

BELL 429

ROTORCRAFT FLIGHT MANUAL

SUPPLEMENT

AVIONICS BAY FAN

EA429E8035

429-799-205

CERTIFIED

28 SEPTEMBER 2015

This supplement shall be attached to the BHT-429-FM-1 when the Avionics Bay Fan installation (EA429E8035 or 429-799-205) 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

Original 0..... 28 SEP 15	Reissue.....002 JUN 16
Reissue 0..... 15 OCT 15	Reissue.....0 06 NOV 20

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LOG OF TC APPROVED REVISIONS

Original 0..... 28 SEP 15 Reissue.....0 02 JUN 16
Reissue 0..... 15 OCT 15 Reissue.....0 06 NOV 20

APPROVED

DATE


ANDREAS HARTONO

06 NOV '20

A/
CHIEF, FLIGHT TEST
FOR
DIRECTOR — NATIONAL AIRCRAFT CERTIFICATION
TRANSPORT CANADA

GENERAL INFORMATION

The Avionics Bay Fan installation (EA429E8035 or 429-799-205) consists of a fan installed in the aft avionics bay compartment, which exhausts the air through the existing side body outlet duct to keep the compartment temperature within limits considering the additional customized equipment installed within it.

The fan is normally inoperative until the aft compartment reaches approximately 49°C (120.2°F), at which point a local thermostat will turn on the fan to reduce the bay temperature. In cases that the fan becomes inoperative while it is commanded to run, a caution message (AV BAY FAN) will be provided on the cockpit DUs to warn the crew of the fan failure. A normally running fan will maintain the avionics bay within temperature limits. In cases where the fan fails to operate and the temperature exceeds 55°C (131°F), a separate thermostat will illuminate a caution message (AV BAY HOT) on the cockpit DUs.

The fan system is testable through a cockpit mounted PBA on the upper section of the pedestal. Pressing the PBA will exercise the system relays, power, fan, and ADIU fan failure caution to confirm proper operational status of the system.

Section 1

LIMITATIONS

No change from basic manual.

Section 2

NORMAL PROCEDURES

2-6-D. MISCELLANEOUS CHECKS

1. **AV BAY FAN** PBA — Press and hold.
2. Verify **PASS** advisory and **AV BAY FAN** caution messages illuminated.
3. **AV BAY FAN** PBA — Release.
4. Verify **PASS** advisory and **AV BAY FAN** caution messages extinguished.

Section 3

EMERGENCY AND MALFUNCTION PROCEDURES

Table 3-3. Caution (Amber) Lights/Messages

MESSAGE	FAULT CONDITION	CORRECTIVE ACTION
AV BAY FAN	Avionics bay fan inoperative.	1) Monitor for AV BAY HOT message. 2) Applicable maintenance required.
AV BAY HOT	Avionics bay overheating.	1) Turn off non essential equipment, individually or through a master switch, such as mission equipment, additional mission, transmitters, receivers, mission computer, etc. 2) If hovering, translate to forward flight, land as soon as practical.

Table 3-4. Advisories (Green, White, or Cyan) Lights/Messages

MESSAGE	FAULT CONDITION	CORRECTIVE ACTION
PASS	Avionics bay fan system test successful.	