

75 AIR BASE WING  
UNITED STATES AIR FORCE  
HILL AIR FORCE BASE, UTAH 84056

## **APPENDIX “C”**

### **SAFETY, FIRE PROTECTION AND HEALTH SPECIFICATION INDUSTRIAL SAFETY REQUIREMENTS**

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PREPARED BY:

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#### **SECTION I - GENERAL REQUIREMENTS**

##### **A. Safety Program Requirements.**

The contractor will implement a safety program plan that ensures protection of Government personnel and property. The program will consist of, as a minimum:

1. Mishap reporting, as defined in paragraph B1 below.
2. A Safety Plan that addresses, as a minimum, the subjects listed in Section II –Specific Requirements, and will be used during the performance of the work described in the contract. The Safety Plan will be approved by 75 ABW/SEG (Safety Office) prior to commencement of any work described in this contract.
3. Routine and recurring surveillance to ensure the safety requirements of this contract are enforced.
4. Competent personnel to provide surveillance of the Safety Plan.

5. Identification of segregated work site locations for operations that cannot be co-mingled with general industrial operations and the process for ACO approval of operations and changes at these specific sites.

6. All contractor personnel shall be trained and qualified to perform their duties safely.

7. The contractor shall include a clause in all subcontracts requiring the subcontractors to comply with the safety provisions of this contract, as applicable.

## **B. Mishap Notification**

1. The contractor shall notify 75 ABW/SEG (801-777-3333), or the Hill AFB Command Post (777-3007) after normal duty hours, and the designated Government Representative (GR), i.e., the ACO, PCO, or DCMA QAR (Quality Assurance Representative) within one (1) hour of all mishaps or incidents at or exceeding \$2,000 (material + labor) in damage to DOD property entrusted by this contract, even if the government is wholly or partially reimbursed. This notification requirement shall also include physiological mishaps/incidents. A written or email copy of the mishap/incident notification shall be sent within three calendar days to the GR, who will forward it to 75 ABW/SEG. For information not available at the time of initial notification, the contractor shall provide the remaining information no later than 20 calendar days after the mishap, unless extended by the ACO.

Mishap notifications shall contain, as a minimum, the following information:

- (a) Contract, Contract Number, Name and Title of Person(s) Reporting
- (b) Date, Time and exact location of accident/incident
- (c) Brief Narrative of accident/incident (Events leading to accident/incident)
- (d) Cause of accident/incident, if known
- (e) Estimated cost of accident/incident (material and labor to repair/replace)
- (f) Nomenclature of equipment and personnel involved in accident/incident
- (g) Corrective actions (taken or proposed)
- (h) Other pertinent information

2. The contractor shall cooperate with any and all government mishap investigations. Additionally if requested by government personnel or designated government representative (GR), i.e., the ACO, PCO, or DCMA QAR (Quality Assurance Representative), the contractor shall immediately secure the mishap scene/damaged property and impound pertinent maintenance and training records, until released by safety investigators.

3. The contractor shall provide copies of contractor data related to mishaps, such as contractor analyses, test reports, summaries of investigations, etc. as necessary to support the government investigation.

4. The contractor shall support and comply with the safety investigation and reporting requirements of AFI 91-204, Chapters 1 – 7.

**C. CONTRACTOR ON-SITE SAFETY BOARD:**

The Contractor shall erect and maintain a safety and health bulletin board in a commonly accessed area in clear view of the on-site workers. The bulletin board shall be continually maintained and updated and placed in a location that is protected against the elements and unauthorized removal. It shall contain, at minimum, the following safety and health information:

- a. A map denoting the route to the nearest emergency care Facility;
- b. Emergency phone numbers; (911, Police, Fire, Environmental, others as applicable)
- c. A copy of the most up-to-date Accident Prevention Plan (APP) shall be mounted on or adjacent to the bulletin board, or a notice on the bulletin board shall state the location of the APP. The location of the APP shall be accessible on the site by all workers;
- d. A copy of the current Activity Hazard Analysis/analyses (AHA) shall be mounted on or adjacent to the bulletin board, or a notice on the bulletin board should state the location of the AHAs. The location of the AHAs shall be accessible on the site by all workers;
- e. The Occupational Safety and Health Administration (OSHA) Form 300A, Summary of Work Related Injuries and Illnesses, shall be posted, in accordance with OSHA requirements, from February 1 to April 30 of the year following the issuance of this form. It shall be mounted on or adjacent to the bulletin board, which shall be accessible on the site by all workers;
- f. A copy of the Safety and Occupational Health deficiency tracking log shall be mounted on or be adjacent to the bulletin board or a notice on the bulletin board shall state the location where it may be accessed by all workers upon request;
- g. Safety and Health promotional posters;
- h. Date of last lost workday injury;
- i. OSHA Safety and Health Poster;
- j. A copy of the hazardous material inventory, identification of use, approximate quantities and site map detailing location.

