# BELL MODEL 206B JET RANGER II

# **FLIGHT MANUAL**

# SUPPLEMENT FOR

# 206-706-124 206-706-126 HOIST — EXTERNAL

FAA APPROVED JULY 30, 1971

This supplement shall be attached to the Model 206B Flight Manual, when the External Hoist, has been installed.

The information contained herein supplements the information of the basic Flight Manual. For Limitations, Procedures, and Performance Data not contained in this supplement, consult the basic Flight Manual.

Bell Helicopter TI=XTRON

A Subsidiary of Textron Inc

POST OFFICE BOX 482 . FORT WORTH, TEXAS 76101

**30 JULY 1971** REVISION 4 - 26 JULY 1988 Log of Pages

# 206B FLIGHT MANUAL FAA APPROVED SUPPLEMENT

BHT-206B-FMS-10

LOG OF PAGES				
PAGES	REVISION NO.	PAGES	REVISION NO.	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$				

Log of Revisions

BHT-206B-FMS-10

LOG OF REVISIONS				
REVISION NO. DATE	REVISION NO. DATE			
Original30 Jul 71 Reissue20 Dec 72 128 Apr 76 205 Dec 83 324 Oct 85 426 Jul 88				
APPROVED: 26 JULY 1988				
MANAGER	O. Fickor			
AIRCRAFT CERTIFICATION DIVISION FEDERAL AVIATION ADMINISTRATION DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION, FORT WORTH, TEXAS				
NOTE: Revised text is indicated by a black vertical line. Insert latest revision pages; dispose of superseded pages.				

#### 206B FLIGHT MANUAL FAA APPROVED SUPPLEMENT

BHT-206B-FMS-10

#### INTRODUCTION

The Bell Hoist Kit, No. 206-706-124 or 206-706-126, consists of a hoist motor and winch assembly, mounting frame, master control panel, crew member's pendant control, electrical components, wiring, and all the hardware necessary to complete the installation. The winch unit of the 206-706-124 Hoist Kit contains 100 feet and the winch unit of the 206-706-126 Hoist Kit contains 110 feet of usable cable. Each winch unit when actuated has a rate of cable travel of 50 feet per minute. The control panel is edge lighted and contains a Power Selector switch, for pilot or crew member hoist operation, and a Cable Cut switch for use in the event of an emergency. The control panel of the 206-706-124 Hoist Kit also contains an Overheat Warning light which when illuminated indicates an overtemp condition of the hoist motor. Installation of the hoist will allow the pilot or crew member to deliver or pick up cargo from areas that are not suitable for landing the helicopter.



# **AIRSPEED LIMITATIONS**

The object being hoisted shall be completely in the cabin before forward flight is established.

# **CENTER OF GRAVITY LIMITS**

Actual weight change shall be determined after kit is installed and ballast readjusted, if necessary, to return empty weight C.G. within allowable limits.

# TYPE OF OPERATION

Hoist operations must be conducted under the provisions of Restricted Category Aircraft or the operating rules for external loads.

Operation under FAR PART 27 is approved, with the hoist installed, providing the hoist is not used and the hoist electrical system is deactivated.

Flight operations requiring use of the hoist ARE PROHIB-ITED and the system SHALL BE DEACTIVATED when the Float Kit, 206-706-008, and/or the External Cargo Hook Kit, 206-706-101, is installed.

# LOADING LIMITATIONS

Hoist loading — Maximum 300 pounds. (Refer to Section IV, Hoist Loading Nomograph.)



# NORMAL PROCEDURES

# **EXTERIOR CHECK**

#### 6. FUSELAGE CABIN — LEFT SIDE

Hoist — Condition, security, wiring connected. Ensure hook firmly seated against bumper pad.

Aft cabin door — Removed, if hoist is to be used.

# **INTERIOR CHECK**

Crew member's hoist control — Installed, stowed, wiring connected.

# **BEFORE TAKE-OFF**

#### NOTE

Perform hoist power check if hoist operations are anticipated.

#### HOIST POWER CHECK

Prior to take-off perform hoist operation functional check as follows:

HOIST POWER and CABLE CUT circuit breakers - IN.

HOIST POWER switch — PILOT position.

Section 2

BHT-206B-FMS-10

# HOIST POWER CHECK (Cont)

HOIST OVERHEAT WARNING light — PRESS TO TEST (light ON) then release (206-706-124 Hoist Kit ONLY).

HOIST switch, pilot's – PRESS switch DN (down) to lower hook approximately two feet, then UP to raise hook.

HOIST POWER switch — CREW position.

HOIST switch, crew member — PRESS switch DN (down) to lower hook approximately two feet, then UP to raise hook.

HOIST POWER switch — OFF position.

Pilot or crewmember — Ensure hook firmly seated against bumper pad.

# HOIST OPERATING PROCEDURE

HOIST POWER switch — PILOT or CREW position.

Establish zero ground speed over pickup location.

HOIST switch — DN (Down) to lower hook.

#### NOTE

Allow a 30 second rest period between each 1/2 cycle (i.e. full up or full down) of operation. Lift hoist load slightly above contact surface, by application of collective pitch, to obtain a sense of control feel.

HOIST switch — UP to raise hoist load.

#### 206B FLIGHT MANUAL FAA APPROVED SUPPLEMENT

#### BHT-206B-FMS-10

# CAUTION

To prevent overheating and damage to the hoist motor ONLY three(3) consecutive cycles (i.e. full up and full down) are permitted. After three (3) full cycles of operation allow a 40 minute period for cooling. Overheating of the 206-706-124 winch motor will be indicated by illumination of the OVERHEAT WARNING light.

HOIST POWER switch — OFF after completing hoist operation.

 $\label{eq:point} Pilot \mbox{ or crewmember} - Ensure \mbox{ hook firmly seated against bumper } pad.$ 

# AFTER EXITING HELICOPTER

POST FLIGHT CHECK

Hoist — Condition and security. Ensure hook firmly seated against bumper pad.

#### NOTE

After last flight of the day, if the hoist has been used, maintenance action is required.

# EMERGENCY PROCEDURE

In the event of an emergency LIFT CABLE CUT switch guard and actuate SWITCH to drop the hoist load.



No Change.



#### HOIST LOADING NOMOGRAPH

#### NOTES:

- Fuel loads shown must be the least amount 1. available while load is on the hoist.
- Gross Weight must not exceed max. allowable. 2.

#### EXAMPLE.

250

200

150

PILOT WEIGHT (LBS)

A - - - 200 Lb. pilot and 150 Lb. load in the left seat - for a horizontal C.G. range of 106.0 to 108.0 and a fuel load of 20 Gal., the hoist loading allowable is 200 pounds. For a horizontal C.G. range of 108.0 to 114.2 and a fuel load of 60 gallons the hoist loading allowable is 300 pounds.



