DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

INSPECTION AND REPAIR OF AFT PYLON CLAMSHELL DOOR LOWER LATCH TO PRECLUDE WEAR AND/OR IN-FLIGHT LOSS OF DOORS FOR ALL CH-47D, MH-47D, AND MH-47E AIRCRAFT

Headquarters, Department of the Army, Washington, D. C. 30 September 1996

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

NOTE THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.

1. Priority Classification - Urgent.

- a. Aircraft in Use Upon receipt of this Technical Bulletin (TB) the condition status symbol of the cited aircraft will be changed to a Red Horizontal Dash "-". The Red Horizontal Dash "-" may be cleared when the correction procedures of paragraph 9 below are completed. The affected aircraft shall be inspected as soon as practical but no later than the task/inspection suspense date. Failure to comply with the requirements of this TB within the time frame required will cause the status symbol to be upgraded to a Red "X".
- b. Aircraft in Depot Maintenance Inspect and correct prior to issue. Aircraft shall not be issued until compliance with this TB has been completed.
 - c. Aircraft Undergoing Maintenance Same as paragraph la.
 - d. Aircraft in Transit -
 - (1) Surface/Air Shipment Same as paragraph 1a.
 - (2) Ferry Status Same as paragraph 1a.
 - e. Maintenance Trainers (Category A, B) Same as paragraph 1a.

^{*}This TB supersedes USAATCOM Message 121316Z September 1996 (CH-47-96-ASAM-09)

- f. Component/Parts in Stock at All Levels (Depot and Others) Including War Reserves N/A.
 - (1) Wholesale Stock N/A.
 - (2) Retail Stock N/A.
- g. Components/Parts in Work N/A.
- 2. Task/Inspection Suspense Date Within 100 flight hours.
- 3. Reporting Compliance Suspense Date No later than 04 October 1996 per paragraph 14a of this TB.
- 4. Summary of the Problem.
- a. Several recent incidents have been reported of aircraft losing the aft pylon clamshell doors in-flight due to failure from vibration of the lower latch pin or fitting which holds the doors together. In-flight separation of the clamshell doors from the aircraft has caused damage to the rotor system, engine tail cones, and airframes.
- b. Maintenance Work Order (MWO) 55-1520-240-50-8 (ECP-D082R1) and MWO 1-1520-240-50-62 (ECP D190R1) were issued to improve the latch system. Although the incident rate of doors separating in-flight has decreased, there have been several reports of clamshell latch fittings cracked and broken.
 - c. For Manpower/Downtime and Funding Impacts See paragraph 12 below.
- d. The purpose of this TB is to check (inspect) the aft pylon clamshell doors for proper fit and affix a strap assembly, with latch, to the lower left hand door assembly at the bottom edge of the opening. This repair has been approved by U.S. Army Aviation and Troop Command (ATCOM) Engineering and the SMART Program, and published in the PS Magazine, March 1996 issue.
- 5. End Items to be Inspected All CH-47D, MH-47D, and MH-47E aircraft.
- 6. Assembly Components to be Inspected -

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Door, Access, LH	145\$4906-2	1560-01-117-4129
Door, Access, RH	145\$4906-3	1560-01-117-4130

- 7. Parts to be Inspected N/A.
- 8. Inspection Procedures
 - a. Prepare the aircraft for safe ground maintenance.
 - b. Visually inspect aircraft for installation of the Chinook latch fitting fix TB 43-PS-520 (paragraph 13a below).

NOTE

If you do not have a copy of TB 43-PS-520, contact your local Logistics Assistance Representative (LAR).

- c. If the latch fitting fix per TB 43-PS-520 has been applied, no further action is required. Record and report compliance with this TB in accordance with paragraph 14 below.
 - d. If the latch fitting fix per TB 43-PS-520 has not been applied, proceed to paragraph 9 below for corrective action.
- 9. Correction Procedures -
- a. Check the aft pylon clamshell doors for proper fit per TM 55-1520-240-23, Task 2-281 (D model), and TM 1-1520-252-23, Task 2-273 (E model).
 - b. Locally manufacture, assemble, and install the strap assembly per TB 43-PS-520 (paragraph 13a below).

c. If there are any questions or problems, contact the Maintenance Engineering point of contact listed in paragraph 16a below.

10. Supply/Parts and Disposition -

a. Parts Required - The following items will be required to locally manufacture and install the strap assembly -

NOMENCLATURE	PART NUMBER	NSN	QUANTITY PER AIRCRAFT
CATCH, CLAMPING	214P8078-6 9170-REV J	5340-01-244-4124 OR	1
LATCH ASSEMBLY	H976-7 9170	5340-01-028-0086	1
RIVETS, MONEL, COUN- TERSUNK	MS2042M4-4	5320-00-118-2005	A/R

b. Requisitioning Instructions Requisition replacement parts through normal supply channels using normal supply procedures. All requisitions shall use project code "XCH" per this TB.

