): X_o 1116.2 Y_o -0.2 Z_o 371.2**
 - » **NEOM mass properties are within specified limits**
 - **Attach hardware and ferry plugs are ready to support**
 - **Tailcone 2 ready to support**
 - **Shuttle Carrier Aircraft (SCA): NASA 905**
- **Configuration drawings have been released**



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Ferry Plan Summary - Continued

- DFRC seven day turnaround with ready-to-ferry on day eight (early morning)
- Flight plan:
 - Day 1: Edwards AFB, CA to Fort Worth NAS, TX (refuel)
Fort Worth NAS, TX to KSC SLF, FL
- Weather alternates and emergency landing fields selected
- Pathfinder: USAF C-141 or C-17 (if purge equipment deployed)
NASA or USAF KC-135 (if purge equipment not deployed)
- Purge - decision to deploy purge equipment will be based on predicted temperatures at potential ferry overnight stop locations and contingency airlock return
 - Purge circuit 2 (Airlock - ambient air temperature below 50 °F or above 110 °F in excess of 2-hours)
 - Purge circuit 1 (OMS/RCS - ambient air temperature below 45 °F)



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STS-104 FERRY READINESS STATEMENT

A Ferry Planning Readiness Review was conducted in accordance with the Space Shuttle Vehicle Engineering Office flight preparation process plan contained in NSTS 08117, Requirements and Procedures for Certification of Flight Readiness. This certifies that aircraft, equipment, and ferry requirements are ready to support Orbiter ferry operations.

**Don L. McCormack, Jr.
MV/Manager, Ferry Operations**