Lockheed Martin Aeronautics Company (LM Aero) - Marietta

Contractor Briefing Environment Safety & Health (ESH)

Lockheed Martin Aeronautics Company - Marietta General Presentation Instructions

- Violet underlined word(s) (i.e., <u>SAMPLE HYPERLINK</u>) illustrate a hyperlink to a document or slide. Click on the underlined word(s) to view the referenced document or slide.
- Contractor shall review all slides in the General Requirements section and those slides specific to the type of work to be performed at LM Aero – Marietta (hereafter referred to as "The Company") in the Specific Requirements section.
- Forward requested documents to POC prior to the commencement of work.
- Contact the POC or ESH with any questions regarding the facility.





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General Requirements Purpose

- The purpose of this presentation is to apprise the prime contracting company of Marietta specific requirements.
- The project manager and/or supervisor from the prime contracting company is required to review this presentation prior to commencement of work at LM Aero Marietta. The prime contracting company is responsible for ESH compliance by its own employees and subcontractors and for dissemination of ESH requirements to its employees and subcontractors before any contractual work begins.
- This presentation is a digest of basic applicable company and regulatory standards and should not be considered as a substitute for provisions of the Occupational Safety and Health Act of 1970 or other local, state and federal occupational environmental, safety, and health programs. Any discrepancy between this presentation and regulatory and contractual requirements shall be resolved by using the most stringent requirement.





Definitions

<u>AeroCode</u> – LM Aero Company Procedures. LM Aero system for managing and integrating command media.

<u>Authorized Emergency Vehicles</u> – Vehicles of the Fire Department, Security, and Medical when responding with emergency equipment activated.

<u>Competent Person</u> – Individual(s) capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

<u>Contractor</u> – Any agent/agency engaged by LM Aero through written or electronic contract (or other agreement) to perform work on LM Aero properties and those properties for which LM Aero has operating responsibilities.

- This includes all tiers of subcontractors.
- Not included are contractor employees who work under the direct supervision of LM Aero Marietta personnel. These employees would fall under LM Aero – Marietta internal Environmental, Safety and Health (ESH) programs.

ESH – Environmental, Safety and Health representative.

Excavation – Any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal.

<u>Hot Work</u> – Any operation that involves open flames or produces heat or sparks. Some examples include welding, cutting, brazing, grinding, soldering, torch applied roofing, etc.

LM Aero - Marietta – Lockheed Martin Aeronautics Company - Marietta.

MSDS (Material Safety Data Sheet) – Details the hazardous properties of the products along with the precautionary measures required for safe use.

Other - Than Serious Violation - A condition that does not have the same potential for causing bodily harm, yet may contribute to a decrement in bodily functions or increase bodily stress.

<u>POC (Point of Contact)</u> – A LM Aero representative responsible for providing oversight of Contractors to ensure compliance with the terms and conditions of the contract, purchase order, or other authorizing documents.

<u>Serious Violation</u> – A condition that could result in an injury or illness, which causes prolonged or temporary impairment of the body or substantially reduces efficiency on or off the job.

<u>Vehicle</u> – Any means of transportation used to transport personnel and/or property/equipment (e.g., automobiles, trucks, lift trucks, scooters, golf carts, and bicycles).





Acronyms

•	AC ANSI	AeroCode American National Standards	• LM Aero	Lockheed Martin Aeronautics
		Institute	 LOTO 	Company Lockout/Tagout
•	CFR CP	Code of Federal Regulations	MSDS	Material Safety Data Sheet
•	ENV	Company Policy Environmental Resources	NFPA	National Fire Protection
•		Environmental Protection Agency		Association
		or Act	NIOSH	National Institute for
•	ESH	Environmental, Safety and Health		Occupational Safety and Health
•	FOD	Foreign Object Damage	• OEM	Original Equipment Manufacturer
•	FPS	Fire Protection Services	• OSHA	Occupational Safety and
•	FSR	Facilities Service Request		Health Administration
•	GFCI	Ground Fault Circuit Interrupter	• POC	Point of Contact
•	HAP	Hazardous Air Pollutants	• PPE	Personal Protective
•	HMEL	Hazardous Material		Equipment
		Elimination List	• S&H	Safety and Health
•	НММР	Hazardous Material Management Program	• SES	Security and Emergency
•	HMRB	Hazardous Material Review Board	. CID	Services
•	ISO	International Standards Organization	• SIR	Safety Inspection Report
•	IS&T	Informational System & Technology	• UL	Underwriters Laboratories





General Requirements Important Telephone Numbers

Environmental, Safety and Health - General Information

Environmental, Safety and Health "General Hotline"	(770) 494-4121	
Environmental Resources	(770) 494-5986	
Fire Protection Department - (Fire, Spills)	(770) 494-3473	
Fire Protection Department - ("Hot Work" Permits)	(770) 494-3970	
Hazardous Materials	(770) 494-5986	
Hazardous Waste Management	(770) 494-4936	
Industrial Hygiene	(770) 494-9202	
Weekend & Holiday Cell Phone	(678) 733-0035	

Facilities Engineering/Support

Facilities and Plant Engineering Construction Group	(770) 494-3325
Plant Engineering Facilities Maintenance (PEMO) Desk	(770) 494-2951

Medical (770) 494-4131

Security & Emergency Services

Medical Emergency, Security, Mishap Reporting (770) 494-3244





General Requirements Vehicle and Pedestrian Traffic



- 20 mph in outside areas (unless otherwise posted)
- 5 mph in buildings and in parking lots
- 15 mph on flight line







1

Do:

- wear seat belts at all times when provided on vehicles/equipment.
- receive permission and a vehicle pass from the POC prior to driving on the north/south runway (located at the flight line)
- travel within designated white lines.
- turn off vehicle when not in use.
- leave keys in vehicle and doors left unlocked when parking on ramp areas and areas where emergency vehicles and equipment may need to gain access.
- stay out of all production areas of the flight line unless you have obtained a proper vehicle pass.
- remain outside of red and white checkered flagged areas unless prior approval has been obtained from the POC and area supervision.
- give pedestrians the right-of-way.
- use extreme caution when passing doors that exit into traffic aisles or outdoor traffic lanes.
- set the brakes and block or chock wheels under both right and left rear wheels to prevent movement of trucks or trailers while loading or unloading.





