URGENT

***TB 1–1520–210–20–60**

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

IMPROVED INERTIA REEL INSTALLATION, ALL UH–1 SERIES AIRCRAFT

Headquarters, Department of the Army, Washington, D. C.
15 FEB 2002

1. Priority Classification. URGENT

NOTE

IAW AR 95--1, paragraph 6--6a/6–14a, MACOM commanders may authorize temporary exception from ASAM message/TB requirements. Exception may only occur when combat operations or matter of life or death in civil disasters or other emergencies are so urgent that they override the consequences of continued aircraft operation.

a. Aircraft in Use. Upon receipt of subject message/TB, make the following entry on the DA Form 2408--13–1. Enter a **Red Horizontal Dash (–)** status symbol with the following statement: "Inspect for Installation of the MA–16 Inertia Reel IAW UH--1–02–ASAM–02 (TB 1–1520–210–20–60) NLT 31 JAN 02." Clear the **Red Horizontal Dash (–)** entry when the procedures IAW paragraphs 8 and 9. are completed. The affected aircraft shall be inspected as soon as practical but NLT 31 January 2002. Commanders who are unable to comply with the requirements of subject message/TB within the time frame specified will upgrade the affected aircraft status symbol to a **Red (X)**.

b. Aircraft in Maintenance Facility.

(1) Aircraft in AVUM, AVIM or DEPOT – same as para 1.a..

(2) Aircraft at Contractor Facility -- same as para 1.a..

c. Aircraft in Transit. – same as para 1.a..

d. Maintenance Trainers (Category A and B). N/A.

e. Component/Parts in Stock at All Levels (Depot and Others) Including War Reserves. – N/A.

f. Components/Parts in Work. (Depot Level and Others). N/A.

2. Task/Inspection Suspense Date. Complete the inspection procedures IAW paragraph 8 NLT 31 January 2002.

*** This TB supersedes USAAMCOM Aviation Safety Action Messages 132301Z, JUN 01, UH–1–01–ASAM–04, 301300Z, JAN 02, UH–1--02--ASAM–02 and TB 1–1520–210--20--55, 1 July 2001.**

3. Tamms Reporting Compliance Suspense Date. Report compliance IAW paragraph 14.a.(1) NLT 7 February 2002.

4. Summary of the Problem.

a. Background --UH–1 Aviation Safety Action Message UH--1–01–ASAM–04 (TB 1--1520–210–20–55) required replacement of the MA–6/8 inertia reel with the improved MA–16 reel NLT 31 Jan 02. A limited number of PM procured installation kits (inertia reel, leader strap and bolt) continue to be delivered to the field. Since the issue of the ASAM, additional aircraft are now operational and require the improved reels. No decrease in serviceability or increased risk is incurred by extended the replacement time. Itis projected that all free issue kits will be delivered to the designated units by 1 Jun 02.

b. For Manpower/Downtime and Funding Impacts – see paragraph 12.

c. The purpose of this TB is to –

(1) Revise UH–1--01--ASAM–04 (TB 1--1520–210–20–55) to extend the mandatory installation date for the MA–16 Inertia Reel to 30 August 2002.

(2) Require units to contact their MACOM POC NLT 28 Feb 2002 for kit distribution plan.

5. End Items to be inspected. All UH–1 series aircraft.

6. Assembly Components to be Inspected. N/A.

7. Parts to be Inspected. N/A.

8. Inspection Procedures.

a. Upon receipt of this message/TB, but NLT 31 Jan 02, Inspect the DA Form 2408–15 to determine if the inertia reels have been installed IAW UH–1–01–ASAM–04 (TB 1–1520–210--20--55).

b. If the inertia reels have been installed, the inspection is complete and the **Red Horizontal Dash (–)** entry will be cleared.

c. If the MA–16 inertia reels have not been installed, proceed to paragraph 9.

9. Correction Procedures.

a. If the MA–16 inertia reels has not been installed –

(1) Clear the **Red Horizontal Dash (–)** entry required IAW UH–1--01--ASAM–04 (TB 1--1520–210–20–55).

(2) Enter a new **Red Diagonal (/)** entry with the following statement: “Replace Pilot/Co–pilot Inertia Reel IAW UH–1–02–ASAM–02 (TB 1–1520–210--20--60) NLT 30 August 2002.”