**Post Contact Information on Board (as applicable)**

- 1. Contract Number
- 2. Prime Contractor name, Prime Contractor's POC name and phone number

3. Sub-Contractor name, Sub Contractor's POC name and phone number
4. Government Sponsor name, and Government Sponsor's, POC Name and Phone number

#### **D. General Safety Requirements:**

If the safety plan is modified, the contractor shall submit the proposed modification, in writing, to the Contract Administration Office safety representative.

The contractor is solely responsible for compliance with all federal, state and local laws, the Occupational, Safety and Health Act (OSHA) (Public Law 91-596) and the resulting standards, **OSHA Standards 29 CFR 1910 and 1926**, as applicable, and the protection of their employees. Additionally, the contractor is responsible for the safety and health of all subcontractor employees.

The contractor shall ensure assigned personnel are adequately trained and qualified for the task being performed. Brief all personnel on the hazards involved with operations and applicable precautions to be taken. Should unidentified hazards arise, cease operations until actions are taken to eliminate or mitigate hazards to safe levels.

Compliance with OSHA and other applicable laws and regulations for the protection of contractor employees is exclusively the obligation of the contractor. **Note:** Air Force Occupational Safety and Health Standards (AFOSH STD) are annotated because many of the Air Force Standards exceed the OSHA standard criteria. If a conflict is noted, the most stringent requirement takes precedence. The government shall assume no liability or responsibility for the contractor's compliance or non-compliance with such requirements. The contractor shall furnish to each of his/her employees a place of employment, which is free from recognized hazards. The contractor shall brief his/her employees on the safety requirements of this contract and on hazards associated with prescribed tasks. The contractor is responsible for compliance with OSHA Public Law and the resultant standards identified within. In addition, the contractor is required to flow down the safety requirements/specification to all subcontractors. This applies to Federal Acquisition Regulation (FAR) 12 commercial acquisitions as well. This contract shall in no way require persons to work in surroundings or under working conditions which are unsafe or dangerous to their health. The contractor must coordinate and perform work so as not to impact the safety of government employees or cause damage to government property. This requires providing personnel with protective equipment and associated safety equipment as may be necessary. The contractor must also protect personnel from hazards generated by the work. If the contractor employs BILINGUAL speaking employees, they must post bilingual signs and have written procedures for specific tasks in applicable languages.

## **SECTION II – SPECIFIC REQUIREMENTS**

The contractor's prepared Safety Plan shall:

- Demonstrate a management commitment to employee safety and health
- Identify applicable rules and regulations
- Identify the roles and responsibilities of Management, Supervisors, Employees and Safety Coordinator
- Identify work to be performed and location of expected operations
- Provide a description of safety program, safety monitoring responsibilities, organizational structure, and contact information for on-site personnel
- Include a work hazard analysis of the worksite and operations to be performed to include baseline hazard identification and required control measures
- Identify employee safety and health training requirements and the documentation process
- Include emergency response plans and procedures that relate to protection of government personnel and property
- Include a workplace inspection frequency, to include the identity of the individual responsible for conducting the inspection
- Include hazard reporting procedures and identify individual(s) responsible for the correcting identified hazards
- Identify first aid and injury procedures
- Identify procedures for accident reporting and investigation
- Identify the process for tracking controlled hazards in contractors work area

The contractor shall ensure that each element identified below is adequately addressed in detail in the safety and health plan:

**PEDESTRIAN CROSSWALKS:** All contractor personnel are required to use the closest crosswalk, or traffic controlled intersection when crossing the road. Pedestrians must look both ways to ensure the coast is clear before stepping out into the crosswalk. Pedestrians **DO NOT** have the right of way unless they are already in the crosswalk. Contractor vehicle operators have the same responsibilities as pedestrians, to share the road and mutually observe and yield to pedestrians.

