

ENSTROM 480B OPERATOR'S MANUAL

AND

FAA APPROVED

ROTORCRAFT FLIGHT MANUAL

SUPPLEMENT

**GARMIN SL30 NAV/COM TRANSCEIVER WITH
MD200-306 CDI**

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REPORT NO. 28-AC-030

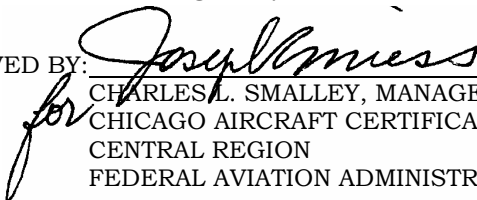
HELICOPTER SERIAL NO. _____

HELICOPTER REGISTRATION NO. _____

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**THIS SUPPLEMENT MUST BE CARRIED IN THE
HELICOPTER AT ALL TIMES IF EQUIPPED WITH THE
GARMIN SL30 NAV/COM INSTALLATION. CHAPTERS 1, 2,
3, AND 4 ARE FAA APPROVED.**

FAA APPROVED BY: _____



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CHICAGO AIRCRAFT CERTIFICATION OFFICE
CENTRAL REGION
FEDERAL AVIATION ADMINISTRATION

FAA APPROVAL DATE: FEBRUARY 16, 2010

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**ROTORCRAFT FLIGHT MANUAL SUPPLEMENT
GARMIN SL30 NAV/COM**

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ROTORCRAFT FLIGHT MANUAL SUPPLEMENT
GARMIN SL30 NAV/COM

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INTRODUCTION

Intro-1. General

This supplement contains the operating instructions, procedures, and limitations for the Garmin SL30 NAV/COM and the Mid-Continent Instruments MD200-306 CDI. 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 SL30 NAV/COM and the MD200-306 units are 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

CB	Circuit Breaker
CDI	Course Deviation Indicator
COM	Communication
DSP	Digital Signal Processing
GS	Glideslope
ICS	Intercom System
ILS	Instrument Landing System
LOC	Localizer
NAV	Navigation
OBS	Omni Bearing Selector
RFM	Rotorcraft Flight Manual
SYS	System
VHF	Very High Frequency
VOR	VHF Omni-Directional Range
VOX	Voice Activated

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CHAPTER 1. OPERATING LIMITATIONS

1-1. Purpose

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

1-2. General

1. 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

1. This RFM supplement is intended for use with the SL30 NAV/COM and, if equipped, the MD200-306 CDI.

2. The Pilot's Guide for the SL30, Part Number 560-0403-01, Revision C, or subsequent, should be referred to for operating instructions. It must be kept accessible to the flight crew at all times.

3. An aircraft radio station license may be required with the SL30 for transmitting.

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CHAPTER 2. NORMAL PROCEDURES

2-1. General

1. Refer to the basic RFM.

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CHAPTER 3. EMERGENCY PROCEDURES

3-1. Electrical System Failure

1. Refer to the basic RFM.

3-2. Stuck Mic

1. A “Stuck Mic” message will display on the SL30 if the microphone sticks in the ON or Transmit position. If the microphone is keyed for longer than 35 seconds, the SL30 will return to the receive mode on the selected frequency.

NOTE

In an emergency situation, if the “Stuck Mic” message remains after you have stopped keying the mic, turn the power off and then back on. You will then get another 35 second time-out period to transmit.

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CHAPTER 4. PERFORMANCE DATA

4-1. General

1. Refer to the basic RFM.

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CHAPTER 6. WEIGHT/BALANCE AND LOADING**6-1. General**

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

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CHAPTER 7. SYSTEM DESCRIPTION AND OPERATION

7-1. System Description

1. The Apollo SL30 NAV/COM unit is a VHF Navigation/Communications Transceiver utilizing high performance Digital Signal Processing (DSP) filtering. It includes a 760-channel VHF Comm transceiver and a 200-channel VOR/LOC/GS navigation receiver.

2. Functions and features of the SL30 include automatic decoding of the Morse code station identifier for VOR/LOC, memory storage for most-used frequency, built-in course deviation indicator, standby Com and Nav frequency monitoring, Nav receiving for both VOR and LOC navigation signals, and built in Glideslope receiver.

3. The SL30 provides output to a VOR/LOC/GS Indicator, such as the MD200-306, and to either a VOX ICS or an audio panel. The system interface is shown in Figure 7-1.

4. Power to the SL30 unit is provided via the **COM** circuit breaker (CB) (5 Amp) and the **NAV** circuit breaker (CB) (2 Amp) located on the left side of the center pedestal.

5. The MD200-306 receives input from the SL30 to provide a visual presentation of OMNI (VOR), GPS, LOC and GS information.