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Do not:

- drive inside buildings unless otherwise approved by the POC.
- cross red lines or drive directly up to an aircraft.
- drive on the active runway and taxiway.
- drive under the wing or tail of an aircraft.
- drive by a moving aircraft whether under its own power or being towed (stop until aircraft has passed).
- drive in front of or behind powered aircraft engines.
- park/store vehicles or equipment within 15 feet of any fire hydrant.
- drive on the south side of B-25/B-24.
- park in front of or drive into the path of taxiing aircraft.
- drive through hazardous areas enclosed by barricades or designated by signs.
- use a vehicle for towing unless it is properly equipped.
- stand on moving vehicles unless the vehicle is specifically designed to accommodate personnel in this manner.
- pass a tug or other slow moving special purpose vehicles when they are moving and loaded. If the tug or special vehicle operator pulls off to the side and gives a hand signal to pass, passing is permitted.





Traffic Violations

- Management has the prerogative of suspending driving privileges of contractors, vendors, and suppliers who have demonstrated unsafe driving practices. Such suspensions may be made without regard for the point assessment should the seriousness of the incident warrant. The following violation policy shall be in effect for contractor vehicles found to be in non-compliance with the company traffic regulations:
 - **a)** First Violation: The violation will be called to the contractor employee's attention by a notice placed on the vehicle and a letter to the POC when it involves a serious traffic violation.
 - **b)** Second Violation (within twelve-month period): A thirty-day suspension of the contractor employee's privilege to operate on Company premises.
 - c) Third Violation (within twelve-month period): Indefinite suspension of contractor employee's privilege to operate a vehicle on Company premises.





Color Codes for Lines

White Designates Roadways, Crosswalks & Parking Spaces

Red NO Ignition Sources (i.e., smoking, vehicles, etc.)

Yellow <u>Dark</u> Lines Illustrate Tow Paths

Yellow <u>Light</u> Lines Illustrate Walkways / Staging Areas

Green Safety Glasses with Side Shields Required

Orange F/A-22 Tow Paths

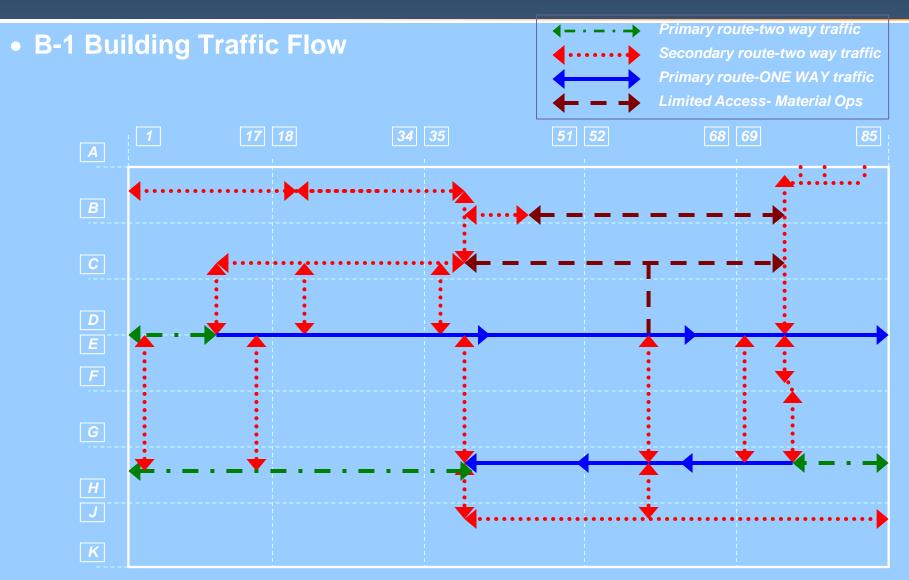












General Requirements Foreign Object Damage (FOD) Prevention Compliance



- In order that LM Aero may provide its customer's the highest level of Quality and Safety in all products manufactured, the company has <u>stringent</u> FOD Prevention & Tool Control Procedures in place throughout the facility.
- All vendors, subcontractors and suppliers shall review the company FOD Prevention Program and complete MANDATORY FOD PREVENTION TRAINING. Your contract POC will provide the information required to complete training.
- LM Aero provides "certification" to validate vendor/supplier/ subcontractor compliance with the above requirement, as well as validating our Commitment to Excellence in FOD Prevention. Badged access to the facility will not be granted WITHOUT this certification.
- As an approved vendor, supplier or subcontractor, you're required to abide by these procedures and remain in compliance while working in ALL FOD Controlled areas. Failure to do so may constitute an immediate contract termination and/or your removal from the facility.





General Requirements Foreign Object Damage (FOD) Check-Points











Lockheed Martin Aeronautics Company (contractor safety briefing 11-19-10)

General Requirements LM Aero - Marietta Safety Signs





Fueling Operations



Open Fuel Tanks



Explosive Storage Area



No Smoking Fuel
Operations



Painting Operations



Radar Test Area







Tobacco Policy

Smoking on Lockheed Martin owned or leased property is prohibited.





• Alcohol, Drugs, Firearms, Cameras, Computers etc.

- No alcoholic beverages, drugs, explosives, firearms, ammunition gambling material or persons under the influence of alcohol/drugs will be permitted on the company or United States Air Force Plant No. 6 property. Cameras, recording devices, etc. require prior approval from prior to being brought onto the facility.
- Vendors and sub-contractors may bring their company-owned computers onto the facility to process unclassified data under the following conditions:
- A Security and Emergency Services (SES) or Contractor LM POC provides an awareness briefing, consisting of pertinent information regarding the use of the restricted and controlled items.
- Contractor or vendor laptops may not be connected to any unclassified LM Aero computer system or network without prior approval from IS&T.
- Laptops are not permitted in any classified area(s) without SES approval.
- A Material Entry/Exit Record is not required for entry and exit from the facility.
- Computers containing the capabilities of items described as Restricted must comply with all policies controlling Restricted Items, your LM POC can provide more information. Security and POC.





