## ENSTROM 480/480B OPERATOR'S MANUAL AND

#### FAA APPROVED

## ROTORCRAFT FLIGHT MANUAL SUPPLEMENT

# PULSE LANDING LIGHT INSTALLATION P/N 4199005-111

\* \* \* \* \*

REPORT NO. 28-AC-059

HELICOPTER SERIAL NO.\_\_\_\_

HELICOPTER REGISTRATION NO.\_\_\_\_

THIS SUPPLEMENT MUST BE CARRIED IN THE HELICOPTER AT ALL TIMES IF EQUIPPED WITH THE PULSE LANDING LIGHT INSTALLATION. CHAPTERS 1, 2, 3, AND 4 ARE FAA APPROVED.

\* \* \* \* \*

2, 3, AND 4 ARE FAA APPROVED.			
FAA APPROVED BY: Rangled OM Elicy			
The American Laborators against all all and			

FOR STEVEN L. LARDINOIS, ACTINO MANAGER CHICAGO AIRCRAFT CERTIFICATION OFFICE CENTRAL REGION FEDERAL AVIATION ADMINISTRATION

FAA APPROVAL DATE: JUL 0 2 2014

THE ENSTROM HELICOPTER CORPORATION  $2209\ 22^{\rm ND}$  STREET MENOMINEE, MICHIGAN 49858-3515

UNCONTROLLED COPY WHEN DOWNLOADED OR PRINTED

INTENTIONALLY LEFT BLANK

## **LOG OF REVISIONS**

Rev. No.	Date	FAA Approved

APPROVED FOR THE MANAGER
CHICAGO AIRCRAFT CERTIFICATION OFFICE
CENTRAL REGION
FEDERAL AVIATION ADMINISTRATION

Report No. 28-AC-059

## ROTORCRAFT FLIGHT MANUAL SUPPLEMENT PULSE LANDING LIGHT, P/N 4199005-111

## **TABLE OF CONTENTS**

<u>CHAPTER</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
	Supplement Cover Page Log of Revisions	i
	Table of Contents	
	List of Figures	
	List of Tables	
	List of Effective PagesINTRODUCTION	v INTRO-1
CHAPTER 1	OPERATING LIMITATIONS	1-1
	Purpose	
	General	
	Operational Limits	1-1
CHAPTER 2	NORMAL PROCEDURES	2-1
	General	
CHAPTER 3	EMERGENCY PROCEDURES	3-1
	General	3-1
CHAPTER 4	PERFORMANCE DATA	4-1
	General	4-1
CHAPTER 5	RESERVED	5-1
CHAPTER 6	WEIGHT/BALANCE AND LOADIN	G 6-1
	General	6-1
CHAPTER 7	SYSTEM DESCRIPTION AND	
	OPERATION	
	System Description	
	Operation	7-3

## ROTORCRAFT FLIGHT MANUAL SUPPLEMENT PULSE LANDING LIGHT, P/N 4199005-111

## **LIST OF FIGURES**

FIGURE NO.	<u>DESCRIPTION</u>	<u>PAGE</u>
7-1	Collective Switch Box Configured with Pulse Landing Light	7-2
	LIST OF TABLES	
TABLE NO.	<u>DESCRIPTION</u>	<u>PAGE</u>
Intro-1	List of Abbreviations	INTRO-1

## LIST OF EFFECTIVE PAGES

<u>PAGE</u>	<u>DATE</u>
i	May 14/14
ii	May 14/14
iii	May 14/14
iv	May 14/14
V	May 14/14
vi	May 14/14
INTRO-1	May 14/14
INTRO-2	May 14/14
1-1	May 14/14
1-2	May 14/14
2-1	May 14/14
2-2	May 14/14
3-1	May 14/14
3-2	May 14/14
4-1	May 14/14
4-2	May 14/14
6-1	May 14/14
6-2	May 14/14
7-1	May 14/14
7-2	May 14/14
7-3	May 14/14
7-4	May 14/14

May 14/14

#### INTRODUCTION

#### Intro-1. General

This supplement contains the operating instructions, procedures, and limitations for the Pulse Landing Light Installation, P/N 4199005-111. The supplement is divided into two basic parts, the FAA approved RFM Supplement and Supplemental Data provided by the Enstrom Helicopter Corporation (Enstrom). Chapters 1, 2, 3, and 4 make up the FAA approved RFM Supplement. It is required by Federal Regulations that this supplement be carried in the helicopter at all times if the Pulse Landing Light Installation, P/N 4199005-111, is installed.

For additional information regarding the supplement format and text emphasis or definitions, refer to the Basic Flight Manual. Abbreviations noted in this supplement are listed in Table Intro-1.

## Intro-1. List of Abbreviations

LED	Light Emitting Diode
RFM	Rotorcraft Flight Manual

INTRO-2 ENSTROM 480/480B RFM SUPPLEMENT

INTENTIONALLY LEFT BLANK

#### CHAPTER 1. OPERATING LIMITATIONS

## 1-1. Purpose

This chapter includes operating limitations and restrictions that must be observed during ground and flight operations.