**MOTOR VEHICLES:** Contractor shall comply with the standards in: DoD Directive 5525.4, *Enforcement of State Traffic Laws on DoD Installations*", DODI 6055.4, *DoD Traffic Safety Program*, AFI 91-207, *USAF Traffic Safety Program*, and AFI 91-207 AFMC SUP1, *The US Air Force Traffic Safety Program*. Each applies to all persons at any time on an Air Force Installation and includes all leased, owned, or privatized property including housing areas. In addition: AFI 13-213, *Airfield Management*, applies to all contractors, sub-contractors, vendors, commercial delivery companies, and all other private business vehicles who operate anywhere on Hill Air Force Base, including the airfield (to include the industrial areas and any buildings or hangars located upon the airfield) in support of their mission.

**WALKING – WORKING SURFACES** Contractor shall comply with the standards in 29 CFR 1910 Subpart D and Life Safety Code . All interior walking and working surfaces which are part of the means of egress shall **remain** clear at all times and comply with the requirements

of National Fire Protection Association (NFPA) 101, *Life Safety Code*. Floors shall be kept in good condition and free of defects that can endanger workers or interfere with the handling of materials. Housekeeping – methods and controls are in place to minimize tripping hazards, the accumulation of flammable/combustible materials, etc. Portable metal ladders – methods and controls are in place to ensure inspection and safe use. Open-sided floors/platforms/runways must be protected and not left uncovered to prevent injury.

**PERSONAL PROTECTIVE EQUIPMENT** Contractor shall comply with the standards in 29 CFR 1910.132, 134, 136 Subpart I and 29 CFR 1926, 28, 95, 100, 101, 102, & 951. Personnel protective equipment is required to be worn when employees are exposed to a potential hazard, working overhead, falling objects, etc. Contractor's Safety Plan shall also address:

- Eye and face protection
- Head protection
- Foot Protection

**HAZARDOUS COMMUNICATIONS** Contractor shall comply with the standards in 29 CFR 1910.1200. Contractor's Safety Plan shall also address:

- Written Program - list of hazardous chemicals, methods used to inform employees of the hazards, precautionary measures
- Identity of the hazardous chemical(s) and labeling system
- Safety data sheets and location
- Employee information and training

**HAZARDOUS MATERIALS:** Contractor shall comply with the standards in 29 CFR 1910.120, Subpart H – *Hazardous waste operations and emergency response*. When handling the hazardous material the following must be accomplished: Compressed gases – training, handling, storage, use, and PPE; flammable and combustible liquids – training, handling, storage use, and PPE. Contractor's Safety Plan shall also address:

- Training, handling, storage, use and PPE
- Explosives and blasting agents
- Dipping and coating operations

**HAZARDOUS WASTE OPERATIONS:** Contractor shall comply with the standards in 29 CFR 1910.120 and 29 CFR 1926.65. Contractor's Safety Plan shall also address:

- Emergency Response Plan
- Personal Protective Equipment
- Medical Surveillance
- Health and Safety Plan (HASP– required elements have been incorporated)
- Employee Training

**TOXIC AND HAZARDOUS SUBSTANCES:** Contractor shall comply with the standards in 29 CFR 1910 Subpart Z and 29 CFR 1926 Subpart Z. Contractor's Safety Plan shall also address:-A section related to working with toxic and hazardous substances, such as asbestos, benzene, lead, and styrene, where the following areas are addressed:

- Threshold Limit Values (TLV)-Exposure monitoring

- Medical surveillance
- Work practices
- Engineering controls
- Respiratory protection
- Protective clothing (PPE)

**SYSTEM MODIFICATION-WHICH ALTERS FORM, FIT OR FUNCTION:** Contractor shall comply with latest version of Mil Standard 882, *Standard Practice for System Safety*, and AFI 91-202, *The US Air Force Mishap Prevention Program*, for system modifications, which alter form, fit, or function.

**ELECTRICAL:** Contractor shall comply with the standards in 29 CFR 1910 Subpart S, 29 CFR 1926 Subpart K, AFI 91-203, *Air Force Consolidated Occupational Safety Instruction* and NFPA 70. All electrical wiring must be IAW National Electrical Code (NEC) 70. Electrical wiring and equipment shall be a type listed by UL or another recognized listing agent. Contractor's Safety Plan shall also address:

- Selection and use of work practices
- Training (basic electrical safety knowledge)
- Use of equipment (handling, visual inspection, rating of equipment)
- GFCI Protection for outside contractor drops and wet/damp areas
- Arc Flash

**FIRE PROTECTION FOR FACILITIES:** Contractor's procedures shall comply with NFPA 10, *Portable Fire Extinguishers*, 2007 Edition; NFPA 13, *Installation of Sprinkler Systems*, 2007 Edition; NFPA 33, *Spray Application Using Flammable or Combustible Materials*, 2007 Edition; NFPA 70, *National Electrical Code*, 2008 Edition; NFPA 72, *National Fire Alarm Code*, 2007 Edition; NFPA 91, *Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids*, 2004 Edition.

