



United States Air Force

Pluto

Occupational and Environmental Health Exposure Data

Reference: AFI 48-145



Current as of Date: 07 Jun 2016

Date Printed: 07 Jun 2016

Workplace	Risk Categorization	Installation	Organization	# of SEGs	# of Personnel
Structural Maintenance (WPID: MXSM-155A)	1 - High Risk	[REDACTED] (ANG)	MAINTENANCE SQ FFL410	1	14

NOTE: This report includes occupational health risk assessment data from the Defense Occupational & Environmental Health Readiness System for Industrial Hygiene (DOEHRS-IH) database. Data is considered reviewed, approved, and current by the below certifying authority as of the above Current as of Date.

Exposure Group(s) Associated with Workplace

Structural Maintenance (SEG)

Administrative Controls/Training

Training - Respiratory Protection; Training - Hazard Communication; Miscellaneous - Other

Workplace Description

Personnel in this shop are primarily responsible for repair and fabrication of aircraft structural components. Personnel in the shop perform all tasks associated with corrosion control of components on A-10 aircraft. Personnel perform painting operations using polyurethane and isocyanide products. Sanding and stripping of components potentially exposes the employees to cadmium, chromium and lead. Stripping paint is primarily contracted out to the private sector. The section uses an aqueous parts washer to remove dirt and loose materials from components prior to painting, the Aqua-Miser is not used to strip equipment. A limited amount of mechanical sanding is accomplished. The sanding is performed in the paint booth using the supplied air respirators and ventilation. The paint booth is cleaned in preparation for painting; respirators are used for paint booth cleaning operations. Shop personnel are required to use a variety of sealants, adhesives, solvents, resins, cleaners, and other chemicals, as directed by technical data. Extensive air sampling has been accomplished on the painting, sanding, and stripping operations, sampling will continue as processes change. Air samples to date show potential chemical hazards to be controlled to levels below applicable permissible exposure limits or action levels.

Exposure Group: Structural Maintenance # SEG Personnel: 21

Health Hazard	Regulatory Limit	Measured Exposure	Exposure Determination
HEXAMETHYLENE DIISOCYANATE MONOMER (Inhalation)	.034 mg/m3 (8 hr TWA)	.000287 mg/m3 (Hazard Ratio: 0.01)	Below 50% of OEL
Existing Control(s)			
Process(es)	Painting in Paint Booth (Weekly 2-4 hours)		
ISOCYANIC ACID, HEXAMETHYLENE ESTER, POLYMERS (Inhalation)	.5 mg/m3 (8 hr TWA)	.016875 mg/m3 (Hazard Ratio: 0.03)	Below 50% of OEL
Existing Control(s)			
Process(es)	Painting in Paint Booth (Weekly 2-4 hours)		
NOISE	85 dBA (8 hr TWA)	85.1	Above OEL
Existing Control(s)			
Process(es)	Hearing - Earplug, Disposable, Foam Plastic (Ear Plugs) Sanding in Paint Booth (2-3 Times/Week 30-60 minutes); Priming in Paint Booth (2-3 Times/Month 30-60 minutes); PMB Operation Bead Blasting-Depainting (2-3 Times/Month 30-60 minutes); Painting in Paint Booth (Weekly 2-4 hours); Metal Work (2-3 Times/Week 2-4 hours); Disassembly, Inspection and Assembly (Daily 2-4 hours)		

Acronyms: dBA=decibels A-weighted; mg/m3 = milligrams per cubic meter; OEEL = Occupational and Environmental Exposure Limit; ppm = parts per million; TLV = Threshold Limit Value; TWA = Time-weighted Average; WPID = Workplace Identifier Code

Boldfaced Font: A red boldfaced "health hazard" indicates OSHA Expanded Standards apply; a boldfaced "health hazard" indicates teratogens/ carcinogens; a boldfaced "measured exposure" and/or "exposure determination" indicates personnel may be exposed above 50% of OEEL; a red boldfaced "measured exposure" and/or "exposure determination" indicates personnel may be exposed above OEEL.

CERTIFYING AUTHORITY

Bioenvironmental Engineering Craftsman (sign and date)

Bioenvironmental Engineer or Industrial Hygienist (sign and date)

PATIENT IDENTIFICATION

PATIENT'S NAME (Last, First, Middle Initial)

GENDER

DATE OF BIRTH

SSN OR IDENTIFICATION NO.

Defense Occupational and Environmental Health Readiness System (DOEHR) (August 2012)

Imaging equipment used for this exam may use ionizing radiation. The radiation dose from this exam is very low and is not expected to cause any harm. The radiation dose from this exam is very low and is not expected to cause any harm.