



***Maintenance***

***\*CLEARING JAMMED F-16 GUN SYSTEMS AND/OR UNIVERSAL  
AMMUNITION LOADING SYSTEMS FOR MAINTENANCE COMPLEX***

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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OPR: 944 MXS/LGMR (SMSgt C. Byerly)  
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This instruction implements AFD 21-2, *Nonnuclear and Nuclear Munitions*. It establishes safe and reliable procedures for clearing jammed gun and ammunition loading systems for maintenance. It applies to all maintenance activities within the 944th Fighter Wing (FW).

***SUMMARY OF REVISIONS***

**This document is substantially revised and must be completely reviewed.**

- 1. Location of Operation.** Building 993, Armament Systems Flight, 944 FW Aircraft Parking Area and the North and South Alternate Dearm Areas.
- 2. Explosive Limits.** See Explosive Facility License and Luke AFB Explosive Site Plans.
- 3. Personnel Limits.** Armament Systems Flight Gun Shop, Building 993, Room 12.

	Maximum	Minimum
Supervisors	1	1
Workers	4	1
Casuals	2	0

- 4. Equipment Required.** Hand tools and empty ammunition containers.

- 5. Emergency Operations.** Armament crew chief complies with the Pre-Task Briefing (Attachment 2). **Note:** Pre-Task Briefing contains all pertinent information in case of emergency.

## 6. Safety Precautions:

6.1. Brief Pre-Task Briefing (Attachment 2).

6.2. Static producing clothing will not be worn as outer garments.

6.3. Personnel will ground themselves prior to handling ammunition.

6.4. Fire Symbols and "Explosive Operation in Progress" signs will be posted at entrances to the Armament Systems Flight Gun Shop. When fire symbol changes, notify the base Fire Department.

**7. Procedures for Clearing a Jammed Gun.** An aircraft returning with a possible gun jam will taxi to the appropriate alternate de-arm area. A de-arm crew will de-arm the aircraft and determine whether it is safe to taxi back to the 944 FW flightline. The de-arm crew will ensure the gun is cleared and safed, electrically and mechanically prior to aircraft taxing or being towed back to the flightline.

7.1. Ensure the jammed gun system or aircraft is grounded and any applicable safety devices are installed before performing any maintenance.

7.2. Before starting to clear the jammed gun system, inspect the system for broken 20MM cases and loose propellant. If a dangerous item is encountered, all operations in the immediate area will be shut down and personnel will be evacuated to a safe site. Notify Maintenance Coordination Function (MCF) by radio or at 6-5418. The MCF will notify Explosive Ordnance Disposal (EOD) for help in eliminating any hazards.

7.3. Clear gun as necessary by following the safest procedures based on the type of malfunction or jam encountered. **WARNING:** Verify the position of any possible live rounds in the gun. If the gun system is in the aircraft, remove the gun system from aircraft and transport to the back shop.

7.4. Barrels with jammed rounds or damaged rounds and loose propellant will be turned over to EOD.

7.5. Secure the gun system to the maintenance gun stand.

7.6. Disassemble the gun system in accordance with applicable technical orders (T.O.).

7.7. The following procedures will be used when a jammed/unsafe gun is discovered after the aircraft has cleared the dearm area and is on the parking ramp:

7.7.1. Personnel discovering a jammed/unsafe gun will immediately notify the flight line expediter. **NOTE:** Weapons personnel will attempt to install the clearing cam holdback tool to mechanically safe the gun when discovering chambered rounds caused by an auto-clearing

malfunction. The on-scene supervisor will declare a ground emergency if the gun cannot be cleared due to a malfunction or damage that cannot be immediately made safe.

7.7.2. The flight line expediter will notify the MCF, the production superintendent and weapons section chief to declare a ground emergency.

7.7.3. All nonessential personnel will be evacuated IAW applicable T.O.s and the 302d Fighter Squadron production superintendent, weapons supervisor, weapons safety and fire department will determine the best course of action.