**HAZARDOUS ENERGY CONTROL PROGRAM ELEMENTS (LOCKOUT-TAGOUT)** Contractor shall comply with the standards [29 CFR 1910 Subpart S](#), [29 CFR 1926 Subpart K](#) and AFI 91-203, and Air Force Consolidated Occupational Safety Instruction. Contractor's Safety Plan should also address:

- Purpose of hazardous energy control program
- Employee training                      -Lockout/tagout procedures
- Restoring equipment to normal operations
- Removal of locks and tags      -Periodic inspections
- Portable Fire Extinguishers – proper type, inspection, maintenance, testing, and training

**MATERIALS HANDLING AND STORAGE:** Contractor shall comply with the standards in 29 CFR 1926.250, 953, 957 and 29 CFR 1910.101, Subparts F, H & N; and 29 CFR 1910.178, *Powered Industrial Truck*. Contractor's Safety Plan shall also address:

- Storage and handling of materials
- Disposal of trash from elevations
- Personnel lifting techniques--proper storage to prevent shifting, for stability, etc.

- Rigging (requirements, inspection, components, and qualifications)
- Equipment (use in handling materials)
- Industrial trucks (training, inspection, maintenance, and safe use)

**CONFINED SPACE PROGRAM ELEMENTS:** Contractor shall comply with the standards in 29 CFR 1910.120, 146 and 29 CFR 1926.21 and 353 and AFI 91-203, Air Force Consolidated Occupational Safety Instruction. A confined space must meet the following three criteria:

- (1) Is large enough and so configured that an employee can bodily enter and perform assigned work; and
- (2) has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry.); and
- (3) is not designed for continuous employee occupancy. **Examples:** underground vaults, tanks, storage bins, manholes, pits, silos, process vessels, and pipelines.

Contractor's Safety Plan shall address:

- Hazards of confined space
- Permit and Non-permit confined spaces
- Responsibilities of management, entry supervisor, authorized entrant, and authorized attendants
- Training requirements
- Permit handling and approval
- Emergency and rescue plans
- Testing and monitoring requirements
- Special hazards
- Posting requirements (applicable to subcontractor operated facilities)

**GENERAL ENVIRONMENTAL CONTROLS:** Contractor shall comply with the standards in 29 CFR 1910 Subpart G, 29 CFR 1910 Subpart J and 29 CFR 1926 Subpart D. Contractor's Safety Plan shall also address:

- Sanitation-toilet and washing facilities
- Accident prevention signs and tags

**RESPIRATORY PROTECTION PROGRAM ELEMENTS:** Contractor shall comply with the standards in 29 CFR 1910.134 and 29 CFR 1926.134. Respirators are required to be worn if employees are exposed to inhalation hazard. Contractor's Safety Plan shall also address:

- Training
- Medical evaluation
- Fit tests
- Selection of respiratory equipment
- Storage of respiratory equipment
- Pre-use checks



**HEARING CONSERVATION PROGRAM ELEMENTS:** Contractor shall comply with the standards in 29 CFR 1910.95 and 29 CFR 1926.52. ***NOTE: Noise exposures are based on ACGIH guidelines of 85 dB TWA.*** Contractor's Safety Plan shall also address:

- Monitoring (survey of noise producing equipment)
- Audiometric testing
- Hearing Protectors
- Training
- Recordkeeping/Access to information and training material

**MEDICAL AND FIRST AID:** Contractor shall comply with the standards in 29 CFR 1910 Subpart K and 29 CFR 1926 Subpart C. Contractor's Safety Plan shall also address:

- Adequate first aid supplies
- Trained employee to render first aid
- Recordkeeping
- Reporting and investigating accidents/incidents
- Off-site physician(s)
- Maintenance of and employee access to exposure monitoring data and medical records

**EXPLOSIVE SAFETY REQUIREMENTS:** Contractor shall comply with the standards in AFMAN(I) 24-204, *Preparing Hazardous Materials for Military Air Shipments*, and dash 11 series TOs; DoDI 4145.26M, *DoD Contractors' Safety Requirements for Ammunition and Explosives*, DoD 4145.19-R-1, *Storage and Materials Handling*, AFJMAN 23-210, *Joint Service Manual for Storage and Material Handling*, TO 11A-1-33, *Handling and Maintenance of Explosives-Loaded Aircraft*, TO 11A-1-46, *Fire Fighting Guidance, Transportation, and Storage*, for all handling of all explosive devices to be removed, installed, stored or transported, AFMAN 91-201, *Explosives Safety Standards*.