(3) Clear the **Red Horizontal Dash (–)** entry required IAW para 1.a. of this ASAM.

b. Following installation of the MA–16 inertia reel, annotate the DA Form 2408–15 that the inertia reel installation is complete IAW ASAM UH–1–02–ASAM–02 (TB 1–1520–210–20–60), and clear the **Red Diagonal (/)** on the DA Form 2408–13–1.

c. Installation of the inertia reels will be IAW the following procedure.

NOTE

Unit commanders will provide an initial briefing to all UH--1 aviators assigned that it is more important now than in the past that they should lock their shoulder harness prior to emergency landing.

NOTE

Commanders will insure that MA–16 inertia reels are installed upon receipt.

NOTE

Unit commanders will place a copy of this message/TB in the units aviators reading file.

CAUTION

Reel is supplied with spring fully wound and inertia reel strap installed. If the spring is allowed to unwind rapidly, spring damage may result. The damage may not be apparent, and the spring may appear to function normally.

NOTE

Before starting, familiarize yourself with the entire procedure in this paragraph. To minimize equipment off–line time, inventory the kit (1–inertial reel/w strap installed P/N 015–870145--3–16 and 1–bolt P/N AN3–22A), identify parts, obtain tools, and observe the location of parts to be installed. The following instructions apply to both the pilot and co--pilot seats.

NOTE

Refer to paragraph 9.d. and 9.e. if using a standard seat and the inertia reel is mounted to the floor. Paragraph 9.f. and 9.g. if using an armed crew seat and the inertia reel is mounted to the back of the seat.

d. Removal Procedures:For Crew Inertia Reel (non–armored).

(1) Remove bolt, washer, and nut securing shoulder harness to inertia reel strap.

CAUTION

Do not “twist” lockwire from knurled nut. Damage to knurled nut will result.

(2) Remove safety wire from knurled nut on inertia reel.

(3) Disconnect knurled nut from inertia reel and remove control cable.

(4) Remove bolts, washers, and nuts securing inertia reel assembly to support bracket and remove inertia reel.

NOTE

If control head assembly needs to be reoriented before installation refer to paragraph 9. i..

e. Installation Procedures: For Crew Inertia Reel (non–armored).

(1) Perform vehicle sensitivity check by ensuring MA–16 inertia reel is unlocked. Using palm of hand strike the reel in any axis. Pull strap and check that reel is locked.

NOTE

Bolt supplied with inertia reel is used in position A figure 1A.

(2) Apply vinyl tape (A–A–1689 (58536), NSN 7510–00–515–2856) to mounting surface of MA–16 inertia reel. Position MA--16 inertia reel assembly on support bracket with the control head assembly on the left facing up. Secure assembly to the bracket using bolts, washers, and nuts.

CAUTION

The existing cable and control assembly must have a minimum stroke of 5/8 of an inch. The cable and control assembly must be replaced if the above condition is not met.

NOTE

Ensure “C” clip on end of cable is properly engaged in slider slot.

(3) Connect control cable and knurled nut to inertia reel; tighten nut finger tight, and lockwire knurled nut.

(4) Attach inertia reel strap to shoulder harness with bolt, nut, and washer.

f. Removal Procedures: For Crew Inertia Reel (armored).

(1) Remove bolt, washer, and nut securing shoulder harness to inertia reel strap.

CAUTION

Do not “twist” lockwire from knurled nut. Damage to knurled nut will result.

(2) Remove safety wire from knurled nut on inertia reel.

(3) Disconnect knurled nut from inertia reel and remove control cable.

(4) Remove bolts, washers, and nuts securing inertia reel assembly to support bracket and remove inertia reel.

NOTE

If control head assembly needs to be reoriented before installation refer to paragraph 9. i..

CAUTION

When installing crew inertia reel, ensure control cable is installed to the outside of telescoping tube (reference TM 55–1520--210–23–1, page 2–155, item 7) or damage to control cable, seat frame, and armor plating may occur.

CAUTION

The existing cable and control assembly must have a minimum stroke of 5/8 of an inch. The cable and control assembly must be replaced if the above condition is not met.

g. Installation Procedures: For Crew Inertia Reel (armored).

(1) Perform vehicle sensitivity check by ensuring MA–16 inertia reel is unlocked. Using palm of hand strike the reel in any axis. Pull strap and check that reel is locked.