Hazardous Materials Management

- Contractors shall not bring any material(s) onto company or United States Air Force Plant No. 6 property whose chemical contents appear on the LM Aero Hazardous Material Elimination or LM Aero Marietta Banned lists. The LM Aero Hazardous Material Elimination List is located at: http://www.lockheedmartin.com/wms/findPage.do?dsp=fec&ci=15482&rsbci=15449&fti=0&ti=0&sc=400 and the LM Aero Marietta Banned Material list found on the next slide.
- Maintain a copy of all Material Safety Data Sheets (MSDS) at the work site or centrally located trailer for each hazardous chemical brought onto the LM Aero – Marietta site. MSDS will be promptly provided when requested by LM personnel.
 - NOTE: LM Aero Marietta MSDS are available 24 hours a day through the MSDS Automated Retrieval System (770-494-5685) or by calling 770-494-6407 (G. Loch) with your request during normal business hours. Please observe and document the five or six digit number listed on the material when requesting a MSDS.
- Hazardous materials on company premises shall be labeled in compliance with OSHA 29 CFR Part 1910.1200, "Hazard Communication." Labels must be legible and replaced when torn or defaced.





LM AERO- Marietta Banned Materials List



C 1 C 4

4,4'-DIAMINODIPHENYL ETHER
DIBROMOTETRAFLUOROETHANE (HALON 2402)
2-CHLORO-1,1,1,2,3,3,3-HEPTAFLUOROPROPANEA
DICHLOROTETRAFLUOROETHANE
PENTACHLOROTRIFLUOROPROPANE
HEXACHLORODIFLUOROPROPANE
HEPTACHLOROFLUOROPROPANE
METHANE, BROMODIFLUORO-
CFC-215
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (TCDD)
PROPANE, 1,1,1,3-TETRACHLORO-2,2,3,3-TETRAFLUORO-
CFC-213
TRICHLOROPENTAFLUORPROPANE (CFC215)
ETHANE, TETRACHLORODIFLUORO-
CHLORPYRIFOS
CFC-214
CFC-212
CHLORODIFLUOROBROMOMETHANE
ETHANE, PENTACHLOROFLUORO-
,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE
CFC-211
PROPANE, 1-CHLORO-1,1,2,2,3,3,3-HEPTAFLUORO-

CAS# Name

4259432	CFC-215
1.207 1.02	CV ANOGEN
460195	CYANOGEN
506683	CYANOGEN BROMIDE
506774	CYANOGEN CHLORIDE
506785	CYANOGEN IODIDE
57125	CYANIDE ANION
661972	PROPANE, 1,2-DICHLORO-1,1,2,3,3,3-HEXAFLUORO-
71432	BENZENE
7439921	LEAD
74839	METHYL BROMIDE (BROMOMETHANE)
74975	CHLOROBROMOMETHANE
75092	METHYLENE CHLORIDE
75638	TRIFLUOROBROMOMETHANE
75694	TRICHLOROFLUOROMETHANE
75718	DICHLORODIFLUOROMETHANE
75729	CHLOROTRIFLUOROMETHANE
76120	1,1,2,2-TETRACHLORO-1,2-DIFLUOROETHANE
76131	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE
76142	1,2-DICHLOROTETRAFLUOROETHANE
76153	CHLOROPENTAFLUOROETHANE
76175	PROPANE, 1,2,3-TRICHLORO-1,1,2,3,3-PENTAFLUORO-





General Requirements Hazardous Waste

Hazardous Waste

- The contractor will supply all necessary Department of Transportation approved drums. The contractor shall ensure the drums are stored and labeled properly.
- Disposal of hazardous waste, including contaminated soils or refuse, shall be done by an approved LM disposal contractor in accordance with regulatory requirements. Contractor will be responsible for all disposal cost.
- Disposal of waste generated from operations (i.e., paint, solvents, floor coatings, etc.) must be coordinated with the POC and ESH prior to generation. Facility generated waste (i.e., process tank cleaning solutions, lead abatement, etc.) will be the sole responsibility of the company in coordination with the POC and HMMP.
- Contact your LM POC with questions regarding hazardous waste.
- Under no circumstances may any material of any kind be discharged to any sewer or storm drain without approval from Environmental Resources.





General Requirements Self-Luminous Exit Signs – Disposal Requirements



- Self-luminous EXIT signs contain radioactive tritium gas (25 curies per sign).
- A self-luminous EXIT sign is a "generally licensed device". A
 general license is provided by regulation and is effective without the
 filing of an application or the issuing of a licensing document.
- Tritium-containing EXIT signs will have a radiation warning notification label and symbol on the outer casing of the sign.
 - These specific EXIT signs are not under any circumstances to be disposed of in normal waste streams as it is a violation of Federal law.
 - Should replacement, repair, removal, or disposal of these selfilluminating signs be necessary, contact your facilities POC or the site Radiation Safety Officer at 770-494-2531.





General Requirements Hazardous Waste (continued)



Disposal of Used Fluorescent Lamps

PROCEDURE

- Personnel handling/storing used fluorescent lamps containing mercury or other hazardous constituents must be trained in storage, use and proper disposal.
- Work site location, prime contracting company's name, FSR number, and anticipated quantity to be stored in the lamp storage site shall be provided to ESH prior to commencement of any activities involving handling of used lamps.