NOTE

Project code "XCH" is required to track and establish a data base of stock fund expenditures incurred by the field as a result of this TB.

c. Bulk and Consumable Materiels -

NOMENCLATURE	PART NUMBER	NSN	QUANTITY PER AIRCRAFT
STAINLESS STEEL, TYPE 301, 1/4 HARD 0.040 INCH THICK	AMS 5517	9515-00-833-4855	A/R
STAINLESS STEEL, TYPE 301,1/4 HARD 0.063 INCH THICK	AMS 5517	9515-00-231-8623	A/R

- d. Disposition N/A.
- e. Disposition of Hazardous Materiel 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.
- b. Estimated Time Required -
 - (1) Total of 10 man-hours using 2 persons.
 - (2) Total of 2 hours downtime for one end item.
- c. Estimated cost impact of stock fund items to the field -

NOMENCLATURE	PART NO	NSN	QTY	UNIT COST	TOTAL COST
CATCH CLAMPING	114P8078-6	5340-01-244-4124	1	\$260.32	\$260.32
LATCH ASSEMBLY	H976-7	5340-01-028-0086	1	33.81	33.81

- 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 -
 - (1 TM55-1520-240-23.
 - (2 TM1-1520-252-23.
- (3 A copy of this TB shall be inserted in the appropriate TM as authority to implement the change until the tag printed change is received. Pen and ink changes are authorized.

13. References-

- a. TB 43-PS-520.
- b. TM 55-1520-240-23.
- c. TM 1-1520-252-23.

14. Recording and Reporting Requirements -

- a. Reporting Compliance Suspense Date (Aircraft) Upon entering requirements of this TB on DA Form 2408-13-1 on all subject MDS aircraft, forward a priority message, data fax or E-Mail to Commander, ATCOM, ATTN: AMSAT-R-X (SOF Compliance Officer), per AR 95-3. Data fax number is DSN 693-2064 or commercial (314) 263-2064. E-Mail address is "amsatrxs@st-louis-emh4.army.mil". The report will cite this TB number, date of entry in DA Form 2408-13-1, the aircraft mission design series and serial numbers of aircraft in numerical order.
- b. Task/Inspection Reporting Suspense Date (Aircraft) Units will forward a priority message to: Commander, ATCOM, ATTN: AMCPM-CH-L. The report will cite this TB number, date of compliance, and aircraft serial number. Reports will be completed no later than seven days after task/inspection suspense date.
 - c. Reporting Compliance Suspense Date (Spares) N/A.
 - d. Task/Inspection Reporting Suspense Date (Spares) N/A.
 - e. The following forms are applicable and are to be completed in accordance with DA PA 73-751, 15 June 1992 -
 - (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 2408-18, Equipment Inspection List.

15. Weight and Balance - N/A.

16. Points of Contact -

- a. Maintenance Engineering point of contact for this TB is Mr. Ron Desplinter, AMSAT-I-MEU, DSN 490-2263 or Commercial (314)260-2263.
- b. Technical point of contact for this TB are Mr. Larry Wieschhaus, AMSAT-R-ECC, DSN 693-3820/-6678 or commercial (314)263-3820/-6678, respectively.
- c. Logistical point of contact for this TB is Mr. Norm Huston, AMCPM-CH-L, DSN 693-1415 or commercial (314)263-1415 and data fax is DSN 693-1485 or commercial (314)263-1485.
- d. Wholesale Materiel point of contact (spares) for this TB is Mr. Hal Barnes, AMSAT-I-SACA, DSN 693-6031 or commercial (314)263-6031 and Data Fax DSN 693-6022 or commercial (314)263-6022.
- e. Forms and records point of contact for this TB is Ms. Ann Waldeck, AMSAT-I-MDM, DSN 490-2318 or commercial (314)260-2318.
 - f. Safety point of contact for this TB is Mr. Jim Wilkins, AMSAT-R-X, DSN 693-2258 or commercial (314)263-2258.

- g. Foreign Military Sales (FMS) recipients requiring clarification of action advised by this TB should contact Mr. Ron Van Rees, AMSAT-I-IAF, DSN 693-3826/3659 or commercial (314)263-3826/3659.
- h. After hours contact ATCOM Command Operations Center (COC) DSN 693-2066/2067 or commercial (314)263-2066/2067.
- 17. Reporting of Errors and Recommending Improvements. You can help improve this TB. If you find any mistakes or if you know of a 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 Troop Command, ATTN: AMSAT-I-MP, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. A reply will be furnished to you. You may also submit your recommended changes by E-mail directly to <mpmt%avma28@st-louls-emh7.army.mil>. A reply will be furnished directly to you.

By Order of the Secretary of the Army:

DENNIS J. REIMER General, United States Army Chief of Staff

Official:

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

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DISTRIBUTION:

To be distributed in accordance with DA Form 12-31-E, block no. 3624, requirements for TB 1-1520-240-20-89.

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