ENSTROM 480B OPERATOR'S MANUAL AND

FAA APPROVED

ROTORCRAFT FLIGHT MANUAL SUPPLEMENT

GARMIN GTX 327 MODE A/C TRANSPONDER

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REPORT NO. 28-AC-065
HELICOPTER SERIAL NO
HELICOPTER REGISTRATION NO
* * * *
THIS SUPPLEMENT MUST BE CARRIED IN THE HELICOPTER AT ALL TIMES IF EQUIPPED WITH THE GARMIN GTX 327 INSTALLATION. CHAPTERS 1, 2, 3, AND 4 ARE FAA APPROVED.
FAA APPROVED BY: Roused D. M. Elizage FOR TIMOTHY P. SMYTH, MANAGER CHICAGO AIRCRAFT CERTIFICATION OFFICE CENTRAL REGION FEDERAL AVIATION ADMINISTRATION
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GARMIN GTX 327 GPS/WAAS NAV COM

INTRODUCTION

Intro-1. General

This supplement contains the operating instructions, procedures, and limitations for the Garmin GTX 327. 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 Garmin GTX 327 unit is installed.

Intro-2. List of Abbreviations

Abbreviations noted in this supplement are listed in Intro1.

Intro-1. List of Abbreviations

ATC	Air Traffic Control	
FAA	Federal Aviation Administration	
MHz	Megahertz	
RFM	Rotorcraft Flight Manual	
SPI	Special Position Identification	
TCAS	Traffic Collision Avoidance System	

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CHAPTER 1. OPERATING LIMITATIONS

1-1. General

Refer to the basic RFM.

1-2. System Software

The system must utilize the software version 2.10 (or later FAA approved version). The software version is displayed during system initialization after power-up or can be accessed in the System function page.

1-3. Pilot's Guide

- 1. The Pilot's Guide for the GTX 327 Part Number 190-00187-00, Revision D, or subsequent, should be referred to for operating instructions. It must be kept accessible to the flight crew at all times.
- 2. If the GTX 327 is configured with the GTN 650 for transponder control, the GTN 625/635/650 Cockpit Reference Guide, Part Number 190-01004-04, Revision F, or subsequent, should also be referred to for operating instructions. It must be kept accessible to the flight crew at all times.

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CHAPTER 2. NORMAL PROCEDURES

2-1. General

Refer to the basic RFM.

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CHAPTER 3. EMERGENCY PROCEDURES

3-1. Emergency Procedures

Refer to the basic RFM.

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CHAPTER 4. PERFORMANCE DATA

4-1. General

Refer to the basic RFM.

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CHAPTER 6. WEIGHT/BALANCE AND LOADING

6-1. General

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 GTX 327 is a panel-mounted transponder with the addition of altitude reporting and timing functions. The transponder is a radio transmitter and receiver that operates on radar frequencies, receiving ground radar or TCAS interrogations at 1030 MHz and transmitting a coded response of pulses to ground-based radar on a frequency of 1090 MHz. The GTX 327 enables ATC to display aircraft identification, altitude and groundspeed on ATC radar screens or TCAS traffic indicators. The GTX 327 is also equipped with IDENT capability that activates the SPI pulse for 18 seconds.
- 2. The GTX 327 installation may be configured with other compatible control/display units such as the GTN 650. The system interface is shown in Figure 7-1.
- 3. The GTX 327 front panel features are shown in Figure 7-2. A brief explanation of the mode selection and code selection keys is provided in Table 7-1.
- 4. Power to the GTX 327 is provided via the **XPNDR** circuit breaker (CB) (3 Amp) located on the left side of the instrument console.

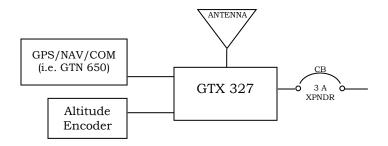


Figure 7-1. GTX 327 System Interface



Figure 7-2. GTX 327 Front Panel

7-2. Operation

- 1. Position the **AVI MSTR** switch to ON to apply system power, if not already switched on.
 - a. Press either the STBY, ALT, or ON keys to turn on the unit.
 - b. After power-on, a start-up page is displayed while the system performs a self-test. If the unit detects an internal failure, the screen displays SELF TEST FAILED.
 - c. Press the **OFF** key to power off the unit. Switching the **AVI MSTR** switch to OFF will also turn off the unit.
- 2. Table 7-1 provides basic mode selection key and code selection key operation.
- 3. For other GTX 327 keys and functions, refer to the GTX 327 Pilot's Guide.
- 4. If configured with the GTN 650, refer to the GTN 625/635/650 Cockpit Reference Guide for transponder control.

Table 7-1. Mode Selection and Code Selection Keys

Key	Functions		
	Press to power on; displays the last active identification code		
	• Press STBY to select the standby mode		
STBY ON ALT	• Press ON to select Mode A; the transponder replies to interrogations, as indicated by the Reply Symbol ()		
	• Press ALT to select Mode A and Mode C; the transponder replies to identification and altitude interrogations, as indicated by the Reply Symbol (R). Replies to altitude interrogations include the standard pressure altitude received from an external altitude source, which is not adjusted for barometric pressure. The ALT mode may be selected in aircraft not equipped with an optional altitude encoder; however, the reply signal will not include altitude information.		
	• Any time the function ON or ALT is selected the transponder becomes an active part of the Air Traffic Control Radar Beacon System (ATCRBS). The transponder also responds to interrogations from TCAS equipped aircraft.		
	Press these keys to enter the reply code		
0-7	• The new code is activated when the fourth digit is entered		
CLR CRSR	Press CLR to move cursor back to the previous digit		
	• Pressing the CLR key when the cursor is on the first digit of the code, or pressing the CRSR key during code entry, removes the cursor and cancels data entry, restoring the previous code.		
	The CLR key may be pressed up to five seconds after code entry is complete to return the cursor to the fourth digit.		

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