(2) Apply vinyl tape (A–A–1689 (58536), NSN 7510–00–515–2856) to mounting surface of MA–16 inertia reel. Position MA--16 inertia reel assembly on support bracket with the control head assembly on the left facing up. Secure assembly to the bracket using bolts, washers, and nuts.

NOTE

Bolt supplied with inertia reel is used in position A figure 1A.

(3) Position MA–16 inertia reel assembly with the control head assembly on the right and facing down. Secure assembly to the bracket using bolts, washers, and nuts.

NOTE

Ensure “C” clip on end of cable is properly engaged in slider slot.

(4) Connect control cable and knurled nut to inertia reel; tighten nut finger tight, and lockwire knurled nut.

(5) Attach inertia reel strap to shoulder harness with bolt, nut, and washer.

h. Operational Check.

(1) Cycle control handle from AUTO to MANUAL several times as the shoulder harness is being reeled in and out. The reel shall positively lock and hold each time the handle is moved to MANUAL.

(2) On seats with reel mounted to seat, position seat in full up position. Unlock reel. Unlock seat verticle adjustment and allow seat to sharply strike the bottom stops. Check that reel locks.

(3) Place control handle in the unlocked position. Sharply pull shoulder harness, exerting a 2 to 3 “G” force to check auto locking mechanism. Check that harness has locked and retracts into inertia reel. Cycle control handle to release auto locking mechanism.

i. Procedure for Orienting The Control Head Assembly.

(1) Place reel on a flat surface standing on end with the control head assembly facing up.

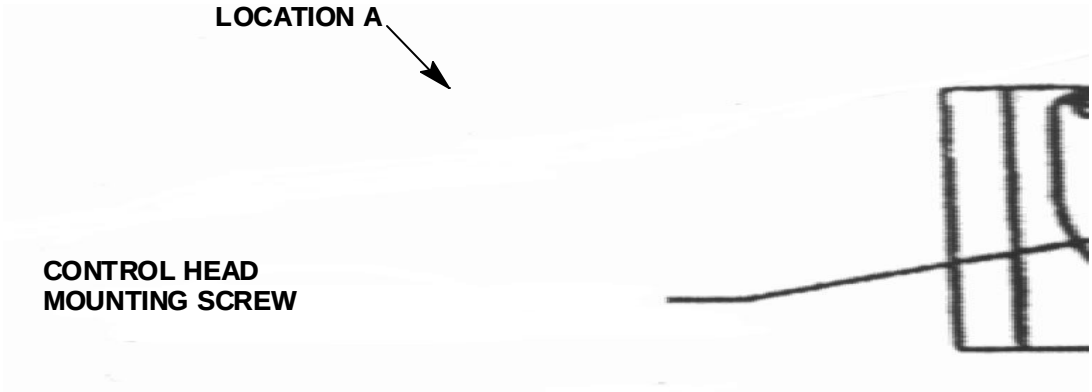


Figure 1A Inertia Reel As Shipped – End View

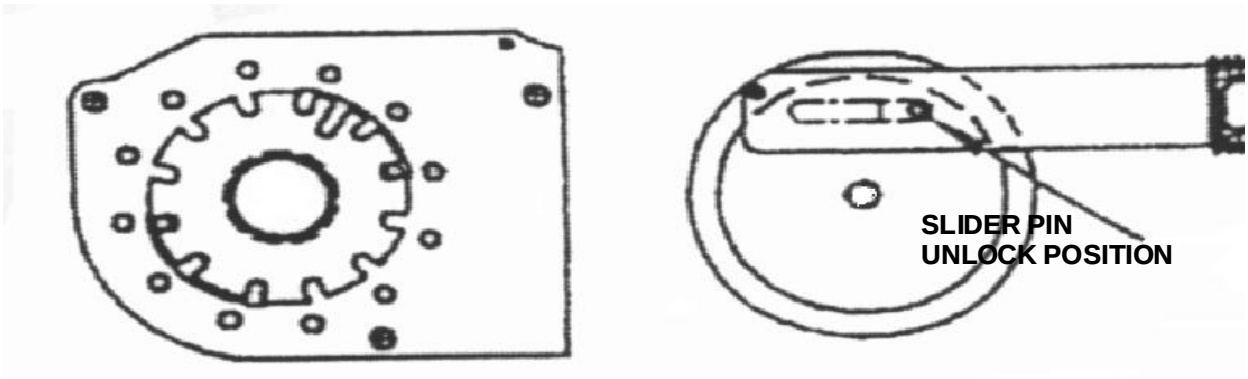


Figure 1B With Control Head Removed

(2) Figure 1A shows the reel in the “as shipped” condition. Figure 1B illustrates the proper component orientation for this configuration. Figure 2 illustrates and identifies the components involved in reorienting the control head assembly.

