

**21 SEPTEMBER 2002**



**Maintenance**

**MANAGEMENT AND MAINTENANCE OF  
NON-NUCLEAR MUNITIONS**

**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: 354 MXS/MGMW (SMSgt Elliott)

Certified by: 354 MXG/CC (Col Gimmi)

Pages: 7

Distribution: F

---

This instruction establishes local accountability and reconciliation procedures for munitions issued to meet flight line requirements. It implements AFD 21-2, *Non-nuclear and Nuclear Munitions*. Squadron commanders and maintenance supervisors will ensure compliance with the requirements and procedures of this supplement. This applies to all personnel assigned, attached, and tenant to Eielson Air Force Base, Alaska.

**SUMMARY OF REVISIONS**

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

**1. Reconciliation Procedures of Aircrew Training Munitions.** The reconciliation process begins as soon as possible after the last aircraft is down for the flying day and ends no later than two hours after the last aircraft is down. Reconciliation is complete when the weapons loading supervisor, munitions reconciliation representative, and munitions control supervisor are in agreement with the reconciliation of munitions for the reporting period. Munitions Control shift supervisor will verify the balanced account and release munitions for the next reporting period. No munitions will move during the reconciliation process unless directed by the Munitions Flight Commander/Chief.

**2. Responsibilities.** The responsibilities of the Maintenance Group Commander, Munitions Flight, Weapons Elements, and account custodians are as follows:

**2.1. Maintenance Group Commander:**

2.1.1. Appoints the Munitions Accountable Systems Officer (MASO) and key, lock and cylinder program manager for the 354th Maintenance Squadron Munitions Flight.

**2.2. Munitions Flight's Control Element:**

2.2.1. Serves as the focal point and releasing authority for the daily reconciliation of aircrew training munitions and accountability of TMU-72/B Argon bottles issued to the flight line. This must be a coordinated effort among all parties having access to the munitions.

2.2.2. If any munitions cannot be satisfactorily accounted for, Munitions Control will contact the NCOIC of Munitions Control, the Munitions Flight Commander/Chief, the appropriate squadrons Weapons Element Chief, and account custodians that manage the munitions in question, or their designated representatives to resolve the discrepancy. Munitions Control will direct the appropriate corrective action.

2.2.3. Maintains an Emergency Action Checklist for hung ordnance as approved by the Munitions Flight Commander/Chief.

2.2.4. Does not allow munitions deliveries after the last down time and prior to reconciliation of munitions, unless directed by the Munitions Flight Commander/Chief.

2.2.5. Ensures that minimum established quantities of munitions, including those scheduled for expenditures are on hand by the first flying day of the week. To the greatest extent possible, manage munitions deliveries by single field lot number for delivery to one aircraft to facilitate AF Form 2434 use. (Locally generated forms may be used in place of the AF Form 2434.)

2.2.6. Maintains current status of 20/30mm loaded into aircraft by lot number, aircraft tail number, date loaded, and quantity.

2.2.7. Maintains current status of all munitions loaded on aircraft by type, functional lot, field number, and quantity. Chaff and flare will be annotated by quantity and module number.

### **2.3. Munitions Flight's Line Delivery Element:**

2.3.1. Maintains accurate records reflecting deliveries, uploads/downloads to aircraft by type of munitions, lot number, field number, location, quantity, and tail number.

2.3.2. Notifies Munitions Control of all trailer movements to include empty trailers, trailer configuration, munitions laden trailers, and Universal Ammunition Loading systems (UAL). Notify Munitions Control of munitions laden trailers/UALS by munitions type, lot number, field number, and quantity of all munitions moved. Notify Munitions Control of chaff and flare uploads/downloads by mod number and quantity. All movements, uploads/downloads will be relayed to munitions control via handheld radios as the action occurs.

2.3.3. Ensures that all processing forms and AFTO Form 350 tags are attached to downloaded, unserviceable munitions. Ensures each form reflects the date, aircraft tail number, lot number/serial number, noted discrepancies, quantity downloaded, employee/crew number, and serial number (if applicable). For hung 2.75-inch rockets, ensure the aircraft systems and launcher check by tail number and launcher serial number is annotated on the AFTO Form 350 tag. This information will be relayed to Munitions Control prior to movement of the munitions.