## **8. Procedures for Clearing a Jammed Universal Ammunition Loading System (UALS) during loading/unloading operations:**

8.1. Ensure the UALS applicable safety devices are installed.

8.2. Before starting to clear the jammed UALS, inspect the system for broken 20MM cases and loose propellant. If a dangerous item is encountered, all operations in the immediate area will be shut down and personnel will be evacuated to a safe site. Notify MCF by radio or at 6-5418. The MCF will notify EOD for help in eliminating any hazards.

8.2.1. If the jam is determined to be in the UALS, the AFTO Form 244, **Industrial/Support Equipment Record**, will be annotated and the UALS will be delivered to the armament flight's maintenance facility for repair.

8.2.2. Disassemble the UALS in accordance with applicable T.O.s.

8.2.3. EOD will dispose of damaged rounds and loose propellant.

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Commander

**Attachment 1****GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFMAN 91-201, *Explosive Safety Standards*

LAFBI 91-2015, *Explosive Hazard Notification*

944 FWI 21-201, *Launch and Recovery of Explosive Loaded Aircraft*

T.O. 11W1-12-4-32, *M61A1 20MM Automatic Guns*

T.O. 11W1-7-16-2, *F-16 Aircraft Ammunition Handling Set*

T.O. 35D30-4-15-1, *Universal Ammunition Loading System (UALS)*

T.O. 11A-1-46, *Fire Fighting Guidance, Transportation and Storage Management Data, Ammunition Complete Round Chart*

T.O. 11A13-4-7, *20 Millimeter Ammunition*

***Abbreviations and Acronyms***

**AFB** – Air Force Base

**AFPD** – Air Force Policy Directive

**EOD** – Explosive Ordnance Disposal

**FW** – Fighter Wing

**IAW** – In accordance with

**MM** - Millimeter

**MCF** – Maintenance Coordination Function

**T.O.** – Technical Order

**UALS** – Universal Ammunition Loading System

**Attachment 2****PRE-TASK BRIEFING**

A2.1. Armament crew chief will brief crewmembers and authorized visitors on the operation to be performed and each person's role in the task.

Task to be Performed: \_\_\_\_\_

A2.2. Explosive Limits: \_\_\_\_\_ Hazard Class/Division: \_\_\_\_\_

Special Hazards: \_\_\_\_\_

Withdrawal Distance/Assembly Area: \_\_\_\_\_

A2.3. Personnel Limits:

Supervisors: \_\_\_\_\_ Workers: \_\_\_\_\_ Visitors: \_\_\_\_\_

A2.4. Location of Operation: \_\_\_\_\_

A2.5. Post "Operation in Progress" signs, check grounding straps and connecting hardware for serviceability and ensure that two serviceable fire extinguishers suitable for the operation to be performed are present.

A2.6. Emergency Procedures. In case of emergency, cease all operations, evacuate nonessential personnel, and notify appropriate agencies.

A2.6.1. \_\_\_\_\_ and \_\_\_\_\_ will man fire extinguishers.

A2.6.2. \_\_\_\_\_ will notify Munitions Control (6-5555/5645) of the location and munitions involved. If Munitions Control is unavailable, notify MCF (6-5418/5419). If immediate contact with Munitions Control or MCF is not possible, call 911.

A2.7. Remove all jewelry, to include watches, rings, necklaces, etc.

A2.8. Brief applicable warnings, cautions, and or notes from specific item T.O.s.

A2.9. Brief any peculiarities on the tasks to be performed and ask if there are any questions concerning the operation.

A2.10. Perform tasks in accordance with T.O.s and FW instructions, when applicable.

A2.11. Do not permit unauthorized personnel entry into operational areas without the crew chief's approval.

A2.12. Crew chief will brief any new personnel and or visitors on the operation and actions to be taken in case of emergency.

A2.13. Crew chief will account for all personnel and or visitors associated with their operation at all times.

SAMPLE