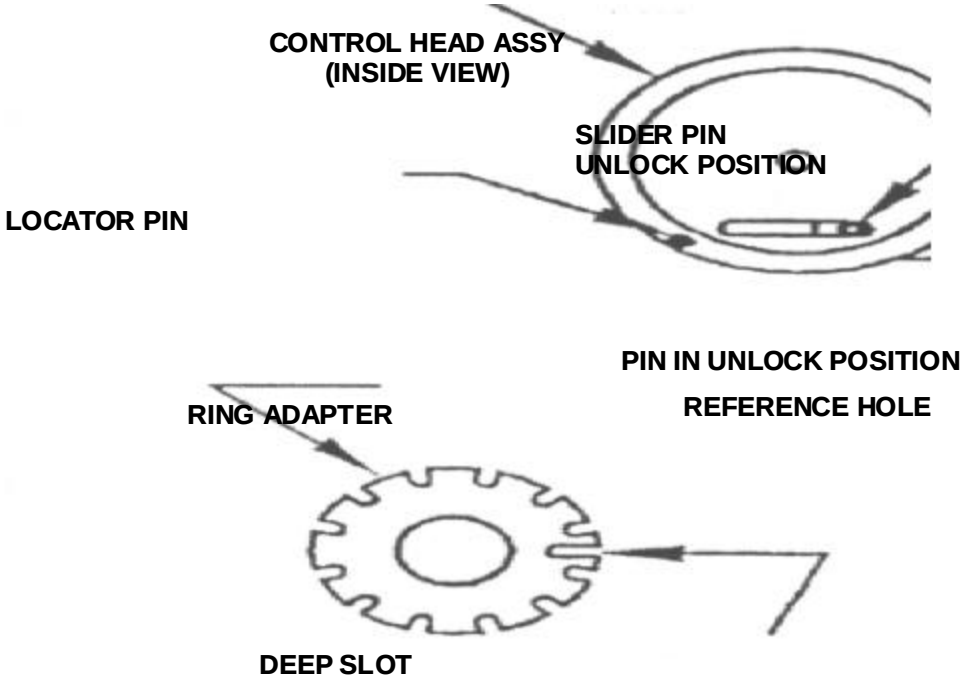


Figure 2 As Shipped Configuration

(3) Remove the screw in the center of the control head assembly and lift the assembly off of the reel.

CAUTION

The reel must be unlocked as indicated by the bright pin being in the position shown in figure 2 before reassembly.

The slider pin must be in the position shown in figure 2 before reassembly (pushed all the way toward the threaded end of the tube).

