

PAYLOAD HAZARD REPORT		a. NO: GHR-AMS02-012
b. Alpha Magnetic Spectrometer-02 (AMS-02) GSE		c. II
d. SUBSYSTEM: CGSE Pumps, Burst Disks	e. HAZARD GROUP: Acoustics	f. DATE: May 2008
g. HAZARD TITLE: Excessive Noise Levels		i. HAZARD CATEGORY <input checked="" type="checkbox"/> CATASTROPHIC <input type="checkbox"/> CRITICAL
h. APPLICABLE SAFETY REQUIREMENTS: KHB 1700.7C, Section 4.2.1.2 Noise.		
i. DESCRIPTION OF HAZARD: Excessive levels of constant noise (above 80dB) or impulse of 140 dB leads to hearing damage or loss as well as impeding communication—including caution and warning systems.		
k. HAZARD CAUSES: 1. Long duration excessive noise level from equipment. 2. Impulse from burst disc causes startling effect or damages hearing.		
l. HAZARD CONTROLS: (See continuation sheet)		
m. SAFETY VERIFICATION METHODS: (See continuation sheet)		
n. STATUS OF VERIFICATION: (See continuation sheet)		
o. APPROVAL	PAYLOAD ORGANIZATION	SSP/ISS
PHASE I		
PHASE II	<i>JRM TREATMARTIN 10/3/08</i>	<i>[Signature] 10/3/08</i>
PHASE III		

PAYLOAD HAZARD REPORT CONTINUATION SHEET		a. NO: GHR AMS02--012
b. PAYLOAD: Alpha Magnetic Spectrometer-02 (AMS-02) GSE		c. Phase II
k. HAZARD CAUSES:		
1. Long duration noise level from equipment (above 80dB) causes physiological damage.		
l. HAZARD CONTROLS:		
1.1 Personnel shall use appropriate hearing protection.		
1.2 Vacuum pumps will be enclosed in sound absorbing housing to reduce noise levels to acceptable levels.		
Note: Acoustic noise levels will be considered in the purchase of the GSE fans.		
m. SAFETY VERIFICATION METHODS:		
1.1.1 Review of procedures to ensure appropriate PPE is required and available at KSC.		
1.2.1 Review of AMS-02 GSE layout at SSPF and launch pad.		
1.2.2 Acoustics survey of noise-generating devices (vacuum pumps) and containment systems to determine whether frequency and intensity of noise are acceptable to preclude health risks and not block out audible caution and warning.		
n. STATUS OF VERIFICATION:		
1.1.1 Open		
1.2.1. Open		
1.2.2 Open		

PAYLOAD HAZARD REPORT CONTINUATION SHEET		a. NO:	GHR AMS02-- 012
b. PAYLOAD: Alpha Magnetic Spectrometer-02 (AMS-02) GSE		c. Phase	II
k. HAZARD CAUSES:			
2. Impulse of 140dB causes hearing damage.			
l. HAZARD CONTROLS:			
2.1 Monitoring of the AMS-02 systems for pressure and temperature increases while personnel are present.			
m. SAFETY VERIFICATION METHODS:			
2.1.1 Review of procedures to ensure AMS-02 and CGSE pressures and temperatures are monitored at appropriate levels.			
2.1.2 Review of Cryosystem performance characteristics to establish time to burst.			
2.1.3 Review of procedures/cautions for warnings to personnel in the event a warming/high pressure trend is noted.			
n. STATUS OF VERIFICATION:			
2.1.1 Open			
2.1.2 Open			
2.1.3 Open			