**FOREIGN OBJECT DAMAGE (FOD) Awareness, Prevention and Responsibilities.**

*Contractor shall comply with the standards in:* AFI 21-101 AFMC SUP 1, *Aircraft and Equipment Maintenance Management*, **National** Aerospace Standard (NAS) 412, *Foreign Object Damage/Foreign Object Debris (FOD) Prevention Program*, AFI 91-203, Air Force Consolidated Occupational Safety Instruction.

The FOD program must be integrated into the day-to-day operations to reduce/eliminate FOD incidents. Programs will include covering waste dumpsters, waste hauling trucks, barriers in place to stop migrating FOD from dirt and gravel piles, and end of shift or daily clean-up. The contractor will brief their personnel at least weekly on any FOD requirements. All contractors, subcontractors performing maintenance in a FOD-potential area will receive and have documented initial FOD Awareness and Prevention training. All vehicle operators are responsible for performing a Foreign Object (FO) inspection on their vehicles including all towed equipment, vehicle tires and open cargo areas of vehicles prior to entering the marked runway, taxiway, flight line, and aircraft parking ramps and other areas as directed by the Installation FOD Awareness and Prevention Officer. All "open-air" delivery vehicles must be free of loose items/debris that could potentially fall from the vehicle and cause a FOD hazard. The cargo beds of pickups truck must be clean or covered prior to entering the airfield. Vehicles will be subject to inspection and denied entry if found unacceptable. Contractors and

site/operations evaluators will ensure tools; equipment, rags, residue and hardware are properly stored and accounted for. **“Clean as you go” methods are desired.**

**PROTECTIVE BARRIERS/WARNING SIGNS:** *Contractor shall comply with the standards in: 29 CFR 1926, Subpart G, Sections 200, 201 and 202 and EM 385-1-1, US Army Corps of Engineers Manual, Safety and Health Requirements.* Barricades must be provided by the contractor in an area for excavation, open manholes, overhead work, or the protection of personnel from hazardous operations, moving equipment or cranes. Barricades are required to cover holes in the ground properly (e.g.: rigid/protective – 200 pound load capacity for fall protection, Red & White rope for warning barricades. The contractor must barricade the area for overhead work to protect personnel from hazardous operations. For crane operations, the barricaded area must encompass one and one half times the longest extended length of the erected boom. Barricades must be erected before the work begins. If the barricades are in a roadway or walkway, blinking lights must be used after dark. When the work is complete, the barricades must be removed from the job site. Kerosene lamps and open flame pots shall not be used for or with warning signs or devices.

**EXCAVATIONS:** *Contractor shall comply with the standards in 29 CFR 1926.651 and Subpart P, Appendix B & C and EM 385-1-1, US Army Corps of Engineers Manual, Safety and Health Requirements, 3 Nov 03 Section 25.* In all excavations where employees are exposed to danger from moving ground, protection shall be provided by means of a shoring system, sloping of the ground or some other equivalent means. All trenches over five feet deep in either hard and compact or soft and unstable soil shall be sloped, shored, sheeted/braced or otherwise supported. Trenches less than five feet in depth shall also be effectively protected when hazardous ground movement may be expected.

**SCAFFOLDING:** *Contractor shall comply with the standards in: 29 CFR 1910 Subpart D and 29 CFR 1926 Subpart L.* Scaffolds are used for persons engaged in work that cannot be done safely from the ground or from solid construction. A competent and qualified person must be on site to make decisions on scaffolding operations. Contractor’s Safety Plan shall also address:

- Safety requirements for construction (as applicable), operation, maintenance, railings, toeboards, inspections, fall protection, and use
- Rails
- Bracing
- Toeboards
- Fall Protection

**POWERED PLATFORMS, MANLIFTS AND VEHICLE-MOUNTED WORK**

**PLATFORMS:** *Contractor shall comply with the standards in 29 CFR 1910 Subpart F.* Manlifts are used for the purpose of allowing workers to perform duties at elevated levels. A competent and qualified person must be onsite to make decisions on manlift operations.

