

# **BELL 429**

## **ROTORCRAFT FLIGHT MANUAL**

### **SUPPLEMENT**

## **TRAKKA TC-300 CAMERA**

**EA429E8137**

**CERTIFIED  
7 OCTOBER 2021**

This supplement shall be attached to the BHT-429-FM-1 when the Trakka TC-300 Camera kit (EA429E8137) has been installed.

Information contained herein supplements information in the basic Flight Manual. For Limitations, Procedures, and Performance Data not contained in this supplement, refer to the basic Flight Manual.

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## LOG OF REVISIONS

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### NOTE

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**CHIEF, FLIGHT TEST  
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## GENERAL INFORMATION

The Trakka TC-300 Camera installation (EA429E8137) consists of a turret, hand controller, and display. The gimbal assembly of the camera system is attached to the Meeker Nose Utility Mount, which is designed to provide an attachment for the TC-300 turret onto the Bell 429 helicopter. The mount is located on the helicopter front access cover (underneath the helicopter nose).

The Trakka TC-300 Camera has a functional interface with the Aircraft Mission Equipment systems to provide Camera Video with or without mission map overlays on the instrument panel mission display.

The TC-300 Camera also provides Turret position information to the Trakkabeam Searchlight for slaved operation, if mapping system is enabled.

The Laser operations are not authorized for civil helicopter operations; however, it may be permitted in public use law enforcement operations.

Electrical power is provided from the Mission Equipment Bus.





# Section 1

## LIMITATIONS

### 1-3. TYPES OF OPERATION



THE CIVIL AVIATION AUTHORITY HAS NOT ASSESSED THE HAZARDS ASSOCIATED WITH THE LASER FEATURE AND HAS NOT VALIDATED MANUFACTURER SAFETY OR HAZARD ASSESSMENTS.

The laser function of the camera is physically disabled.

### 1-4. FLIGHT CREW

Operation of camera is limited to the non-flying pilot/operator.

### 1-6. WEIGHT AND CENTER OF GRAVITY

Actual weight change will be determined after kit installation. Ballast will then be adjusted, as required, to return empty weight CG to within allowable limits.

### 1-20. INSTRUMENT MARKINGS AND PLACARDS

Refer to [Figure 1-1](#) for placards and decals.

**LASER OPERATION IS NOT CIVIL AUTHORITY APPROVED**

Location : Center pedestal

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**Figure 1-1. Placards and Decals**

# Section 2

## NORMAL PROCEDURES

### 2-1. INTRODUCTION

Refer to Trakka TC-300 Camera Operation Manual P/N 1-0101-0026 for system operation.

### 2-3. PREFLIGHT CHECK

#### 2-3-B EXTERIOR CHECK

##### 2-3-B-9 FUSELAGE — FRONT

1. TC-300 turret — Condition and security of turret, nose mount, and power cable. Lens for cleanliness and damage.
2. Camera Unit — Verify freedom of movement in 360 degrees rotation and stop to stop vertically.
3. Desiccant humidity indicators — Verify upper quadrants do not indicate a pink color.

### 2-4. INTERIOR AND PRESTART CHECK

1. MISSION EQUIP BUS switch — Blank (off).
2. Hand controller — Stowed with HCU ON/OFF Switch — OFF.

#### NOTE

To protect the TC-300 multi sensor against overvoltage and transient voltage during aircraft engine startup, make sure no voltage is supplied to TC-300.

### 2-7. BEFORE TAKEOFF

#### NOTE

TC-300 system is designed to be powered during all phases of flight.



TO PROTECT THE LENSES FROM DAMAGE, THE SYSTEM SHALL BE IN STOWED POSITION DURING TAXI, TAKEOFF, AND LANDING.

1. MISSION EQUIP BUS switch — ON.
2. HCU ON/OFF switch — ON.
3. Hand controller MODE button — Press and hold to stow turret.

### 2-9. IN-FLIGHT OPERATIONS

#### NOTE

The Trakka TC-300 camera is installed forward of the lower wire strike and when installed could inhibit functionality of the lower wire cutter safety device.



TO AVOID FOD AND DUST CONTACTING THE CAMERA LENS, SET MODE BUTTON TO CAGE POSITION AT AN ALTITUDE OF 33 FT (10 M) ABOVE GROUND LEVEL.

**2-10. DESCENT AND LANDING**

1. Hand controller MODE button — Press and hold to stow turret.
2. Hand controller — Stowed with HCU ON/OFF — OFF.

**2-12. POSTFLIGHT CHECK**

1. MISSION EQUIP BUS switch — Blank (off).

# ***Section 3***

## ***EMERGENCY AND MALFUNCTION PROCEDURES***

No change from basic manual.

# ***Section 4***

## ***PERFORMANCE***

No change from basic manual.

# ***Section 5***

## ***WEIGHT AND BALANCE***

No change from basic manual.