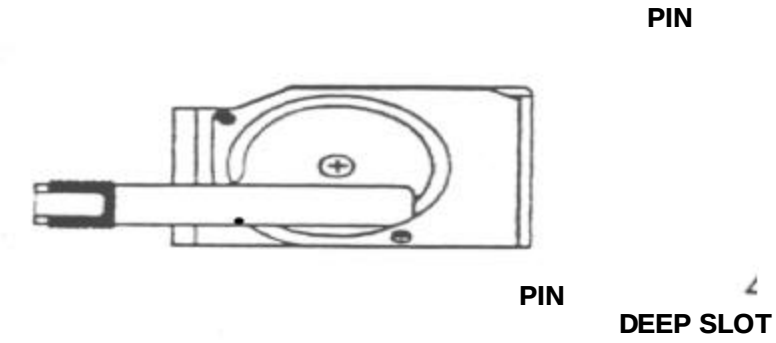


Figure 3

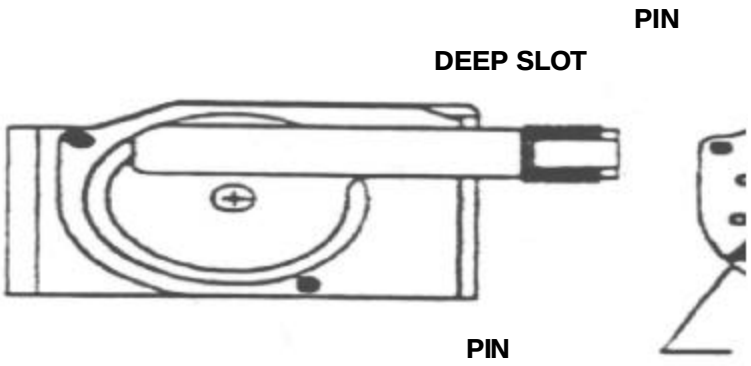


Figure 4 As Shipped

(4) If inertia reel is mounted to the floor figure 3 shows the correct position of the control head assembly. If inertia reel is mounted to the back of the seat figure 4 shows the correct position of the control head assembly (as shipped). Lift off the adapter ring and replace it in the position shown in that figure. Replace the control head assembly in the new orientation ensuring the locator pin is properly engaged in the end cover. Replace the screw.

(5) Using a small screwdriver or allen wrench, push the slider all the way into the tube and pull back out to original position. If it moves, the reorientation has been properly accomplished.

CAUTION

Over tightening the control head screw can cause binding.

(6) If the slider will not move, note the **CAUTION** above and repeat steps 4 and 5.

10. Supply/Parts and Disposition.

a. Parts Required. –

(1) MA--16 installation kits will be issued at no cost to the unit for selected operational aircraft.

(2) Any additional aircraft shall be modified at unit level expense. When separately procuring the kit components from supply, the existing aircraft leader strap may be reinstalled (reused) in the MA–16 reel if it meets TM serviceability criteria. See paragraph 12.c. for a listing of reel kit components.

b. Requisitioning Instructions.

NOTE

MA–16 inertia reel installation kits are not available through normal supply. It is projected that all free issue kits will be delivered to the appropriate units by 1 Jun 02.

(1) National Guard units will contact their respective AVCRAD for distribution of kits NLT 28 February 2002..

(2) All other units will contact the appropriate MACOM POC identified in paragraph 16.e. NLT 28 February 2002.

c. Bulk and Consumable Materials.

NOMENCLATURE	FSCM/PART NUMBER	NATIONAL STOCK NUMBER
Tape, Vinyl	(58536) A–A–1689	7510–00--515–2856 or equivalent

d. Disposition. Demilitarize/Mutilate IAW TM 1–1500–328--23 any part/component removed IAW subject message/TB.

e. Distribution of Hazardous Material. N/A.

11. Special Tools, Jigs and Fixtures Required. N/A.

12. Application.

a. Category of Maintenance. AVUM. Aircraft downtime will be charged to AVUM. Report aircraft non–mission capable maintenance (NMCM) while undergoing correction IAW subject message/TB.

b. Estimated Time Required.

(1) To annotate records.

(a) Total of .5 man–hours using 1 person.

(b) Total of 0 hours downtime for one end item.

(2) Time for repair/replacement.

(a) Total of 1 man--hours using 1 person.

(b) Total of 1 hours downtime for one end item.

c. Estimated Cost Impact of Stock Fund Items to the Field.

NOTE

Units not authorized a free issue kit will be required to purchase the parts listed.

NOMENCLATURE	P/N	NSN	QTY.	COST EA.	TOTAL $
Reel Inertia	015–870145–3–16	1680--01--437–0396	2	$1318.23	$2636.46
Strap	960009–3	1680--01--437–0400	2	$222.46	$444.92
Bolt	AN3–22A	5306--00--337–2861	2	$.22	$.44

Total Cost per Aircraft = $3081.82

d. TB/MWOs to be Applied Prior to or Concurrently with this Inspection. N/A.

e. Publications which Require Change as a Result of this Inspection. N/A.

13. References.

a. DA PAM 738--751, 15 Mar 99.

b. TM 1–1500--328–23.

c. TB 1--1520–210–20–55 (UH–1–01–ASAM--04)

14. Recording and Reporting Requirements.

a. Aircraft –

(1) Reporting Compliance Suspense Date. Upon entering requirements of subject message/TB on DA Form 2408–13–1 on all affected aircraft, commanders will forward a priority message, datafax or e–mail to CDR, AMCOM, ATTN: AMSAM--SF–A (SOF compliance officer), Redstone Arsenal, AL 35898--5000, IAW AR 95–1, NLT date specified in paragraph 3. Datafax number is DSN 897–2111 or (256) 313--2111. E–mail address is <safeadm@redstone.army.mil>. The report will cite subject message/TB number, date of entry in DA Form 2408–13–1, the aircraft mission design series and serial numbers of aircraft in numerical order.