**Note: Fall restraint is the preferred method for fall protection.** Contractor’s Safety Plan shall also address:

- Personal Fall Arrest Systems (PFAS) {body harness, lanyard, lifeline, etc., inspections}
- Manlift – maintenance, inspection, and operation

**AERIAL LIFT EQUIPMENT:** Contractor shall comply with the standards in 29 CFR 1910.66 Subpart F, American National Standards Institute (ANSI) ANSI 92.2, ANSI 92.5, ANSI 92.6, and AFI 91-203, Air Force Consolidated Occupational Safety Instruction. Aerial lifts have inherent risks associated with their use. The Air Force has established procedures to ensure only trained and qualified personnel are operating aerial lifts. In the past, the lifts were identified that did not meet regulatory safety requirements and foreign objects (FO) were found on the equipment. Based on this negative trend and a fatal mishap in years past, the following policies, procedures and processes will be adhered to when aerial lifts are used to support a contractor mission:

(1) Aerial devices shall include the following types of vehicle mounted aerial devices used to elevate personnel to job sites above ground:

- Extendible boom platforms
- Aerial ladders
- Articulating boom platforms
- Vertical towers and a combination of any of the above

(2) Aerial equipment may be made of metal, wood, fiberglass reinforced plastic, or other material; may be powered or manually operated, and are deemed to be aerial lifts whether or not they are capable of rotating about a substantially vertical axis.

**CONTRACTOR AERIAL LIFT DEVICES:** Contractors shall comply with the standards in 29 CFR 1910.67, 29 CFR 1926.453, and ANSI 92.2, *Standards for "Vehicle Mounted Elevating and Rotating Work Platforms*. Contractors, subcontractors, vendors, commercial delivery companies, and all other private business vehicles will comply with the following requirements while operating any type of aerial lift as described above, while on a DOD installation. This includes contractor owned equipment, leased or rented equipment acquired to support the contractual activities. Unless otherwise provided in this section, aerial devices (aerial lifts) acquired on or after July 1, 1975, shall be designed and constructed in conformance with the applicable requirements of the American National Standards for "Vehicle Mounted Elevating and Rotating Work Platforms, ANSI A92.2 - 1969, including **appendix** which is incorporated by reference as specified in 29 CFR 1910.66. Aerial lifts acquired for use before July 1, 1975 which do not meet the requirements of ANSI A92.2 - 1969, may not be used after July 1, 1976, unless they shall have been modified so as to conform to the applicable design and construction requirements of ANSI A92.2 - 1969. Prior to bringing an aerial device on a DoD installation, the contractor will ensure: Aerial devices meet the above 29 CFR 1910.66 and 1910.67 requirements. Aerial devices meet certification and classification for the designated work area. Aerial devices are serviceable, and all safety devices, warning devices, and interlocks operate. Aerial devices (regardless of guardrail, mid-rail or toe board configuration) will have fall protection attach points installed. Aerial devices will contain the manufacturer's manual and operator's safety manual. The applicable ANSI Standard will satisfy the requirement for a safety manual. The contractor and operating employee will be trained and certified on the leased/rental device and provide visual certification upon request. Aerial lifts will not be used to deliver employees to higher levels unless so certified.

**PERSONAL PROTECTIVE EQUIPMENT FOR AERIAL LIFT DEVICES:** To ensure compliance with 29 CFR 1910.66, Subpart F, Appendix C, 29 CFR 1910.133, *Personal*

*Protective Equipment, 29CFR 1926.453, Aerial Lifts, 29CFR 1926.104, Safety belts, Lifelines & Lanyards, and 29CFR 1926.501, Duty to have Fall Protection*; the contractor will ensure the following: Contractor employees will use fall restraint on all aerial lift devices unless so certified for fall arrest by the manufacturer. Fall restraint is the preferred standard for DOD installation operations with aerial devices. Fall restraint will consist of a harness (no body belts allowed) and a lanyard shortened to the minimum length to allow work but not allow the employee to leave the platform cage or stand on toe-boards or mid-rails. Energy absorbing lanyards are not authorized for fall restraint. Lanyards will have self-closing; self-locking keepers which remain closed and locked until unlocked and pressed open for connection or disconnection. Contractor employees operating, observing and spotting for aerial devices will wear approved hard hats.