2.3.4. Inventories all munitions carried forward on aircraft, ensuring that downloaded munitions are received before allowing loading of munitions for the next reporting period. This information will be forwarded to Munitions Control.

2.3.5. Ensures that the AF Form 2434 is correct and in agreement with the physical inventory. Provide the AF Form 2434 and all upload/download sheets and aircraft inventory sheets to Munitions Control. Ensures that BDU-33 safing blocks, bomb safing pins and expended carts are

accounted for according to the expenditures within the reporting period. BDU-33 safing blocks and safing pins will be held at the Delivery Element office and labeled with the date of reconciliation. Conventional Maintenance personnel will pick up the safing blocks and verify the quantity matches the number of BDU-33's expended daily. Expended carts will be held at Missile shop pending residue certification.

2.3.6. Performs daily, an end-of-day inventory of all TMU-72/B Argon bottles in missiles on aircraft and in Weapons Loaders possession by quantity only. Verifies quantity of bottles inventoried with Munitions Control.

2.3.7. Immediately notifies Munitions Control when discrepancies involving aircrew training munitions are noted.

#### **2.4. Munitions Flight's Precision Guided Munitions Element:**

2.4.1. Responsible for ordering, processing, inventory, and expenditure documentation of all chaff, flare, 2.75 rockets, 20mm ammunition, and AGM-65s.

2.4.2. Makes sure munitions are processed on a daily basis or as directed by Munitions Control.

2.4.3. Performs and documents a 100 percent daily inventory and reconciliation of all assigned training assets, to include, maintenance bays, and trailers. Performs inventory of storage cells and updates munitions control whenever munitions quantities change.

2.4.4. Provides Munitions Control by quantity an end of duty day inventory of all daily use TMU-72/B Argon bottles located in the PGM element.

2.4.5. Processes expenditure documents each Monday for the week prior based on the information obtained from the AF Form 2434, and daily physical inventories. Expenditure documents will be forwarded to Munitions Operations each Monday.

2.4.6. Maintains 20mm upload/download sheets on all aircraft showing uploading/downloading of 20mm ammunition including lot number, date loaded, and quantity.

2.4.7. Maintains a visual aid showing all aircrew training munitions. Information to include: quantities, authorized quantities, on-hand quantities, built quantities expended to date, and service life expiration dates, if applicable.

2.4.8. Obtains weekly flying schedule for munitions requirements. Plans and requests all munitions required to fulfill a quarterly allocation quantity ensuring that no quantity exceeds the yearly allocation. Account custodians will make sure 100 percent of COPE THUNDER allocations are requisitioned, and on hand, at least 1 week prior to deployed units arrival. Signs all receipt documents and stencil account code on each outer container.

2.4.9. Maintains a daily listing of all available aircrew training munitions.

2.4.10. Maintains a custody account folder as outlined in the Munitions Account Custody Agreement published by Munitions Operations.

2.4.11. Produces a weekly (on Mondays), quarterly (first working day after end of quarter), and yearly (first working day after years end) report detailing expended munitions and authorized quantities remaining. This report will be distributed to MXS Munitions Flight Commander/Chief, MASO, Munitions Production Superintendent, Munitions Operations and Munitions Control.

- 2.4.12. Maintains a copy of all daily inventories of aircrew training munitions assets and forwards a copy to Munitions Control daily.
- 2.4.13. Ensures all publications governing the storage of munitions are followed.
- 2.4.14. Provides Munitions Control all information requested for scheduling of aircrew training munitions.
- 2.4.15. Assigns local functional lots to assembled munitions that contain separate accountable components to assure complete and accurate accountability of these assets. This assignment is documented on a buildup sheet marked on the complete round item by the buildup crew chief with the correct functional lot. Munitions personnel will develop an abbreviated field lot number system to facilitate AF Form 2434 lot number tracking.
- 2.4.16. Ensures munitions items that are used by more than one aircraft are marked to identify and prevent possible intermixing.
- 2.4.17. As necessary prepares and turns in serviceable and unserviceable munitions to the Inspection Element.
- 2.4.18. Responsible for Chaff and Flare support and reconciliation for all deployed COPE THUNDER units.
- 2.4.19. Maintains accurate records reflecting uploads/downloads to aircraft by type of munitions, lot number, field number, location, quantity. Element drivers will forward this information to Munitions Control as the action occurs and account custodians at the end of each shift.

