

**BY ORDER OF THE COMMANDER
5TH BOMB WING**

**MINOT AIR FORCE BASE
INSTRUCTION 21-206**



4 AUGUST 2026

Maintenance

***LAUNCH AND RECOVERY OF
EXPLOSIVES LOADED AIRCRAFT***

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This publication implements AFMAN 21-206, Aircraft Armament Systems Management and DAFI 21-101, Aircraft and Equipment Maintenance Management. It provides guidance and procedures for the proper launch and recovery of explosives-loaded aircraft. It also includes ground handling and safing of aircraft returning from flight with hung munitions. This publication applies to all organizations on Minot AFB that launch or recover explosives-loaded aircraft. It is applicable to all organizations within the 5th Bomb Wing who launch and recover explosives-loaded aircraft. Ensure all records generated as a result of processes prescribed in this publication adhere to AFI 33-322, *Records Management and Information Governance Program*, and are disposed in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. Refer recommended changes and questions about this publication to the office of primary responsibility (OPR) using the DAF Form 847, *Recommendation for Change of Publication*; route DAF Forms 847 from the field through the appropriate functional chain of command. This publication may not be supplemented or further implemented/extended.

SUMMARY OF CHANGES

This document has been substantially revised and must be completely reviewed. Changes were made to ensure specificity of Hung Munitions procedures. Changes to final signatory authority, changed to Jesse W. Lamarand, Colonel, USAF.

Chapter 1

LAUNCH AND RECOVERY OF EXPLOSIVES-LOADED AIRCRAFT

1.1. End Of Runway (EOR) Inspection

1.1.1. Upon landing, all sorties that carry munitions, regardless of indications (i.e., released, retained, or hung), will be inspected at the end of the runway. At Minot AFB, this is at the Delta (Primary) or Alpha (Secondary) Hammerheads. While deployed, the Production Superintendent and Weapons Expediter will pre-coordinate an appropriate area for EOR with Airfield Management and the installation safety office based on airfield space and traffic.

1.1.2. The EOR crew should consist of a production superintendent, 3 crew chiefs, a weapons expediter, and a certified weapons load crew member.

1.1.3. EOR team will stop the aircraft at the designated inspection area. Production Superintendent will establish radio contact with aircrew to ensure radar is down and aircraft brakes are set prior to sending in Crew Chiefs. Crew Chiefs will chock the aircraft and establish intercom communications with the aircrew.

1.1.4. Weapons personnel will visually inspect the aircraft for unsafe conditions, specifically checking for munitions partially hanging from racks, positioned on top of one another and munitions positioned on bay doors. The bomb bay will be inspected through the #3 aft wheel well catwalk door.

1.1.5. If an unsafe condition exists, the Weapons Expediter will notify the Production Superintendent and the crew chief. The crew chief will inform the aircraft commander. The aircraft commander will shut down the aircraft. The Production Superintendent will then declare a Ground Emergency based on the conditions with advice from the Weapons Expediter and will then initiate Hung Munitions Procedures per [Paragraph 1.3](#) as required.

1.1.6. Once the aircraft has been inspected and declared safe, the Weapons Expediter will notify the Production Superintendent and the crew chief that has communication with the aircrew. The crew chief will then inform the aircraft commander the aircraft is safe to taxi back to the parking area.

1.2. Arm/De-Arm Procedures

1.2.1. During normal operations arming and de-arming will occur on aircraft parking areas in accordance with the Minot AFB Airfield Explosives Plan.

1.2.2. Weapons loading and aircrew personnel will utilize current technical orders to perform all arm/de-arm procedures.

1.2.3. Weapons loading personnel will meet the aircraft at the assigned parking location and pin all munitions prior to towing or applying external power to the aircraft.

1.3. Hung Munitions Procedures

1.3.1. A EOR crew will be dispatched to the designated hammerhead per [Paragraph 1.1](#).

1.3.1.1. If hung ordnances are present, do not park aircraft in Explosive Clear Zone on the Delta Hammerhead.

1.3.2. The senior fire officer or the incident commander will establish the appropriate withdrawal distance. The senior fire officer or the incident commander will not terminate the in-flight emergency until the munitions are declared in a safe condition by the Weapons Expediter.

1.3.3. The Weapons Expediter will be the on-scene supervisor for munitions operations and be the sole authority for declaring munitions safe.