#### 1-2. General

This supplement must be attached to the basic RFM when the Pulse Landing Light Installation, P/N 4199005-111, is installed on the aircraft. Operation in compliance with Chapter 1, Operating Limitations, of the basic flight manual is mandatory except as modified by this supplement. Other approved sections and supplemental data are recommended procedures.

The operating limitations set forth in this chapter are the direct results of design analysis and flight tests. Compliance with these limitations will allow the pilot to derive maximum utility from the helicopter.

### 1-3. Operational Limits

This RFM supplement is intended for use with the pulse landing light installation, P/N 4199005-111.

Refer to the basic RFM for operational limits.

#### CHAPTER 2. NORMAL PROCEDURES

## 2-1. Preflight

Add the following to Paragraph 2-8, "Before Preflight Check", Step 5:

- a. Switch **LDG LT** to **ON** then **OFF** after check.
- b. Switch **LDG LT** to **PULSE** then **OFF** after check.

#### 2-2. Cruise

Add the following to Paragraph 2-32, "Cruise":

Landing light – constant or pulse illumination as desired.

### 2-3. Before Landing

Add the following to Paragraph 2-34, "Before Landing", Step 1e:

#### NOTE

Avoid using landing lights when in thick haze, dust, snow, smoke, or fog as reflected light will reduce visibility and may affect depth perception.

#### CHAPTER 3. EMERGENCY PROCEDURES

#### 3-1. General

Refer to the basic RFM.

#### 4-1

#### CHAPTER 4. PERFORMANCE DATA

#### 4-1. General

Refer to the basic RFM.

4-2 ENSTROM 480/480B RFM SUPPLEMENT

INTENTIONALLY LEFT BLANK

FAA Approved: Jul 2/14 Report No. 28-AC-059

May 14/14

## CHAPTER 6. WEIGHT/BALANCE AND LOADING

#### 6-1. General

This installation is included in the basic aircraft weight. Refer to the basic RFM.

6-2

INTENTIONALLY LEFT BLANK

#### CHAPTER 7. SYSTEM DESCRIPTION AND OPERATION

## 7-1. System Description

The pulse landing light installation components include an AeroLED Sunspot 36HX LED Landing Light with a pulsing feature.

- 1. The landing light is mounted in the landing light holder assembly of the lower nose section. As with the standard landing light, a servo actuator extends and retracts the lamp to provide a 45° arc of vertical travel.
  - a. Operation of the pulse landing light illumination and landing light positioning is controlled by a pair of switches on the pilot's and co-pilot's collective switch box as shown in Figure 7-1.
- 2. The pulse control is self-contained in the AeroLED Sunspot 36HX LED Landing Light assembly.
  - a. When the landing light switch is set to **PULSE**, the landing light pulses on/off at 0.5 second intervals.
- 3. Visual indication of pulsed landing light illumination is provided by a green **LDG LIGHT PULSE** annunciation on the caution/warning panel or an integrated Garmin G1000H display.
- 4. Power to the landing light is provided via the **LDG LT** circuit breaker (5 Amp); power to the landing light actuator is provided via the **LDG LT ACTR** circuit breaker (2 Amp). Both circuit breakers are located on the left side of the center pedestal.

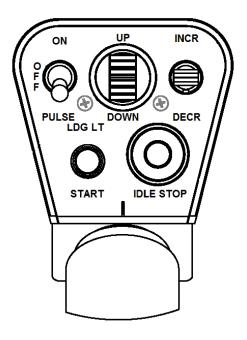


Figure 7-1. Collective Switch Box Configured with Pulse Landing Light

Report No. 28-AC-059

May 14/14

## 7-2. Operation

The pilot's and co-pilot's collective switch box contains two landing light switches jointly labeled **LDG LT** as shown in Figure 7-1.

- 1. Landing light illumination is controlled by the switch labeled **ON/OFF/PULSE**.
  - a. To operate the landing light with constant illumination, move the switch to **ON**.
  - b. To operate the landing light with pulsed illumination, move the switch to **PULSE**.
  - To operate without landing light illumination, move the switch to **OFF**.

#### NOTE

The pulse function overrides the steady on function. For example, if the pilot's landing light switch is set to ON and the copilot's landing light is set to PULSE, the landing light will pulse.

- Positioning of the landing light vertically is controlled by the switch labeled **UP/DOWN**. The switch is a momentary switch spring loaded to the center-**OFF** position. The landing light will move within its 45° arc of travel when the switch is held in the **UP** or **DOWN** position.
  - a. To move the light beam upward, push the UP/DOWN switch forward to the UP position and hold until the light is aimed as desired.
  - b. To move the light beam downward, pull the UP/DOWN switch backward to the DOWN position and hold until the light is aimed as desired.

7-4 ENSTROM 480/480B RFM SUPPLEMENT

INTENTIONALLY LEFT BLANK