CONTAINERS

- For <u>renovation</u> projects, place lamps in the OEM containers from which the new lamps are taken. For <u>demolition</u> projects, obtain boxes from used lamp storage site. Prior coordination is necessary to provide boxes for large projects. Both the OEM and the new boxes must be properly labeled prior to placing lamps into them.
- Ensure that containers are closed at the end of the shift and completely sealed by taping the opened end when full or when the job is finished. Ensure that containers are not exposed to undesirable conditions (rain, wet surfaces, etc.) inside and outside of all buildings.
- Note: Inspect all used lamps. Broken lamps shall be separated unbroken bulbs. Put broken bulbs in designated green 55 gallons drums located in the Hazardous Waste Storage Site adjacent to secured Lamp Storage site at B-27 Building. Seal 55 gallons drums tightly.





General Requirements Hazardous Waste (continued)



Disposal of Used Fluorescent Lamps (continued)

STORAGE

- THERE IS ONLY ONE AUTHORIZED STORAGE SITE for contractors. It is located in B-27 Building, Column "O-47". Access from the south side of the building. Notify POC for access to storage site. POC will provide access to crib and notify ESH when stored lamps are ready for disposal.
- All containers shall be structurally sound, adequate to prevent breakage, and compatible with content. (Use 48-inch boxes for 48-inch lamps.)
- POC and contractor shall ensure housekeeping in storage area (neat, clean, free of debris).

LABELS

- POC shall obtain adhesive "Date of Entry" labels from ESH and provide them to contractor.
- If labels are not available, use an indelible ink marker to write the above information including date of entry (when first used lamp is placed in the container)
- All users, when applying label to container, leave the label intact. Do not detach the last three bar codes from portion featuring the entry date.

INSPECTION

- POC shall call ESH to inspect containers to ensure compliance with storage requirements.
- Note: EPA regulations prohibit discarding used fluorescent lamps in regular trash containers.





General Requirements Air Emissions

Air Emissions

- Air emissions from operations at the company are regulated under the Clean Air Act. The intent of these regulations is to control air quality by reducing or eliminating hazardous air emissions.
- Ensure that only materials approved for the job are used.
- Keep solvent and paint containers closed to minimize air emissions.
- Notify Environmental Resources for questions relative to the Clean Air Act requirements.





Lockheed Martin Aeronautics Company - Marietta

File No:117

Contractor Safety Inspection Report

To: POC Dept: RFM1 Bldg: B27 Zone: 0426 Date: 1/8/2004 From: Safety Dept: REM4 Bldg: B27 Zone: 0446 Ext: 4-2643

Subject: Safety Inspection of "Contractor X"

These discrepancies were observed during a routine safety inspection of the subject contracting company. If corrective action has not been taken, please take corrective action, note same on this form, and return via e-mail to veronica.musgrave@lmco.com by 1/19/2004

Discrepancy No. 1

Building Location: West side B-91
Safety Violation: ESH.3.12
Photo Available: Yes

Description: Environmental hazards found
Corrective Action: Area shall cleaned up, containers

labeled, and waste disposed of properly to eliminate possibility of

environmental impacts.

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Surveillance

- Contractors operating on the company or United States Air Force Plant No. 6 property are subject to routine inspections performed by ESH personnel to ensure regulatory compliance.
- Contractor noncompliance with regulatory or contractual ESH requirements may result in the exclusion of a contract employee from company property or in cancellation of the contract.



ISO 14001

- POLICY STATEMENT It is LM Aero's policy to provide a safe and healthy working environment. This policy applies to Contractors as well as LM Aero employees. The purpose of this briefing is to make all contractor personnel aware of the critical need to maintain a safe workplace, to eliminate causes of accidents and provide direction on environmental, safety & health, and fire requirements.
- "ESH IS EVERYONE'S RESPONSIBILITY" LM Aero is registered to ISO 14001 or has an ISO-like, integrated Environment, Safety and Health Management System. Your assigned LM Aero Point of Contact (POC) will provide to you copies of ISO 14001 brochures which communicates the standard's provisions and how it affects your activities at LM Aero.





General Requirements Asbestos

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Asbestos

- Orange and black colored warning signs have been posted at the entrances to buildings and mechanical rooms where known or presumed asbestos containing building materials are present.
- Unauthorized contractors shall not disturb any asbestos containing materials or materials suspected to contain asbestos.
- If an incident occurs contact Safety and Health immediately at 4-4121 (during the evenings, weekends, and holidays call the "weekend and holiday cell phone" number).
- Asbestos containing materials (ACM) can be in the form of floor and ceiling tile,
 wall insulation, pipe lagging, sprayed on fireproofing, duct wrap, etc.





General Requirements Hoisting Equipment

Hoisting Equipment

- In buildings where cranes are in operation, the crane operator will blow a whistle to warn personnel of approaching crane(s) and load(s). At no time will personnel stand or walk under a crane load.
- The use of LM Aero hoisting equipment such as powered cranes or hand-powered hoisting devices is prohibited unless authorized by the contract.
- All rigging used under such conditions must be appropriate for the lift and in good repair. Lift plans and rigging is subject to approval by the POC and ESH.
 - If approved for use, crane operator's permit is required to utilize the overhead crane system. This requires a training course provided by the Company Training Department. The POC will assist in obtaining training and certification.





General Requirements Housekeeping

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Housekeeping

- All places of employment shall be kept clean and orderly. Materials and equipment shall be stored in designated places.
- Sharp projections, where injury may occur, shall be eliminated.
- Outside dumpsters shall be kept effectively covered and closed unless in use.
- Aisles and exits must be kept clear at all times and materials and equipment stored in designated places.
- Electrical cord sets and air hoses used in work areas shall not create a tripping hazard.
- Objects shall not be "stored" on the top of any cabinets, electrical panels, etc.
- Chemical containers shall be stored properly at the end of the work shift.