**GENERAL FALL PROTECTION:** Contractor shall comply with the standards in: 29 CFR 1910.66, Appendix C, Subpart F and 29 CFR 1926.500-502, Subpart M – If a person can fall 4 feet or more; fall protection must be provided to prevent injury. Contractor’s Safety Plan shall also address:

- Guardrail System (height and load rating)
- Safety Net System (location, inspection, and testing)
- Personal Fall Arrest System (PFAS)- life line, lanyard, component strength, and anchorage
- Fall Protection Plan
- Qualifications of persons

**CRANES, DERRICKS, HOISTS, ELEVATORS, AND CONVEYORS:** Contractor shall comply with the standards in: 29 CFR 1926 Subpart N – Cranes are used to move material, simplify materials handling and heavy or bulky supplies and equipment. Load capacities and operating speeds must be posted; special hazard warnings and instructions – visible to operator; hand signals – per ANSI standard for type of crane in use and inspections are performed by a competent person. Personnel must be trained/qualified/certified by a nationally recognized crane certification league to operate these items.

**WORK STANDS/PLATFORMS:** Contractor’s procedures shall comply with AFI 91-203, Air Force Consolidated Occupational Safety Instruction and 35A4 series T.O.s -Ground Support Equipment (various maintenance stands).

**AIRCRAFT MAINTENANCE:** Contractor shall comply with the standards in AFI 91-203, Air Force Consolidated Occupational Safety Instruction, *applicable Dash 2 Series Technical Orders*, and AFI 21-101, *Aircraft and Equipment Maintenance Management*.

**LIQUID GASEOUS OXYGEN/CRYOGENICS:** Contractor’s procedures shall comply with AFI 91-203, Air Force Consolidated Occupational Safety Instruction T.O. 00-25-172, *Ground Servicing of Aircraft and Static Grounding/Bonding*, and NFPA 51, *Design & Installation of Oxygen–Fuel Gas Systems for Welding, Cutting, and Allied Processes*, 2007 Edition, Chap 4.

**AIRCRAFT JACKING OPERATIONS:** Contractor’s procedures shall comply with site specific applicable aircraft T.O.s and 35A2 series Technical Orders (various jacking equipment), and AFI 91-203, Air Force Consolidated Occupational Safety Instruction.

**FUEL TANK /FUEL CELL REPAIR:** Fuel tank/cell work will be accomplished IAW the requirements in T.O. 1-1-3, *Inspection and Repair of Aircraft Integral tanks and Fuel Cells*, Air Force Civil Engineer Support Agency (AFCESA) Engineering Technical Letters (ETL) listed in PART III, and list specific applicable Aircraft Technical Orders.

**FUELING/DEFUELING OPERATIONS:** All fueling/defueling operations will be in compliance with T.O. 00-25-172, *Ground Servicing of Aircraft and Static Grounding/Bonding*, T.O. 1-1-3, *Inspection and Repair of Aircraft Integral Tanks and Fuel Cells*, Air Force Civil Engineer Support Agency (AFCESA) Engineering Technical letters (ETL) listed in PART III, and list specific applicable Aircraft Technical Orders.

**HANGERING OF FUELED AIRCRAFT:** Aircraft hangars where fueled aircraft will be stored must meet the facility requirements in NFPA 70, *National Electrical Code*, 2008 Edition, NFPA 409, *Aircraft Hangars*, 2004 Edition; NFPA 410, *Aircraft Maintenance*, 2004 Edition, and T.O. 1-1-3, *Inspection and Repair of Aircraft Integral Tanks and Fuel Cells*, and Air Force Civil Engineer Support Agency (AFCESA) Engineering Technical Letters (ETL) listed in PART III.

**REMOVE/INSTALL AIRCRAFT ENGINES:** Contractor shall comply with the procedures in T.O. 2J-1-18, *Preparation for Shipment and Storage of Gas Turbine Engines*, 30 Jun 02 and (list applicable Aircraft Handbooks).

**ON-AIRCRAFT ENGINE OPERATIONS/ENGINE RUNS:** Contractor's procedures must comply with AFI 11-218, *Aircraft Operations and Movement on the Ground*, Chap 1, Sect 1D, 1, site specific applicable aircraft T.O.s and AFI 91-203, Air Force Consolidated Occupational Safety Instruction.

**AIRCRAFT TOWING/PARKING/MOORING:** Towing, parking and mooring procedures must comply with AFI 11-218, *Aircraft Operations and Movement on the Ground*, Chap 1, Sect 1D, AFI 91-203, Air Force Consolidated Occupational Safety Instruction, Unified Facility Code (UFC260-1, *Airfield and heliport Planning and Design*, site specific applicable aircraft Technical Orders.

**SAFING/EGRESS/ESCAPE SYSTEMS:** Contractor shall comply with the standards in T.O. 11A-1-33, *Handling and Maintenance of Explosives-Loaded Aircraft*, and site specific applicable aircraft Technical Orders.

