

10 OCTOBER 2002



Maintenance

**AIRCRAFT ESCAPE SYSTEM MAINTENANCE
PROCEDURES**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

NOTICE: This publication is available digitally on the AFDPO WWW site at:
<http://www.e-publishing.af.mil>

OPR: 926MXS/MXMCG (MSgt D. Walley)

Certified by: 926MXS/CC
(Col Timothy W. Wroten)

Pages: 5

Distribution: F

This instruction implements AFD 21-1, *AIR AND SPACE MAINTENANCE* and prescribes procedures, define responsibilities, and ensure that storage and handling of Egress System Propellant Actuated Devices (PAD), Cartridge Actuated Devices (CAD), Rocket Catapult, Electro Explosive Devices (EED) and Ejection Seat Rocket Motors is accomplished IAW Tech Data in a safe and professional manner. It also prescribes procedures for accomplishing inspection, maintenance and storage of A-10 Egress System and Explosive components. References for this instruction are AFI 21-112, *AIRCREW EGRESS SYSTEMS MAINTENANCE*, AFMAN 91-201, *EXPLOSIVES SAFETY STANDARDS*, T.O.s 1A-10A-2-95JG-1, *ORG MAINT JOB GUIDE -- EGRESS SYS, CANOPY/SEAT*, 1A-10A-2-95JG-2, *ORG MAINT JOB GUIDE -- EGRESS SYS EMERGENCY CANOPY RELEASE* 1A-10A-4-95, *IPB -- EGRESS SYS* and 13A5-56-11, *OPN AND MAINT INSTR W/PB -- ESC SYS ASSEM*. The NCOIC of Egress shop will be and is primarily responsible for all inspection and maintenance performed on the aircraft escape system, with assistance rendered by authorized certified members of other work centers as required. The Accessory Maintenance Element Supervisor, the NCOIC of Egress, and all applicable maintenance personnel will comply with this instruction.

1. The Explosive Limits are as follows: At no time will the total quantity of combined class/division 1.3 and 1.4 explosive on hand be allowed to exceed 100 pounds in the Egress Maintenance Shop and Seat Storage Room and never exceed the quantities stated on the explosive facility license and never exceed the quantities stated on the explosive facility license. Compatibility of explosive will be in accordance with AFMAN 91-201 and what is stated on the explosive facility license and what is stated on the explosive facility license.

1.1. There will be no more than four (4) CKU-5/A rockets (total Net Explosive Weight for four CKU-5/A rockets - 22.0 pounds, Class 1.3C) in the Egress shop and Seat Storage Room area at one time, except during a loading and unloading operation.

2. Personnel Limits are as follows: Only those maintenance actions dictated by Tech Data dictated by Tech Data will require a minimum of two personnel and a maximum of eight personnel for accomplishment.

2.1. Explosive Maintenance/Storage room 129 - Maximum personnel authorized in these areas will not exceed the following: two (2) supervisors, six (6) workers, and two (2) visitors/casuals.

3. The Location of Operations: All major seat maintenance is the Egress Shop Maintenance area in Bldg. 385.

4. Safety Precautions are as follows: It is imperative that lighting is available and used as deemed necessary by the Egress Team Chief to help reduce the possibility of accidental actuation of the ejection seat or components.

4.1. The use of safety pins without an appropriate streamer being attached is strictly forbidden.

4.2. Covers for ACES II pitot tubes will be installed while the aircraft is on the ground. These covers will be removed with the seat pins prior to pilot entry.

4.3. When egress maintenance is being performed in the aircraft cockpit, no other personnel will start work on the aircraft until completion of the egress task. Personnel will not interrupt Egress system maintenance.

4.4. There will be no refueling or Liquid Oxygen (LOX) servicing while egress work is being performed.

4.5. No external power will be applied to the aircraft unless the egress team chief supervisor deems it necessary.

4.6. Once an egress maintenance task has started, the specialists involved will not be dispatched to another job unless it is an emergency. Starting and stopping of egress work in this manner could lead to a serious explosive incident.

