



AIRBUS HELICOPTERS CANADA LIMITED

**FLIGHT MANUAL SUPPLEMENT  
AIRFRAME FUEL FILTER  
EC 130 B4**

**SUBJECT: AIRFRAME FUEL FILTER (P/N 130-600004)**

The Airframe Fuel Filter enables operation of the helicopter at low temperatures without the use of anti-ice additives in the fuel. The filter is designed to collect ice particles.

**APPLICABILITY:**

This Flight Manual Supplement must be used when the Airframe Fuel Filter is installed on the helicopter.

Department of Transport  
(Canada) Approved

**IMPORTANT NOTE**



THE INFORMATION AND DATA CONTAINED IN THIS DOCUMENT SUPERSEDE OR SUPPLEMENT THAT CONTAINED IN THE BASIC APPROVED FLIGHT MANUAL FOR THE EC 130 B4 HELICOPTER IN THOSE AREAS LISTED HEREIN. FOR LIMITATIONS, PROCEDURES AND PERFORMANCE NOT CONTAINED IN THIS DOCUMENT REFER TO THE APPROVED FLIGHT MANUAL AND OTHER APPLICABLE APPROVED FLIGHT MANUAL SUPPLEMENTS.

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SECTIONS 2, 3, 4 AND 5 OF THIS DOCUMENT COMPRISE THE APPROVED FLIGHT MANUAL SUPPLEMENT. COMPLIANCE WITH SECTION 2, LIMITATIONS, IS MANDATORY.

SECTIONS 1 AND 6 ARE UNAPPROVED AND ARE PROVIDED FOR INFORMATION ONLY.

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|  | NAME AND SIGNATURE                  | DATE                       | COMPANY DEPARTMENT    |
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| PREPARED BY:                             | D. Kerr <i>D. Kerr</i>              | 25 Feb, 2015               | AHCA ENGINEERING      |
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| REV. 6 ACCEPTED<br>(Civil A/W Authority) | SEE TCQA<br>STATE <i>C. Timmins</i> | 15 <sup>th</sup> June 2015 | TCQA                  |
| REV. 6 RELEASED BY:                      | P. Sharpe <i>P. Sharpe</i>          | JUN 17 2015                | AHCA ENGINEERING      |
|  |                                     |                            |                       |
|  |                                     |                            |                       |

**RECORD OF REVISIONS**

| Rev. | Pages at this Revision | Description, Reason Changed Pages   | Prepared (name and date)   | Checked (name and date)       | App'd/Acc'd (Civil A/W Authority) (name and date) | Released (name and date)       |
|------|------------------------|---|----------------------------|-------------------------------|---|--------------------------------|
| 0    | 1 through 5            | Original Issue  | A. Magner<br>10 Dec., 2002 | T. Czarnecki<br>13 Dec., 2002 | TCCA<br>Eric Cheung<br>17 Dec., 2002              | R. Manson<br>17 Dec., 2002     |
| 1    | 1 through 5            | Pages 4, revised Temperature Limitations  | D. Kerr<br>19 Dec., 2003   | T. Czarnecki<br>19 Dec., 2003 | TCCA<br>Eric Cheung<br>19 Dec., 2003              | R. Manson<br>19 Dec., 2003     |
| 2    | 1 through 7            | Pages 1 through 7. Format update, text revisions.   | D. Kerr<br>21 July 2004    | C. Timmins<br>21 July 2004    | TCCA<br>Eric Cheung<br>3 Aug. 2004                | R. Manson<br>3 Aug. 2004.      |
| 3    | 1 through 9            | Revised Preflight Checks and operation of Press to Test button. Placard locations clarified. (Pages 3 to 7)   | D. Kerr<br>13 June 2006    | C. Timmins<br>13 June 2006    | TCCA<br>J. Palmer<br>13 June 2006                 | P. Garofalo<br>14 June 2006    |
| 4    | 1 through 8            | Corrected Section 2. Addition of illustration to Section 3. Revised Section 4, Normal Procedures from START UP/Engine Prestart Check to Before the first flight of each day and Pre-Flight Check. Section 6, location of the Weight and Balance information corrected. (Pages 5 to 8) | D. Kerr<br>17 August, 2006 | C. Timmins<br>18 August, 2006 | TCCA<br>J. Palmer<br>7 December, 2006             | R. Manson<br>11 December, 2006 |
| 5    | 1 through 9            | Replace "boost" pump reference with "fuel" pump in Sec. 4. Addition of placard on Fuel Filter. (Pages 3, 4, 6, and 8)   | D. Kerr<br>28 March 2008   | C. Timmins<br>28 March 2008   | TCCA<br>J. Palmer<br>7 April 2008                 | R. Manson<br>9 April 2008      |

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AIRFRAME FUEL FILTER  
EC 130 B4

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**1. GENERAL (unapproved)**

The installation of the Airframe Fuel Filter system enables operation of the helicopter at low operating temperatures (below  $-20^{\circ}\text{C}$ ) without the use of anti-ice additives in the fuel. The filter is designed to collect ice particles.