1.3.4. Production Superintendent will establish radio contact with aircrew to ensure radar is down and aircraft brakes are set prior to sending in Crew Chiefs. Aircraft Crew Chiefs will chock the aircraft and establish intercom communications with the aircrew.

1.3.5. Weapon personnel will inspect munitions for unsafe conditions per [Paragraph 1.1.4](#). After the inspection dictated in [Paragraph 1.1.4](#) is performed, see the paragraphs below to clear the hung munitions status. If unsafe conditions are detected or if any condition exists that presents a hazard to normal safing procedures, the Weapons Expediter and Production Superintendent will declare a ground emergency through Maintenance Operations Center (MOC).

1.3.6. Externally Hung Munitions

1.3.6.1. A certified load crew member will safe all munitions and attempt to pin all bomb racks. If all munitions are able to be pinned and all weapons are declared safe, the aircrew will taxi back to the designated parking apron.

1.3.6.1.1. If munitions cannot be declared safe, the aircrew will shut down engines and egress the aircraft. The Weapons Expediter and Production Superintendent will declare a ground emergency and EOD personnel will assist in safing and downloading the aircraft at the designated hung munitions area prior to the aircraft being towed back to the parking apron.

1.3.7. Internally Hung Munitions

1.3.7.1. For munitions positioned on the bomb bay doors: After verifying per [para 1.1.4](#) that the munitions are positioned on the bomb bay doors, the Weapons Expediter will ensure aircrew are aware of the hazard and are instructed NOT to open bay doors upon engine shut down. The Weapons Expediter will then direct the aircrew to shut down all engines and seek EOD assistance to secure and safe the weapon(s).

1.3.7.2. For munitions not positioned on bomb bay doors: After verifying per [para 1.1.4](#) that there are no munitions positioned on bomb bay doors, aircrew will shut down all engines. The Weapons Expediter can then direct aircrew to open the doors in order to safe munitions after all engines are shut down.

1.3.7.2.1. Aircraft Crew chief will install bomb bay door struts and a load crew member will attempt to safe all munitions and attempt to pin all racks/shackles. If all munitions are able to be pinned and all weapons are declared safe, the aircraft can be towed back to parking and downloaded.

1.3.7.2.2. If the munitions cannot be declared safe the aircrew will egress the aircraft, the Weapons Expediter and Productions Superintendent will declare a ground emergency and EOD personnel will assist in safing and downloading the aircraft at the designated hung munition area prior to the aircraft being towed back to the parking.

1.4. Impoundment

1.4.1. Impoundment for aircraft and/or equipment is mandatory following inadvertent ordnance release or an explosive mishap. Follow impoundment procedures IAW DAFI 21-101, Chapter 7.

1.4.2. Impoundment will not preclude proper safing procedures or download of retained/hung munitions.

JESSE W. LAMARAND, Colonel, USAF
Commander

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

DAFI 21-101, *Aircraft and Equipment Maintenance Management*, 16 January 2020

AFMAN 21-206, *Aircraft Armament Systems Management*, 23 September 2025

AFI 21-101_AFGSCSUP_MINOTAFBSUP, *Aircraft and Equipment Maintenance Management*, 6 September 2023

Prescribed Forms

None

Adopted Forms

DAF Form 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

AFDPO—Air Force Departmental Publishing Office

AFI—Air Force Instruction

AFMAN—Air Force Manual

DAFMAN—Department of the Air Force Manual

DOD—Department of Defense

EOD—Explosive Ordnance Disposal

EOR—End of Runway

MOC—Maintenance Operations Center

OPR—Office of Primary Responsibility

Office Symbols

AF/RE—Air Force Reserve

SAF/BB—Business Management

Terms

Hung Munition—A munition that fails to separate from the aircraft after a proper intent to release signal has been applied. This includes munitions released and separation-not-confirmed/release-status-unknown and any munition remaining after attempted release which cannot be safed.

Retained Munitions—A munition remaining on board the aircraft with no release attempt or after successfully releasing the intended number of munitions in a partial load. Munitions not released due to aircraft procedural errors are also considered retained.

Safed—The act of ensuring the munition will not inadvertently drop from suspension equipment from which it is latched onto by installing rack or shackle safety pins and checking fuses and initiators for partially armed conditions.

Inadvertent Release—An un-commanded release of a munition.

Unsafe Condition—Is a hung munition, unsecure munition, unsafe or abnormal condition.

Munitions—Includes live or inert munitions, decoys, and flares.