**ELECTRONIC/ELECTROSTATIC DISCHARGE SENSITIVE COMPONENTS:** An electrostatic discharge program, when applicable, shall be implemented according to MIL-HDBK-263B, *Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment (Excluding Electrically Initiated Explosive Devices)*, MIL-STD-1686C, *Electrostatic Discharge Control Program for Protection of Electrical and Electronic Parts, Assemblies and Equipment (Excluding Electrically Initiated Explosive Devices)*, 25 Oct 95 and T.O. 00-25-234, *General Shop Practice Requirements for the Repair, Maintenance and Test of Electrical Equipment*, or the commercial standard ANSI/ESD S20.20, *Electrostatic Discharge Control Program-Protection of Electrical & Electronic Parts, Assemblies and Equipment*.

**CLEANING/CORROSION CONTROL FOR AVIONICS AND ELECTRONICS:**

Corrosion removal and treatment shall be conducted according to TO 1-1-689-3, *Cleaning and Corrosion Control Volume III Avionics and Electronics*, 1 Mar 05; and T.O. 1-1-689-5, *Cleaning and Corrosion Control Volume V Consumable Materials and Equipment for Avionics*.

**CLEANING/CORROSION CONTROL OF AIRCRAFT:** Corrosion removal and treatment shall be conducted according to T.O. 1-1-691, *Cleaning and Corrosion Prevention and Control, Aerospace and Non-Aerospace Equipment*.

**PAINTING & PAINT REMOVAL:** Painting and paint removal shall be accomplished according to T.O. 1-1-8 *Application and Removal of Organic Coatings, Aerospace and Non-aerospace Equipment*, NFPA 33, *Spray Application Using Flammable or Combustible Materials*, 2007 Edition and NFPA 410, *Aircraft Maintenance*, 2004 Edition.

**AIRCRAFT PAINTING & PAINT REMOVAL OPERATIONS:** Contractor shall comply with the standards in T.O. 1-1-8, *Application and Removal of Organic Coatings, Aerospace and Non-aerospace Equipment*, NFPA 33, *Spray Application Using Flammable or Combustible Materials*, NFPA 70, *National Electrical Code*, NFPA 91, *Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids*, 2004 Edition; NFPA 409, *Aircraft Hangars*, NFPA 410, *Aircraft Maintenance*, and (cite specific applicable aircraft T.O.s)

**HOUSEKEEPING:** Housekeeping shall be conducted according to the requirements in OSHA Standard 29 CFR 1910.141. ***CLEAN AS YOU GO*** will be enforced. Refuse, trash, and debris will be collected daily and not left on site to prevent hazards during high winds and inclement weather.

**SOLDERING:** Soldering shall be conducted in accordance with the requirements in T.O. 00-25-234, *General Shop Practice Requirements for the Repair, Maintenance and Test of Electrical Equipment*, and 29 CFR 1910.253.

**GROUNDING, BONDING OF AIRCRAFT & AVIONICS EQUIPMENT:** Contractor shall comply with the standards for grounding and bonding in accordance with TO 00-25-172, *Ground Servicing of Aircraft and Static Grounding/Bonding*, for aircraft repair and TO 00-25-234, *General Shop Practice Requirements for the Repair, Maintenance and Test of Electrical Equipment*, for avionics equipment.

**HAND AND PORTABLE POWERED TOOLS AND OTHER HAND-HELD**

**EQUIPMENT:** Contractor shall comply with the standards in 29 CFR 1910 Subpart P and 29 CFR 1926 Subpart I. Contractor's Safety Plan shall also address:

- Inspection
- Proper use
- Guarding
- Maintenance
- Control of rotating parts, flying chips, and sparks

**WELDING, CUTTING AND BRAZING:** Contractor shall comply with the standards in: 29 CFR 1910.251 thru 255 and 29 CFR 1926.102(b), 153, 453(b), AFI 91-203, Air Force

Consolidated Occupational Safety Instruction, NFPA 410 *Aircraft Maintenance*, and NFPA 51B, *Fire Prevention During Welding, Cutting, and Other Hot Work*, Contractor's Safety Plan shall also address:

- Welding Permit Required from Fire Department
- Training/worker knowledge
- Equipment inspections, service, and use
- Fire protection and prevention
- Protective equipment & welding shields
- Health protection (PPE)
- Ventilation
- Cylinders and containers
- Cylinder storage