General Requirements Pollution Prevention/Solid Waste Management



Pollution Prevention / Solid Waste Management

- The contractor should determine the location of the recycling and/or disposal facilities to be used for all materials recycled and/or disposed of which will be generated from the work performed under the contract as well as their method of transport, prior to the commencement of work. The contractor should transport non-recyclable solid wastes to a state permitted disposal facility that accepts these materials for disposal or reclamation.
- The contractor shall be responsible for collecting and removing solid wastes, including all construction debris (including concrete), and segregating recyclable wastes from non-recyclable wastes.
- Recyclable materials including construction debris that cannot be reused onsite by the contractor should be transported by the contractor to a valid recycling facility that reclaims and recycles these materials.
- Recycling contractors should maintain records (i.e., scale or recycling receipts that reflect quantity disposed) for all solid waste material re-used, recycled or, if necessary, land filled throughout the contract period, and provide to ESH, the weight by the 1st of every month.





General Requirements Procedures

Accidents/Injuries/Illnesses

- Accident prevention will the be responsibility of the contractor to initiate and maintain programs to:
 - Provide for daily safety inspections of the job site(s), materials, tools, and equipment.
 - Permit only those employees qualified by training, licensed or experienced, as appropriate, to operate machinery, tools, or equipment.
 - Conduct weekly 10-15 minute safety talks to reinforce safety awareness. Topics should be related to work under the contract.
 - Ensure warnings are posted to inform employee of hazards or potential hazards resulting from propellers, jet engine intake, and jet engine exhausts. It is the responsibility of the contractor to so advise it's employees, subcontractors, and suppliers.
 - Ensure that affected employee(s) receive(s) necessary first aid or medical treatment.
- Promptly report all accidents/injuries/illnesses to the POC. Immediately notify Security & Emergency Services of any serious accidents or injuries. Secure the area and equipment if blood or other bodily fluids are present.
- Where the eyes or body of any person may be exposed to injurious corrosive material, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.





General Requirements Procedures

Emergency Action Plans / Warning Signals

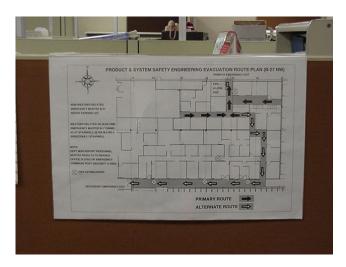
- All company organizations have posted an <u>Emergency Action Plan</u> showing evacuation, area security, first aid and accountability personnel assignments for each shift and the "Warning Signals You Should Know" poster. These documents, specific to the area in which the contractor is working, should be reviewed in safety meetings.
- Contractors may devise their own plan and/or request the plans from supervision in the area where the job site is located.
- Weather warnings are indicated by six blasts of the Fire Department horn. Upon hearing the horn, contractors shall terminate elevated work, utilization of flammable or combustible material, etc. Three blast indicate "all clear".





General Requirements Emergency Action Plans / Warning Signals





Emergency Evacuation Plan



WARNING SIGNALS
YOU SHOULD KNOW

ATTACK WAMMING SHOULD

WAVERING SIGNAL

WAVERING SIGNAL

WAVERING SIGNAL

MEANING = ATTACK MARKENT

TAKE SHELTER B-1 BASEMENT

MEANING = SHEADENCY ACTION FLAN

MIGH-LOW TOMES

MEANING = SHEADENCY ACTION FLAN

NOTIFICATION

LISTEN TO INSTRUCTION OVER FLANT

PAGE OFFICE AND PLAN MEANING THE MEANING THE MEANING THE MEANING THE MEANING THE MEANING OF METALE MODIFICATION

THERE OF THE METALE METALE

Warning Signals



Emergency Evacuation Plan





Procedures

Management of Emergency Incident

- Contractors causing or discovering a fire, including discovering evidence of a fire, shall call the company Fire Department immediately.
- Contractors discovering or causing a chemical spill, or other emergency must quickly assess the situation. If the situation is an emergency, the contractor shall immediately leave the danger area and notify the company Fire Department and ESH.
- Non-emergency situations involving minor spills shall be attended to immediately and in accordance with regulatory requirements.
- Contractor shall prepare and submit a detailed written report completely describing the events (i.e., product or chemical name, location, date, time, person(s) involved, estimated quantity spilled, remedial action required, etc.) surrounding the spill. Forward completed report and all other requested documents to ESH and POC.





General Requirements Point of Contact Responsibilities

Point of Contact

- Prior to the commencement of work, review the ESH documentation with the ESH department.
- Inform contractor of any known potential hazard (i.e., fire, explosion, toxic release, asbestos locations, etc.) related to the contractor's work area.
- Ensure ESH regulatory compliance is achieved throughout the execution of the contract.
- Act as a liaison between the contractor, ESH, and area management/supervision.





General Requirements Contractor Responsibilities

Contractor

- Review PM-8013, "Contractor Environment, Safety & Health Handbook" located at: http://www.lockheedmartin.com/wms/findPage.do?dsp=fec&ci=15449&sc=400.
 The prime contractor is responsible for disseminating the requirements in PM-8013, "Contractor Environment, Safety and Health Handbook" and this contractor briefing to their employees and their subcontractors employees.
- The contractor shall not under any circumstances use the company's equipment or property unless stated in the contract and approved by the Facilities Contract POC.
- If large rental equipment (cranes, lifts, etc.) is used by the contractor, contact information (including the name of the company it is rented from and a phone number) shall be available upon request of the company.





Specific Requirements Table of Contents (TOC)

- Blasting
- Compressed Gas Cylinders
- Confined Space Entry
- Electrical Safety
- Excavation/Trenching
- Fall Protection
- Heating Equipment
- High Voltage (>600 Volts)
- Hot Work Welding/Cutting

- Lead
- Lockout / Tagout
- Overhead Work
- Painting, Sandblasting and Pressure
 Washing
- Powder Actuated Tools
- Refrigerant Management
- Scaffolds and Ladders
- Steel Erection





Specific Requirements

Blasting

- Only experienced personnel shall perform blasting operations at the company; qualifications must be submitted in writing to the POC and ESH prior to the commencement of work.
- The company Fire Protection and Security departments must be notified of blasting operations at least 24 hours in advance.