**2.5. Munitions Flight's Conventional Munitions Maintenance Element:**

- 2.5.1. Responsible for the ordering, processing, inventory, and expenditure of 30mm, LUU-1/2 flares, and all bombs and associated components.
- 2.5.2. Maintains 30mm upload/download sheets or AFTO Form 350 tag on all aircraft showing uploading/downloading of 30mm ammunition including lot number, date loaded, and quantity.
- 2.5.3. Maintains a custody account folder as outlined in the Munitions Account Custody Agreement published by Munitions Operations.
- 2.5.4. Processes all returned munitions daily or as directed by Munitions Control.
- 2.5.5. Prepares unserviceable munitions and documents for turn-in to the Inspection Element. Coordinates with the Munitions Control scheduler to have unserviceable item(s) picked up and delivered to the Inspection Element.
- 2.5.6. Produces a weekly (on Mondays), quarterly (first working day after end of quarter), and yearly (first working day after years end) report detailing expended munitions and authorized quantities remaining. This report will be distributed to MXS Munitions Flight Commander/Chief, MASO, Munitions Production Superintendent, Munitions Operations and Munitions Control.
- 2.5.7. Coordinates with Munitions Control and Operations, evaluates inventories, and if necessary, submits issue requests to the munitions scheduler at least 2 weeks prior to munitions drop.
- 2.5.8. Processes request for aircrew training munitions utilizing Combat Ammunition System-Base (CAS-B) complete rounding capabilities whenever possible.

- 2.5.9. Maintains a visual aid indicating type of munitions, built/unbuilt, location, service life, functional lot, and quantity.
- 2.5.10. Accomplishes beginning of day inventory of all aircrew training munitions and forward changes to Munitions Control.
- 2.5.11. Ensures all aircrew training munitions assets are properly packaged, sealed, and marked IAW applicable technical order.
- 2.5.12. During buildup of component type issues, crew chiefs complete buildup sheets for each functional lot used. All lot numbers, quantities, service life, and assigned functional lot will be documented for each functional lot. Munitions personnel will develop an abbreviated field lot number system to facilitate AF Form 2434 lot number tracking.
- 2.5.13. Crew chiefs will forward all buildup sheets to the custody account monitor(s) for tracking purposes. Buildup sheets will remain on file until the items have been expended.
- 2.5.14. When loading SUU-25s, flare and impulse cart lots will not be mixed within a SUU-25 dispenser without approval from the custody account monitor(s).
- 2.5.15. Ensures all COPE THUNDER munitions, built/unbuilt, are marked with the unit's abbreviated base name (i.e., Osan AB would be OS).
- 2.5.16. Ensures all COPE THUNDER munitions, built or unbuilt, are segregated from the 354th Fighter Wing's munitions.

## **2.6. Munitions Flight's MASO/Operations Element:**

- 2.6.1. The MASO oversees the management of all supply point accounts and ensures accountability of all munitions directly supporting the 354 FW. The MASO also establishes a Munitions Account Custody Agreement (MACA) between munitions operations and all supply point custodians, to accurately manage munitions accountability, requisitions, turn-ins, inventories, and documentation flow as outlined in *AFI 21-201, Management and Maintenance of Non-Nuclear Munitions*.
- 2.6.2. Munitions Operations to the greatest extent possible will issue single lot numbers of munitions to supply point custodians in order to reduce the number of assembly lot numbers requiring tracking on AF Form 2434's.
- 2.6.3. Munitions Operations will verify weekly expenditure documentation against weekly AF Form 2434s.