4.7. Aircraft will not be moved while egress work is being performed, except in emergency situations.

4.8. Due to the safety factors involved, seats will not be removed or reinstalled, while the aircraft is on jacks.

4.9. The Production Superintendent, and Debrief Dispatch will ensure that other specialists are not dispatched to the aircraft in a manner that will conflict with Egress personnel performing maintenance.

4.10. Egress maintenance will not be started on an aircraft in inclement weather (example: rain).

4.11. No egress maintenance will be performed under Thunder Condition 1, confirmed through the Production Superintendent.

5. Emergency Procedures are as follows: In the event of an explosive accident/incident, the following actions will be taken by the fastest means possible.

5.1. The ranking person at the scene will notify Maintenance Control Function (MCF) as to the type and location of the accident/incident and any emergency aid required (fire, medical, etc.).

5.2. The ranking person at the scene will ensure that nothing is disturbed unless it represents a hazard to personnel or equipment.

5.3. The area will be secured by any means possible to prevent further injury, damage, or tampering with possible evidence for mishap investigations.

5.4. All personnel will remain at the scene until relieved by ranking person ranking person, unless evacuation and/or medical attention is necessary.

6. In the event of a fire: The person nearest to the extinguisher will take charge to attempt to extinguish the fire.

6.1. Call the fire department, ext. 83333, and notify MCF, ext. 83608.

6.2. Withdraw a minimum of 600 feet, all nonessential personnel.

6.3. Note the exact time the munitions were engulfed in flames.

6.4. In the event of an unsafe condition involving the egress system, all maintenance actions on the aircraft will be stopped. The Production Superintendent, and the immediate supervisor will be notified. The Production Superintendent will ensure that maintenance does not resume until the unsafe condition is corrected.

7. The Sequence of Operation are as follows: Egress maintenance and inspection operations will be accomplished using approved checklists or T.O.s applicable to the system upon which maintenance is being performed.

7.1. The Demand Response method by checklist will be used.

7.2. The team chief and members will be certified in accordance with AFI 21-112 on AF Form 623, **On the Job Training record (OJT)**, or Core Automated Maintenance System (CAMS) prior to being dispatched for any operation.

7.3. Due to recognized hazards of the ACES II ejection seat removal and installation, maintenance involving removal/raising of the seat assembly will be kept to a minimum. All shops will troubleshoot their system prior to requesting seat removal for other maintenance. The applicable entry will be recorded on the AFTO Form 781A, **Maintenance Discrepancies and Work Document**.

8. Only authorized personnel will receive CAD, PAD, and EED items.

8.1. All CAD, PAD, and EED items received from munitions supply will be inspected for damage, security, and any defects as prescribed by the applicable publications, prior to installation in the aircraft or in the seat.

8.2. The lot number, serial number (if applicable) and the date of manufacture will be annotated in CAMS prior to installation.

8.3. All removed CAD, PAD, and EED items will be processed for turn in as soon as possible. All items will be properly annotated on the AFTO Form 350, **Repairable Item Processing Tag**, and attached.

8.4. A fire symbol 3 sign will be posted at the entrance to both doors and on the exterior of the building of the egress shop when class 1.3 explosion items are in the shop. A fire symbol 4 will be posted

if only class 1.4 and no class 1.3 explosives are present. When there are no explosive items within the shop, the sign will be removed. The fire department will be notified when the appropriate fire symbol is changed.

RANDALL G. FALCON, Colonel, USAFR
Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 21-101, *Aerospace Equipment Maintenance Management*

AFI 21-112, *Aircrew Egress Systems Maintenance*

AFM 91-201/AFRC Sup 1, *Explosive Safety Standards*

LAFBI 91-202, *Explosive Hazard Notification*

T.O. 11A-1-46, *Fire Fighting Guidance, Transportation, and Storage Management Data -- (ATOS)*

T.O. 13A5-56-11, *Operation and Maintenance Instructions Escape System Assemblies*

1A-10A-2-95JG-1, *Organizations Maintenance Job Guide for Egress System Canopy/Seat*

1A-10A-2-95JG-2, *Organizations Maintenance Job guide for Egress System Emergency Canopy Release*

1A-10A-4-95, *Illustrations Parts Breakdown for Egress systems*