Compressed Gas Cylinders

- Storage of gas cylinder supplies must be arranged through the company Fire Department.
- All welding equipment shall be inspected daily for damage, loose connections, or unsafe conditions.
- Compressed gas cylinders shall be stored and secured in an upright position. Cylinders shall be secured with a noncombustible material such as wire chain or fabric straps.





Specific Requirements

Confined Space Entry

- Cylinders containing oxygen, oxygen displacement, acetylene or other fuel gas shall not be taken into confined spaces.
- A competent person shall be available to assess the inherent dangers in confined space entry prior to entry by all authorized personnel.
- Contractors shall provide their own confined space entry and safety related equipment (i.e., air monitoring equipment, rescue tripod, harness, lanyard, etc.)
- Notify your LM Aero POC as to the location of the confined space(s) and the entry and exit times or any problems encountered.
- Contact your LM POC to obtain the confined space hazard classification and information regarding atmospheric and physical hazards prior to confined space entry.





Specific Requirements Confined Space Common Signage











Specific Requirements Electrical Safety

Electrical Safety

- Extension cords, constructed of metal junction boxes and flexible cords shall not be used.
- Stay clear of "High Voltage" locations unless approved by the POC.
- Ground Fault Circuit Interrupters (GFCI) are required when operating power tools from an electrical cord set.
- Piggy backing of electrical cords is prohibited.





Specific Requirements Electrical Safety Common Violations





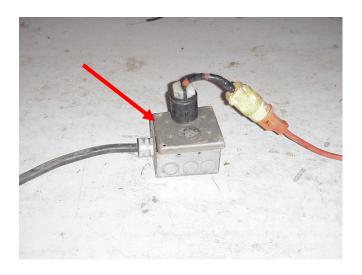
Ground Prong Missing



Tape on Cord Set,



Frayed Cord Set



Improper Installation and Use

Specific Requirements Excavations/Trenching

Excavations / Trenching

- Provide the POC with <u>Certification Excavations/Trenching Training</u> for those employees engaged in, supervising or serving as stand-bys for excavating/trenching operations.
- Before excavating/trenching over four (4) feet in depth, the equipment operator(s) shall obtain a Cobb County Excavation & Trenching Certificate (770-528-2190).
- Prior to commencement of any excavation, pavement sawing, subsurface investigative drilling, or any other activity that may potentially encounter buried or concealed utilities or impair or disrupt the structural integrity of the work site, the contractor shall obtain a company Permit for Drilling and/or Excavating from the POC. Maintain a copy of the permit at the work site at all times.
- Any excavation/trench over four (4) feet in depth, shall be sloped, shored, braced, etc. (according to the soil classification) to prevent hazardous ground movement.
- It will be the responsibility of the contractor in cooperation with the POC to ensure that any excavation or drilling does not go through into an occupied area. The area below drilling or excavation shall be cleared and/or barricaded to prevent injury to personnel.





Excavating / Trenching Common Violations





"Rebar" Not Capped



Not properly sloped, benched, etc.

Go to "Table of Contents"



Soil < 2 ft. from excavation



Not properly sloped, benched, etc.

Specific Requirements Fall Protection



Fall Protection

 Contractors shall provide their own fall protection equipment (i.e., harness, lanyard, vertical / horizontal life lines, etc.). Company owned fall protection equipment or components are not to be used by contractors.





Specific Requirements Fall Protection Common Violations





Non-Compliant Guardrail



No Fall Protection Equipment



Fall Protection Equipment



Safety Chain Not Utilized

Specific Requirements Heating Equipment and High Voltage



Heating Equipment

- Location for all asphalt or pitch kettles shall be approved by the company Fire Department (770-494-3970) prior to the commencement of work.
- A UL approved fire extinguisher of suitable capacity and "charge" shall be available at the job site.
- Kettles, lead pots and/or ovens shall be under constant contractor attendance while in operation and require a "Hot Work" permit from the company Fire Department.

High Voltage

Stay clear of High Voltage (i.e., ≥ 600 Volts) locations - unless approved by the POC.





Specific Requirements "Hot Work" - Welding/Cutting

"Hot Work" - Welding/Cutting

- Welding on an automatic sprinkler system is prohibited.
- Only approved containers and portable tanks shall be used for storage and handling of flammable & combustible liquids.
- A new permit is required at the beginning of each work shift or as the result of changed work location(s) or conditions.
- Once the Hot Work is complete or the permit has expired, call the Fire Department for recheck of the area. After clearance by the Fire Department, original permit will be picked up.
- All hot work shall be properly shielded when performed within or outside any building.





Specific Requirements "Hot Work" - Welding/Cutting (continued)

- "Hot Work" Welding/Cutting (continued)
 - When performing hot work in enclosed areas the contractor is responsible for performing LEL and oxygen measurements prior to and during the operations.
 - Hot work in a paint booth, whether in service or deactivated, shall require the approval of the company Fire Protection Manager or designee.
 - The contractor shall provide fire extinguishers of the type & size required by NFPA 10 at all work sites.
 - Prior to burning/welding on cylinders, tanks, or containers that have previously contained flammable, combustible, or hazardous materials Extract all contents using proper equipment, wash container thoroughly with hot water/steam, dispose of waste material in accordance with regulatory requirements, obtain LEL readings before and during operations to confirm a safe environment exists (25% of LEL or less)
 - All equipment (i.e. tanks, machinery, piping, flammable liquid storage cabinets, etc.) where an ignitable mixture may be present shall be bonded or connected to a ground. Electrically isolated sections of metallic piping or equipment shall be bonded to the other portions of the system or individually grounded to prevent hazardous accumulation of static electricity.