## **2.7. Weapons Elements:**

- 2.7.1. Ensures only one lot of 20/30mm ammunition is loaded into each aircraft, except as noted in T.O. 11A13-4-7. Partially mixed loads of live ammunition are not permitted. Topping off of guns is not permitted.
- 2.7.2. Ensures only one aircraft load of ammunition is downloaded in a pair of 30mm ammunition cans. Only ammunition downloaded because of equipment failure may be placed in M548 cans.
- 2.7.3. Ensures a processing form provided by 354 MXS/LGMW or AFTO Form 350 tag is attached to all downloaded 20/30mm ammunition cans and 20mm Universal Ammunition Loaders (UALS). All unserviceable/damaged munitions items and downloaded 30mm containers will be tagged using the AFTO Form 350 tag. Each form will reflect the date, aircraft tail number, lot

number/serial number, noted discrepancies, quantity downloaded, employee/crew number. For hung 2.75-inch rockets, an aircraft systems and launcher check will be performed to determine rocket and launcher serviceability. Annotate results on the AFTO Form 350 tag with the aircraft tail number, station number, launcher serial number, and attach to the rocket. If the systems and launcher check cannot be performed immediately, the results of the check will be faxed to Munitions Control and Precision Guided Munitions Elements upon completion. This will ensure only required rocket motors are processed for Ammunition Disposition Request (ADR).

2.7.4. Notifies Munitions Control prior to cross loading any munitions item (aircraft to aircraft). Provides Munitions Control with item cross-loaded, aircraft tail number, quantity, lot number/serial number. Cross loading will not occur during the reconciliation process.

2.7.5. Prepares AF Form 2434. Record all transactions as they occur including munitions that are uploaded, downloaded, cross-loaded, carried forward, and/or expended during the reporting period. Exception: 20/30mm ammunition will be accounted for by total expenditures when downloaded for processing.

2.7.6. Enters the gun ammunition counter readings after each flying day in the appropriate blocks of the AF Form 2434.

2.7.7. Conducts a physical inventory of all aircraft at the end of each reporting period and prepares AF Form 2434. Reviews and forwards a copy of the AF Form 2434 to Line Delivery and Munitions Control. To facilitate reconciliation, the AF Form 2434 may be given to the Delivery Element representative on the flightline who will in-turn forward a copy to Munitions Control.

2.7.8. Annotate on the AF Form 2434 the following information for uploaded/expended munitions. Assembly lot numbers, Computer Control Group (CCG) serial numbers, 20mm/30mm lot number, 2.75 inch rocket type and lot numbers, missile serial numbers, and flight hours of precision guided munitions. Chaff and flare will be reported by quantity only. Precision Guided Munitions personnel will provide the lot numbers for chaff and flare.

2.7.9. Impulse cart accountability will be managed by Weapons supply point custodians and Munitions Operations. When hermetically sealed impulse containers are initially opened, each cart will be marked with service life start date using permanent marker. Expended carts will be listed on the AF Form 2434 by type cart.

2.7.10. Turns in daily, to the Munitions Flight reconciliation representative, all BDU-33 safing blocks, bomb safing pins and expended carts for the period. The appropriate fighter squadron will initiate a lost tool report if quantities do not match expenditure quantity.

2.7.11. Deliver to missile shop all TMU-72/Bargon bottles requiring recharging during normal day shift duty hours. Coordinates with Munitions Control for TMU-72/B recharging during swing shift hours. Spare TMU-72/B bottles will be signed for and reconciled daily. Missiles delivered to and from the flightline for upload/download on aircraft will have TMU-72/B bottles installed at all times. Attach an AFTO Form 350 tag to damaged bottles, i.e., leaking, broken glass, etc.

2.7.12. Ensure all munitions have required safing gear installed and are secured to the trailer IAW 11-1-38 prior to requesting movement of the trailer.

2.8. **Account Custodians:** Responsibilities for account custodians are located in *354th Fighter Wing Instruction 21-202, Munitions Management Policy and Procedures*.

2.9. **Cartridge actuated device/propellant-actuated device (CAD/PAD).** Procedures and responsibilities to manage the CAD/PAD time change requirements forecast IAW T.O. 00-20-9; *Forecasting Replacement Requirements for Selected Calendar and Hourly Time Change Items* are covered in *354th Fighter Wing Instruction 21-202, Munitions Management Policy and Procedures*.

BOB D. DULANEY, Brig Gen, USAF  
Commander