(2) Task/Inspection reporting suspense -- N/A.

b. Wholesale Spare Parts/Assemblies. N/A.

c. Retail Spare Parts/Assemblies. N/A.

d. The Following Forms are Applicable and are to be Completed in Accordance with DA PAM 738-751, 15 March 1999:

NOTE

ULLS--A users will use applicable " E" forms.

(1) DA Form 2408–13, Aircraft Status Information Record.

(2) DA Form 2408–13--1, Aircraft Inspection and Maintenance Record.

(3) DA Form 2408–15, Historical Record for Aircraft.

(4) DD Form 1577 and 1577–1 Unserviceable (condemned) tag/label–material (color red). Annotate remarks block with "Condemned IAW ASAM UH–1–02–ASAM--02 (TB 1–1520–210–20–60) and Mutilated IAW TM 1–1500–328--23".

15. Weight and Balance. N/A.

16. Points of Contact.

a. Technical point of contact for subject message/TB is – Mr. Darrell Hutson, AMSAM–RD–AE–I–D–U, DSN 897–2350 ext–9718 or (256) 705–9718; datafax is (256) 705–9896; e–mail is <darrel.hutson@rdec.redstone.army.mil>.

b. Logistical point of contact for subject message/TB is -- Mr. Mike Haragan, AMSAM–DSA–UH–U, DSN 645–0663 or (256) 955–0663, datafax is DSN 897–3770; e--mail is<mike.haragan@uh.redstone.army.mil>

c. Forms and records point of contact for subject message/TB is Ms. Ann Waldeck, AMSAM--MMC–MA–NM, DSN 746–5564 or commercial (256) 876–5564. Datafax is DSN 746–4904 or (256) 876–4904. E–mail is <ann.waldeck@redstone.army.mil>.

d. Safety points of contact for subject message/TB are:

(1) Primary: Mr. Harry Trumbull, (SAIC), AMSAM–SF–A, DSN 897–2095 or (256) 313--2095. Datafax is DSN 897--2111 or (256) 313– 2111. E–mail is <harry.trumbull@redstone.army.mil>.

(2) Alternate: Mr. Signey Hernandez, AMSAM--SF–A, DSN 897–2094 or commercial (256) 313–2094. Datafax is DSN 897–2111 or (256) 313–2111. E–mail is <signey.hernandez@redstone.army.mil>.

e. MACOM points of contact –

(1) AMC – John Savelli, DSN 767--9891

(2) FORSCOM – Bob Cruse, DSN 367–5487

(3) TRADOC – Judy Dyer, DSN 680–5683

(4) ATEC – Jeff Stayton, DSN 761–4985

(5) MEDCOM – LTC Montagno, DSN 558–1179

(6) MDW – George Gresham, (703) 806–7033

(7) USAREUR -- Dave Sprinks, DSN 484–8900

(8) NGB – CW4 Adee, DSN 327–9752

f. Foreign Military Sales (FMS) recipients requiring clarification of action advised by subject message/ TB should contact – Mr. Ronnie W. Sammons, Security Assistance Management, AMSAM--SA–CS–NF, DSN 897--6856 or (256) 313–6856; datafax is DSN 897–6630 or (256) 313–6630, E–mail is <sammons–rw@redstone.army.mil>.

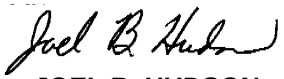
g. After hours contact AMCOM Command Operations Center (COC) DSN 897–2066/2067 or commercial (256) 313–2066/2067. (Huntsville, AL. is GMT minus 6 hrs).

17. Reporting of Errors and Recommending Improvements. You can help improve this TB. If you find any mistakes or if you know of any way to improve these procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to: Commander, US Army Aviation and Missile Command, ATTN: AMSAM--MMC–MA–NP, Redstone Arsenal, Alabama 35898–5000. A reply will be furnished to you. You may also send in your comments electronically to our E–mail address: <ls–lp@redstone.army.mil> or by datafax: DSN 788--6546 or commercial (256) 842--6546. Instructions for sending a 2028 by E--mail may be found at the back of most TMs.

By Order of the Secretary of the Army:

ERIC K. SHINSEKI
General, United States Army
Chief of Staff

Official:



JOEL B. HUDSON
Administrative Assistant to the
Secretary of the Army
0203803

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