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FAA APPROVED

ROTORCRAFT FLIGHT MANUAL SUPPLEMENT

For

VHA 2042200-101 TAIL ROTOR BLADES

Installed On

HAGGLUND UH-1H HELICOPTERS

REGISTRATION No. _____

SERIAL No. _____

This supplement must be attached to the TM 55-1520-210-10 UH-1H/V Operator's Manual when the Van Horn Aviation **VHA 2042200-101 Tail Rotor Blades** are installed in accordance with STC No. SR02051LA

The information contained herein supplements or supersedes the information in the Operator's Manual only in those areas listed herein. For limitations, procedures, and performance data not contained in this supplement, consult the Operator's Manual and applicable Flight Manual Supplements.

FAA Approved: _____
Manager, Flight Test Branch, ANM-160L
Federal Aviation Administration
Los Angeles Aircraft Certification Office
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LOG OF PAGES

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Revised pages marked with "*" symbol.

NOTE
Revised text is indicated by a black vertical line.
Insert latest revision pages; dispose of superceded pages.

TABLE OF CONTENTS

CHAPTER 1
INTRODUCTION

No change.

CHAPTER 2
HELICOPTER AND SYSTEMS DESCRIPTION AND OPERATION

2-31. Tail Rotor Control System

The system is operated by pilot/copilot anti-torque pedals (fig 2-5 in the TM 55-1520-210-10 UH-1H/V Operator's Manual). Pushing a pedal will change the pitch of the tail rotor blades resulting in directional control. Pedal adjusters are provided to adjust the pedal distance for individual comfort. A force trim system is connected to the direction controls.

a. Tail Rotor Blades. The VHA 2042200-101 tail rotor blade is an all composite blade employing an advanced high efficient airfoil. The blade length is the same as the existing production blade, but the chord has been increased by .80 inches. Erosion protection is provided by a full span stainless steel abrasion strip adhesively bonded to the leading edge. Stainless steel bushings are pressed into the inboard end, which react to the attachment bolt loads. The blade is constructed primarily of carbon/epoxy unidirectional tape. The grip plates, tip closure and root closure are fabricated from fiberglass/epoxy fabric. The blades are statically balanced at the factory using a brass balance weight threaded into the tip closure. The interior of the blade is filled with closed cell rigid foam.

CHAPTER 3
AVIONICS

No change.

CHAPTER 4
MISSION EQUIPMENT

No change.

CHAPTER 5
OPERATING LIMITS AND RESTRICTIONS

No change.

CHAPTER 6
WEIGHT/BALANCE AND LOADING

There are no changes to the maximum weight or center-of gravity limitations shown in the TM 55-1520-210-10 UH-1H/V Operator's Manual. The VHA 2042200-101 tail rotor blades are lighter than the existing production tail rotor blades. The empty weight change is recorded in helicopter's basic weight and balance chart.

Weight and Balance Data as specified in the TM 55-1520-210-10 UH-1H/V Operator's Manual and Flight Manual Supplements remain applicable.

CHAPTER 7
MB PERFORMANCE DATA

7-18. Control Margin

c. VHA 2042200-101 Tail Rotor Blades. Figure 7-4 in the TM 55-1520-210-10 UH-1H/V Operator's Manual is applicable when the VHA 2042200-101 tail rotor blades are installed.

CHAPTER 8
NORMAL PROCEDURES

8-36. Cruise

When the desired cruise altitude is reached adjust power as necessary to maintain the required airspeed. Refer to Chapter 7 in the TM 55-1520-210-10 UH-1H/V Operator's Manual for recommended airspeeds, power settings, and fuel flow.

NOTE

With VHA 2042200-101 tail rotor blades installed, the left pedal position will be very close to neutral in level flight at 100 kias.

CHAPTER 9
EMERGENCY PROCEDURES

9-36. Hydraulic Power Failure

NOTE

Without hydraulic boost and with the VHA 2042200-101 tail rotor blades installed, a significantly higher force will be required to move the left pedal forward than to move the right pedal forward. However, little or no pedal force is required to maintain pedal position.