Specific Requirements "Hot Work" Common Violations





Fire Extinguisher Not Charged



Improper Storage (i.e., > ,24 Hours)



Gas Cylinders Not Secured



Inadequate Use of PPE

Hot Work Permit Request

- Requesting Supervisor/Contractor Completes "Hot Work Permit Form"
 - Contact is made to "ABLE" Fire Dispatch by Requestor
 - "ABLE" Fire Dispatch notifies Fire Department Fire Inspector
 - Requestor prepares work area according to:
 - 29 CFR 1910.252
 - 29 CFR 1910.253
 - 29 CFR 1910.254
 - NFPA 51B
 - LM Aero Fire Prevention Standard #10

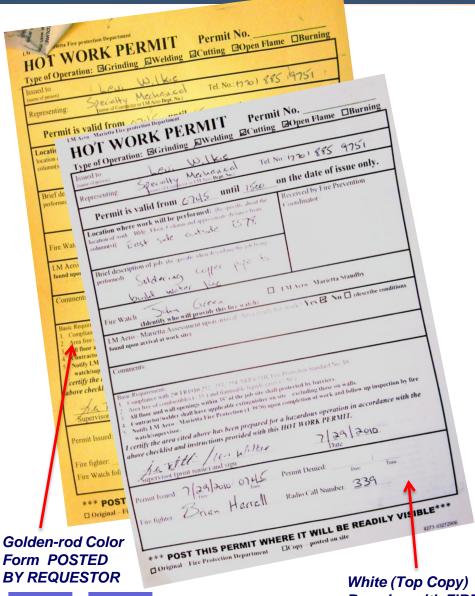






Hot Work Permit Form





• FIRE INSPECTOR:

- Bring Permit Form To Site
- Receive Info. from Requestor
- Annotate Info. onto Form
- Annotate ISSUED Date and Time
- Annotate DENIED Date and Time
- Annotate Radio Call Number
- Annotate Name

REQUESTOR:

- Provide Telephone numbers
- States Duration of "Hot" Work
- Provide Portable Fire Extinguisher
- Provide Fire Curtains / Covers
- Print name and SIGN





Issuing the Hot Work Permit

- LM Security & Emergency Services (SES) "ABLE" Fire Dispatch the Request (approval of Assistant Fire Chief or Captain):
 - Firefighter- Inspector (FF) arrives to site within 15 minutes
 - FF verifies work site compliance with referenced 29 CFR, NFPA and LM Aero Fire Prevention Standard #10
 - FF may "issue" or "refuse" the permit:



- If refusal, Fire Inspector instructs requestor on corrective action(s).
- Contact the Assistant Fire Chief to determine a revisit time.
- Site not prepared after revisit; requestor is prohibited from performing hot work; until completed training session and site properly prepared.





Issuing the Hot Work Permit Cont'd



– <u>Requestor Provides:</u>

- Type of Operation
- Name of Person Permit Issued
- Name of Company Represented
- Start Date
- Location
- Brief Description of Work
- Fire Watch Person
- Fire Extinguishers / Covers
- Marietta Standby Person
 - * The Assistant Fire Chief or Captain will determine if a fire watch is needed.
 - * Whether it is the contractor's fire watch person, LM Maintenance, or a firefighter, they MUST return 30 minutes after the job is completed to inspect the area.

Fire Inspector Provides:

- Verify Type of Operation
- Verify Who Permit Issued To
- Verify Represented Company
- Verify Start Date
- Verify Specific Location
- Verify Brief Description of Work
- Verify Fire Watch Person
- Annotate Marietta Standby
- Annotate Firefighter Standby



Issuing the Hot Work Permit Cont'd



NOTE: REQUESTOR shall be responsible for preparing work area according to the "BASIC REQUIREMENTS" as described on the Permit Form.







<u>NOTE</u>: **FIRE INSPECTOR** shall verify that the work area is ready for "hot" work...and the OPERATION Is SAFE. (Marietta Assessment)





Recovering and Follow up

Completion of "HOT" Work

REQUESTOR:

- (1) Shall Post the "golden-rod" color copy of the hot work form visible in the work area.
- (2) Call SES "ABLE"Fire Dispatch Desk
 requesting that the
 Fire Inspector come
 review the
 completed work
 area and PICK UP
 the hot-work form
 to close out the
 HOT WORK
 PERMIT.





FIRE INSPECTOR:

- (1) Shall receive radio dispatch from SES Fire Dispatch Desk for the PICK UP REQUEST and proceed to check the hot work site for no possible hot spots or fire hazards.
- (2) Return the "goldenrod" colored permit form to the Assistant Fire Chief on Duty; thus discussing and annotating any discrepancies found





Specific Requirements Lead



Lead

- Lead containing materials can be in the form of painted surfaces, solder in electronics and plumbing, etc.
- Prior to commencement of any job that involves lead containing material, the contractor must submit a compliance plan to POC & ESH for review.
- All painted surfaces shall be assumed to contain lead or other hazardous metals. Mechanical disturbance (i.e., grinding, burning/welding, abrasive blasting, needle gunning, etc.) of these surfaces shall be conducted in compliance with applicable OSHA regulations for hazardous metals.

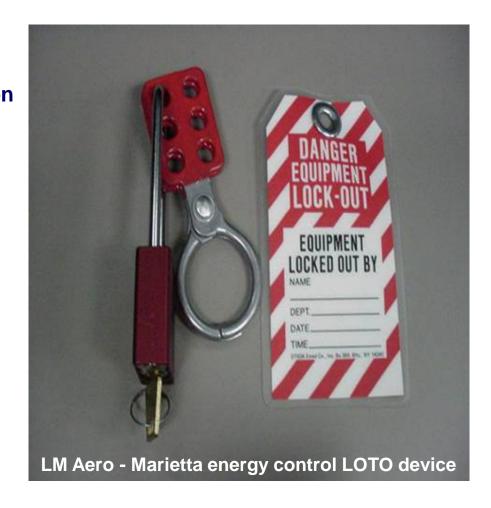




Specific Requirements Lockout/Tagout (LOTO)

Lockout / Tagout (LOTO)

- Provide the POC with documentation
 LOTO Training
 for those employees engaged
 in, supervising or serving as
 stand-bys for LOTO activities.
- Contractor shall notify POC (at least 24 hours in advance)
 of need for system outage of Fire Protection Systems.







