NAME P/N QTY	CRIT	FAILURE MODE & CAUSES	FAILURE EFFECT	RATIONALE FOR ACCEPTANCE
		105FM03		
HELMET ASSEMBLY, ITEM 105 ---------- A/L 9672-03 (1)	2/2	Loss of attachment, Valsalva device. Defective material or adhesive contamination.	END ITEM: Loose valsalva device in helmet. GFE INTERFACE: Unable to use valsalva device to clear ears. MISSION: Terminate EVA prep. CREW/VEHICLE: None. TIME TO EFFECT /ACTIONS: Seconds. TIME AVAILABLE: N/A TIME REQUIRED: N/A REDUNDANCY SCREENS: A-N/A B-N/A C-N/A	A. Design - The valvsalva device (GFE supplied) is molded from hydrophilic polymer foam FHP3000. It is attached to the helmet (bubble) with a double-backed tape. Prior to attachment of the device the attachment area is verified visually clean. B. Test - Acceptance: Component - See Inspection. Certification - The valsalva device was installed in the helmet and successfully passed S/AD shock, vibration and acceleration requirements (Ref. HS TER's 3067, 3048, 3043, and 3076. C. Inspection - The valsalva device is visually inspected after molding for uniform surfaces and proper attachment of adhesive back tape. D. Failure History - None. E. Ground Turnaround - Inspected for non-EET processing per FEMU-R-001, Pre-Flight External visual inspection. None for EET processing. Additional valsalvas are available from the maintenance/pre kit on board the vehicle. F. Operational Use - Crew Response - Pre/post-EVA : If detected prior to prebreathe, replace using spares. If detected during depress/repress and use required to clear ears, adjust depress/repress rate to accomodate. Continue EVA. Special Training - No training specifically covers this failure mode. Operational Considerations - EVA checklist procedures verify hardware integrity and systems operational status prior to EVA.

EXTRAVEHICULAR MOBILITY UNIT

SYSTEMS SAFETY REVIEW PANEL REVIEW

FOR THE

I-105 HELMET ASSEMBLY

CRITICAL ITEM LIST (CIL)

EMU CONTRACT NO. NAS 9-97150

Prepared by: _____ 3/27/02
HS - Project Engineering

Approved by: _____
NASA - SSA/SSM

_____
HS - Reliability

_____ 5/14/02
NASA - EMU/SSM

_____ for Ron
HS - Engineering Manager

_____ 5/12/02
NASA - S&MA

_____ 5/23/02
NASA - MOD

_____ 6/04/02
NASA - Crew

_____ 6/04/02
NASA - Program Manager