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Maintenance

EGRESS SYSTEMS MAINTENANCE/SAFETY

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This instruction implements AFD 21-1, *Air Force Maintenance Management*. It works in conjunction with AFI 21-112, *Aircraft Egress and Escape Systems*, and AFMAN 91-201, *Explosive Safety*. It defines responsibilities and establishes procedures to ensure safe storage, handling, inspection, and maintenance of F-16C/D and A/OA-10 egress systems and emergency procedures for incidents involving explosives.

SUMMARY OF REVISIONS

Changed the emergency procedures (paragraph 9). New or revised material is indicated by a bar (|).

1. Responsibilities:

- 1.1. Unit Commander. Ensures Egress personnel are properly trained and have adequate facilities for safe egress maintenance.
- 1.2. Section Chief. Responsible for inspections and maintenance performed on aircrew egress systems. Manages and ensures the accuracy, and timely updates of the Time Change Inventory (TCI) data base.

2. Facility:

- 2.1. Explosive Limits. Net Explosive Weight (NEW) will not exceed that authorized on the AF Form 2047 Explosives Facility License (100 pounds NEW class 1.3/1.4). Explosives installed on ejection seat assemblies do not count against the NEW limit.
- 2.2. All maintenance actions on explosive items will require a minimum of two personnel. Maximum number of personnel allowed in the immediate area will not exceed the limits established on AF Form 2047, Explosive Facility License.

2.3. Smoking and use of spark producing devices will not be allowed in the explosive storage area, designated maintenance area, or egress vehicle.

2.4. Explosive Room Control Procedures:

2.4.1. The storage locker door will remain locked during normal duty hours.

2.4.2. Only egress section personnel will be authorized unescorted entrance to the explosive storage/work area.

2.4.3. The shift supervisor will conduct and document a daily/shift inventory of explosives.

2.4.4. When explosives are present in the explosive storage room or workroom, appropriate fire symbols will be posted at all entrances to the effected room. When fire symbols change, notify the Fire Department.

2.4.5. Upon receipt of explosive items, the explosive storage room inventory board will be updated. Information must include aircraft serial number, noun and date.

3. Location of Operations:

3.1. Seat and canopy removal or installation, with the Lorain crane, will only be performed in third generation shelters #1-16, Able 6 right and Able 5 left, in hangars to include the 31st, phase, corrosion, fuel cell, weapons load training, and the hush house. The Utility crane can be used in all shelters and hangars. Seat and canopy maintenance will not be performed in the flow through area. Seats and canopies may be removed outside only when all the above mentioned hangars are unavailable and weather conditions permit it. The unavailability of a hangar will be verified by the 51st Maintenance Squadron production superintendent and the egress section shift supervisor prior to performing maintenance outside. Applicable technical orders and the egress section shift supervisor will determine if it is safe to perform egress maintenance outside. A minimum of 3 egress personnel will be available to perform F-16C/D seat and/or canopy removals.

3.2. While egress explosive maintenance is being performed in the aircraft cockpit, other personnel will not work around the cockpit area until egress maintenance is completed. Egress system maintenance will not be interrupted once step-by-step procedures have begun. Personnel will not be dispatched to another task unless it is an emergency. There will be no fuel or oxygen servicing while egress maintenance is being performed.

3.3. At no time will Advance Concept Ejection Seat II (ACES II) seats be removed, installed, or raised outside when a possibility of inclement weather (rain or winds exceeding 15 knots) exists.

3.4. Egress maintenance and inspections will not be accomplished while an aircraft is on jacks, unless specifically authorized in the egress maintenance technical order.

3.5. Maintenance being performed on the egress system will cease when lightning is within five miles.

3.6. A Cartridge Activated Device and Propellant Actuated Device (CAD/PAD) inventory will be completed during acceptance inspections, the 36 month seat inspection, when the recovery sequencer is time changed, or whenever explosives are removed from the seat for major repairs.

4. Vehicle Requirements:

4.1. The egress section vehicle will be an enclosed “bread truck,” equip with two (2) ABC dry chemical fire extinguishers, a pintle hook, and have proper DOT placards for the class/division of explosives being transported.

4.2. Whenever the driver’s seat is vacant, with explosives on board, the vehicle will have wheels chocked and the parking brake engaged. The egress vehicle will not be left unattended when explosive components are on-board.

4.3. Per the exception option in AFMAN 91-201 section 2.70. and as approved by this operating instruction, minimum egress personnel may ride in the cargo compartment of egress metro vehicles while transporting limited quantities of class/division 1.3 and 1.4 explosives. All explosive components will be secured to prevent shifting during transport.

5. Explosive Incidents:

5.1. In the event of an unsafe condition involving an egress system, maintenance will be stopped and the egress section chief or egress supervisor will be notified. Maintenance will not resume until the unsafe condition is corrected.

5.2. In the event of an explosive mishap, egress will notify the Maintenance Operations Center (MOC), maintenance supervision, and the Accessories Flight Chief.

5.3. In the event of a fire, personnel will:

5.3.1. Extinguish the fire, if possible

5.3.2. Notify the Fire Department (911) and MOC (784-4105)

5.3.3. Evacuate all non-essential personnel a minimum of 600 feet.

5.3.4. Record the time and location of fire involving explosives.

5.4. The ranking person will ensure the area is secure to prevent further injuries or damage. Personnel involved with the explosive mishap will remain at the scene until relieved by a competent authority, unless they require medical attention.

6. Egress Familiarization Training:

6.1. All newly assigned personnel who require access to aircraft cockpits with egress systems installed will complete a hands-on egress familiarization course for each type of aircraft assigned. 51 LSS/LGLTM will ensure an aircraft is scheduled for this training and coordinate with the egress section for the availability of an instructor.

6.2. Each fighter squadron will ensure an aircraft, B-1 or B-4 maintenance stand and aircraft forms are available prior to this training.

6.3. Egress familiarization training requests by the Fire department for annual mass training of their personnel will be coordinated through 51 LSS/LGLTM. 51 LSS/LGLTM will ensure an aircraft is scheduled for this training and coordinate with egress section for the availability of an instructor.

7. Egress Certification. All personnel assigned to the 51st Fighter Wing who perform maintenance or inspections on aircrew egress systems will meet the certification requirements in chapters 1, 5 and 8 of AFI 21-112. This is required for all egress (2A6X3), Life Support (1T1X1), and Quality Assurance per-

sonnel. The egress section supervisor will ensure that all certifications are current prior to personnel performing egress maintenance and/or inspections.

8. Maintenance requirements. Remove all jewelry prior to any egress maintenance being performed.

9. Emergency Procedures:

9.1. If explosive item is dropped from any height refer to applicable 11P series T.O. for serviceability determination. When an explosive item is suspected of being defective and presents a safety hazard beyond guidance of applicable 11p series tech data, EOD assistance is requested.

9.2. See pre-explosive operation task briefing.

9.3. If explosive item is detonated perform the following steps. Notify supervisor (784-9414), Flight Chief (784-4429), Maintenance Supervisor (784-8885) Chief of Maintenance (784-4890), Maintenance Operations Center (784-4105), Fire Department (911).

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