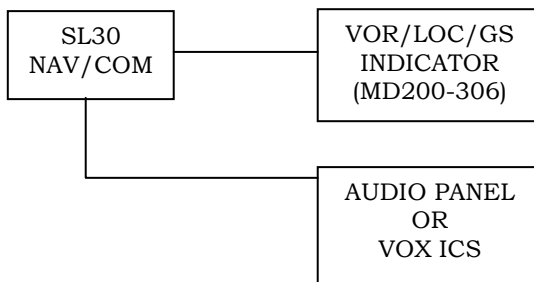


Figure 7-1. SL30 System Interface

7-2. Operation

1. Operation of the SL30 is controlled by the **OFF/VOL** dial on the lower left side of the unit.

2. The SL30 display and controls are shown in Figure 7-2. Annunciators over the function buttons will light when the mode is active or selected. Instructions for the commonly used Nav/Com functions are briefly explained in Table 7-1.

3. Light intensity of the SL30 display is automatically controlled by a photocell in the top left corner of the front panel. The lens on the display is polarized to reduce reflections. Using polarized sunglasses may make it difficult to view the display. If preferred, the automatic dimming function can be disabled. Refer to the Pilot's Guide, Part Number 560-0403-01, to disable the dimming function.

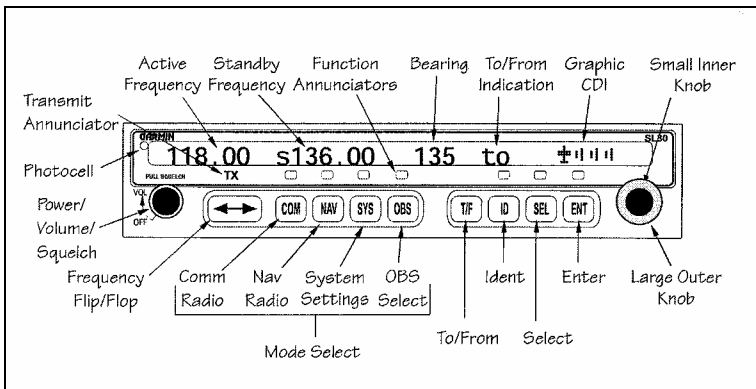


Figure 7-2. SL30 Display

4. Back Course Mode: The back course mode activates the Nav receiver's reverse sensing capability. When the helicopter is on a localizer back course in the back course mode, the CDI indications will be the same as in the front course. Thus, a right needle deflection indicates "fly right" and a left needle deflection indicates "fly left".

Table 7-1. SL30 Function Operation

Function	Operation
COM Radio Mode	Press COM . Use the Large and Small Knob to select the desired frequency.
NAV Radio Mode	Press NAV . Use the Large and Small Knob to select the desired frequency.
Frequency Monitoring COM Radio Mode	Press COM . A small “m” will replace the “s” in front of the Standby frequency.
Frequency Monitoring NAV Radio Mode	Press NAV . A small “m” will replace the “s” in front of the Standby frequency. <u>Note:</u> You cannot monitor a Localizer channel.
OBS	Press OBS once to see the current OBS setting and graphic CDI. Press OBS twice to navigate Direct-To a VOR.
T/F	Press the T/F to change the CDI to To or From.
Back Course	Press NAV and set the Localizer frequency of your approach as the Active channel. Press SEL . Press ENT to enable the back course. “bc” will be noted on the display. The graphic CDI will guide you along the course to the runway.
Switch between active and standby frequency	Press FLIP/FLOP
Memory Storage for Common Used Frequencies	While in COM , press ENT . Use the Large and Small Knob to assign a four-character name. Press ENT .
System	Press SYS for system info and Nav/Com options menus.

5. For all other operation instructions of the SL30, refer to the Pilot's Guide.

6. The MD200-306 display and controls are shown in Figure 7-3. Annunciators on the indicator will light when the mode is active or selected.

7. The OBS control knob on the front of the MD200-306 display is used to select the appropriate inbound or outbound bearing to a VOR station or waypoint.

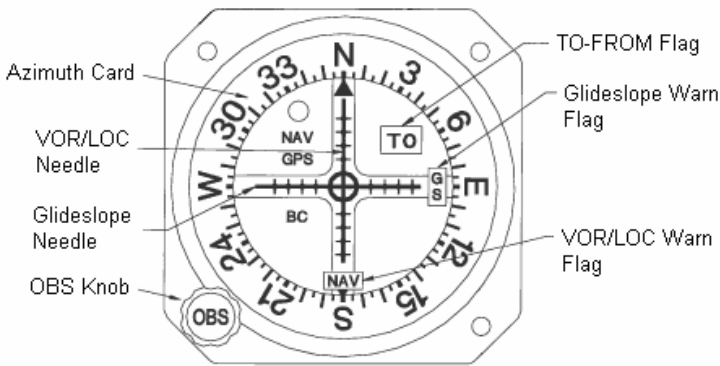


Figure 7-3. MD200-306 Display