Specific Requirements Lockout/Tagout (LOTO) (continued)



- Lockout / Tagout (LOTO) (continued)
 - Upon request provide a copy
 of the LOTO Program to the
 POC that will be utilized
 prior to the commencement of
 work. These requirements are
 also applicable to
 subcontracting companies
 performing LOTO.



 Affected company and contractor employees shall be informed of LOTO activities in their work area.





Specific Requirements Elevated Work



Elevated Work

- Overhead work in areas occupied by company personnel, aircraft or equipment shall be coordinated with the POC.
- The area below overhead work shall be barricaded to eliminate personnel from walking or working below these operations.
- Chutes shall be utilized when material is to be dropped more than 20 feet or outside the walls of the structure to the ground.
- Materials, hand tools, or other equipment shall not be placed or stored, even temporarily, on any roof truss member, catwalk, platform, etc.





Specific Requirements Painting, Sandblasting and Pressure Washing



Painting, Sandblasting and Pressure Washing

- Indoor spray painting is permitted only in authorized paint spray booths/buildings with prior approval from the POC and ESH.
- Outdoor spray or electrostatic painting, sand or other abrasive blasting, and pressure washing is strictly prohibited unless approval is obtained from the POC and ESH prior to the commencement of work.
- Brush and/or roller painting may be accomplished in other buildings or areas where authorized by the POC.
- Contractor must ensure that all applicable OSHA requirements are met regarding potential exposure of their personnel to hazardous materials.
- Painting of building structures (interior or exterior) will be addressed on a case-bycase basis with ESH and POC.
- Contractors involved in on-site painting operations must report paint and associated solvent usage monthly on Facilities Contractor Hazardous Material Usage Log (Form 10977). Provide the completed form to ESH monthly.





Specific Requirements Refrigerant Management



- Refrigerant Tracking & Reporting
 - Form 11880, LM Aero Marietta Site Service Order, is used to record the installation or removal of refrigerants for the entire Marietta Plant.
 - Contractor is required to utilize the LM Aero Marietta designated EPA Certified Refrigerant vendor in handling and recording refrigerant on the site.
 - Form 11880 will be turned in to the Project Manager who will turn them over to the appropriate Site Refrigerant Coordinator.
 - LM Aero Forms Library Form 11880-12062006





Specific Requirements Powder Actuated Tools

Powder Actuated Tools

- Never drive fasteners into hard or brittle materials including, but not limited to, cast iron, glazed tile, surface hardened steel, live rock, face brick or hollow tile. Avoid driving into materials easily penetrated unless such materials are backed by some substance that prevents the driven objects from going through the material and becoming a flying projectile hazard.
- Treat all tools as loaded and always use the proper PPE.
- A competent person shall test these tools each day for proper operation of safety devices. Unsafe tools shall be immediately taken out of service and removed from the work site. Safety devices shall never be bypassed or disabled.
- Powder-actuated tools used by contractors shall meet the requirements of ANSI A10.3.





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- Powder-actuated tools used by contractors shall meet the requirements of ANSI A10.3.





Specific Requirements Scaffolds and Ladders

Scaffolds and Ladders

- Provide the POC with <u>Documentation of Scaffolding Training</u> for those employees engaged in, supervising or serving as stand-bys for scaffolding operations.
- Contractor personnel working at sufficient heights to cause death or injury in case of falls shall use work stands, scaffolding, safety nets, compliant personal fall arrest systems, etc. to safeguard against potential falls.
- Placement of swinging scaffold should be approved by the POC & ESH before using.





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Specific Requirements Scaffolds and Ladders (continued)

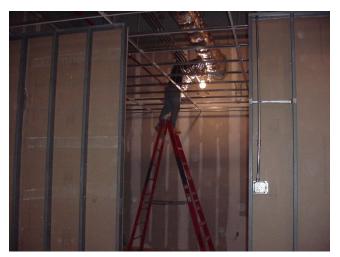
- Scaffolds and Ladders (continued)
 - Ladders shall be securely roped to the structure whenever possible.
 - Ladders shall not be left in an unsecured position at the close of the day's They will be removed to a storage area to prevent unauthorized usage.
 - The top two steps of a stepladder shall not be used as a step. Ladders shall be used only for the purpose for which they were designed (i.e., do not use step ladder as straight ladder).
 - Wood ladders shall not be coated with any opaque covering, except for identification or warning labels, which may only be placed on one face only of a side rail.
 - Do not use metal ladders during electrical work, nor where the user or the ladder could contact exposed energized parts.





Specific Requirements Scaffold and Ladder Common Violations





Use of Top Two Steps



Use of Step Ladder as Straight Ladder



Guardrail Missing



No Fall Protection Equipment





Specific Requirements Steel Erection

Steel Erection

- Fall protection systems (i.e., personal fall arrest system, guardrails, lifelines, etc.) shall be utilized when performing steel erection greater than six feet in height.
- Ironworkers operating as connectors may use safeguards such as safety nets rigged beneath the worker(s) in lieu of "tie-offs". In either event, the ironworker's safety must be provided for.
- Structural steel, poles, pipe, bar stock, and other cylindrical materials, unless racked, shall by stacked and blocked so as to prevent spreading or tilting.





Lockheed Martin Aeronautics Company - Marietta Pre-Work ESH Document Requirements

The following pre-work Environmental, Safety and Health (ESH) documents (forms) must be signed and submitted to the Company Point of Contact prior to the commencement of work:

- Competent Person Designation Prime construction contractors working at LM Aero - Marietta owned or operated facilities are required to have a competent person on-site at all times. The contractor shall submit to the POC a list of "Competent Persons" as defined and required by specific OSHA standards.
- "Contractors Confined Space Information Verification" only operations involving confined space entry.
- "Pollution Prevention / Environmental Impact Reduction Checklist for Contractors" only for those projects involving construction and demolition work.

