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# Flight Manual Supplement

## Garmin GTS 855 Traffic Collision Avoidance System (TCAS I)

Bell 212

**FMS-212-004**

Revision A

April 6, 2023



Aircraft Registration: \_\_\_\_\_

Aircraft Serial Number: \_\_\_\_\_

Sections 1 to 4 inclusive of this document comprises the approved Flight Manual Supplement. Compliance with Section 1, "Limitations", is mandatory.

Sections 5 and 6 are unapproved and for information only.

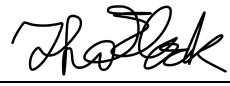
The information and data contained in this document supersedes or supplements that contained in the basic Approved Flight Manual for the Eagle Single Bell 212 Models only in the areas listed herein when modified in accordance with STC SH21-44. For Limitations, Procedures and Performance data not contained in this supplement, refer to the Approved Flight Manual or other applicable Approved Flight Manual Supplements.

This Supplement must be attached to the Approved Flight Manual for the aircraft with the subject design change incorporated.


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### Revision Record

Rev	Date	Description of Revision
A	See Cover Page	Initial Release. This document supersedes FMS21011-3 Rev A.

Prepared:   
\_\_\_\_\_

Reviewed:   
\_\_\_\_\_

Released:   
\_\_\_\_\_

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## General Information

This flight manual supplement (FMS) is intended to supplement Eagle Single Flight Manual Supplement FMS-D212-725-1.

This installation consists of the following systems/equipment:

- Garmin GTS 855 TCAS Computer (Qty 1)
- Garmin GA 58 TCAS Antennas (Qty 2)

This flight manual is divided into six sections as follows:

- Section 1: Limitations
- Section 2: Normal Procedures
- Section 3: Emergency and Malfunction Procedures
- Section 4: Performance Data
- Section 5: Weight and Balance Data
- Section 6: Systems Description

Sections 1 through 4 contain Transport Canada approved data necessary to operate the helicopter in a safe and efficient manner.

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## **Section 1. Limitations**

The Limitations of Section 1 remain applicable with the addition of the following:

### **1.1. Garmin GTS 855 Traffic Collision Avoidance System (TCAS)**

The pilot should not maneuver the aircraft based on the traffic display only. The traffic display is intended to assist in visually locating traffic. The traffic display lacks the resolution necessary for use in evasive maneuvering.

### **1.2. Headset/Helmet Limitation**

A compatible headset or helmet must be used when operating the GTS 855 Traffic Collision Avoidance System (TCAS I).

**TCCA APPROVED** May 23, 2023

## Section 2. Normal Procedures

The Normal Procedures of Section 2 remain applicable with the following additions:

### 2.3. Preflight Check

#### 2.3.2. Exterior Check

Add the following areas to be inspected:

##### 2A. Area 2A – Forward Belly

Antenna(s) – Condition and security.

### 2.7. Before Takeoff

TCAS Self Test – Initiate.

“TCAS I System Test Passed” Aural Message – Verify.

If “TCAS I System Test Failed” aural message is heard:

TCAS Self Test – Initiate Again.

If “TCAS I System Test Failed” aural message is heard again, TCAS is considered inoperative.

(The following section is added after Section 2.13 Post Flight Check.)

### 2.14. Normal Operation

#### 2.14.1. TCAS Activation

From the MFD Page:

TCAS Mode – Select Operate.

Altitude Filter – Set as desired.

#### 2.14.2. TCAS Deactivation

From the MFD Page:

TCAS Mode – Select Standby.

#### 2.14.3. Traffic Pop-up

Traffic alerts occur anytime there is an increase in the number of traffic advisories. They will be displayed on the PFD and MFD as follows:

PFD: “TRAFFIC” alert appears in black text inside a yellow box.

MFD: A traffic display pop-up window appears along with a “TRAFFIC ALERT” black text inside a yellow box.

They remain active until the area is clear of all TAs.

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### **Section 3. Emergency and Malfunction Procedures**

The Emergency and Malfunction procedures of Section 3 remain applicable with the addition of the following:

#### **3.12. Warning and Caution Messages**

##### **3.12.1. TCAS Caution**

Yellow TRAFFIC annunciator and aural "TRAFFIC":

Aircraft Flight Path – Verify and correct if required.

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## Section 4. Performance Data

No change.

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## **Section 5. Weight and Balance Data**

No change.

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## Section 6. System Description

For complete normal operating procedures refer to:

Garmin GTS Traffic Systems Pilot's Guide 190-00587-02, Revision E, dated July 20, 2018 (or later applicable revision).

### 6.1. Garmin GTS 855 Traffic Collision Avoidance System (TCAS)

The Garmin GTS 855 TCAS is operating as a TCAS I system.

Control of the GTS 855 TCAS I occurs at the MFD Traffic Page. The following function keys are available:

Traffic Status Key: Selects between:

- Operating mode (displayed as "OPER"), and
- Standby mode (displayed as "STBY")

Test: Initiates self test.

Altitude Filter: Pilot selectable filters limit the display of traffic to a specific altitude range relative to the altitude of the ownship. Selects between:

- Normal (-2,700 ft to 2,700 ft)
- Above (-2,700 ft to 9,900 ft)
- Below (-9,900 ft to 2,700 ft)
- Unrestricted (-9,900 ft to 9,900 ft)

### 6.2. Power

The Garmin GTS 855 TCAS I and its associated components are protected as described in Table 1.

CB Label	Amps	Location	Bus
TCAS	5A	Overhead Panel	Essential Avionics Bus

Table 1 – TCAS Circuit Breaker

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