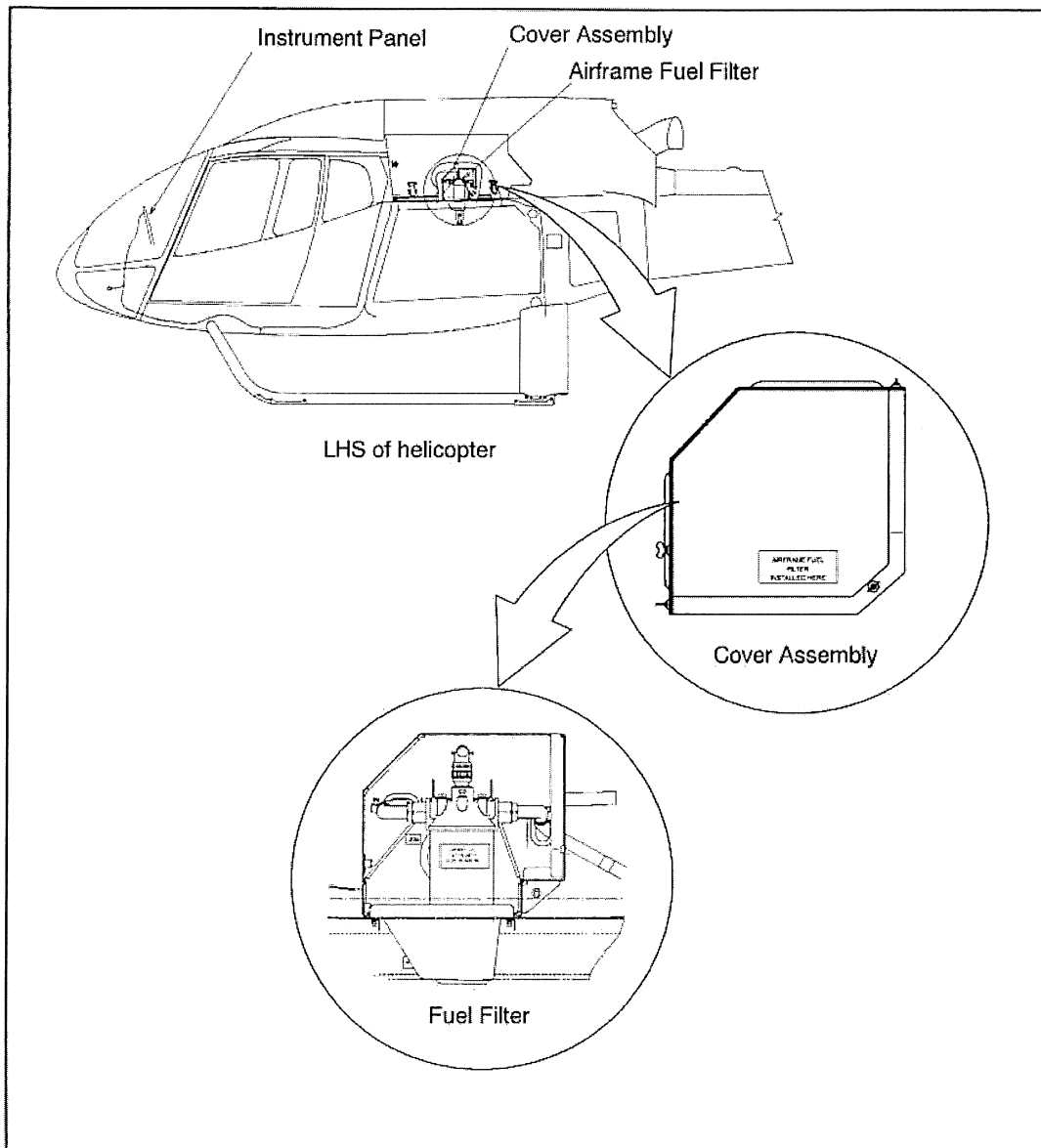


Figure 1 General Layout

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**1. GENERAL (unapproved) (continued)**

## Abbreviations and Definitions

| ABBREVIATION | DEFINITION  |
|--------------|---|
| A/F          | Airframe  |
| AH           | Airbus Helicopters (France)   |
| AHCA         | Airbus Helicopters Canada Limited   |
| A/W          | Airworthiness   |
| Acc'd        | Accepted  |
| App'd        | Approved  |
| °C           | Degrees Celsius   |
| CAR          | Canadian Aviation Regulations   |
| DAPM         | Design Approval Procedures Manual   |
| F/F          | Fuel Filter   |
| FILT         | Filter  |
| FMS          | Flight Manual Supplement  |
| ft.          | feet  |
| Hp           | Pressure Altitude   |
| ISA          | International Standard Atmosphere   |
| LHS          | Left Hand Side  |
| MOD          | Modification  |
| Ng           | Engine Generator Speed  |
| PAHI         | Transport Canada Civil Aviation,<br>Ontario Region, Engineering<br>(Aircraft Certification) |
| P/N          | Part Number   |
| ref.         | reference   |
| RHS          | Right Hand Side   |
| Rev.         | Revision  |
| Sec.         | Section   |
| STC          | Supplemental Type Certificate   |
| TCCA         | Transport Canada Civil Aviation   |

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**2. LIMITATIONS**
**a. Operation**

Maximum Operating Altitude in Flight

|       |   |                 |
|-------|---|-----------------|
| Jet A | - | Hp = 16,000 ft. |
| Jet B | - | Hp = 15,000 ft. |

Temperature Limitations

|                         |   |                      |
|-------------------------|---|----------------------|
| i. Minimum Temperature  | - | No change            |
| ii. Maximum Temperature | - | Jet A - No change    |
|                         | - | Jet B - ISA + 30° C  |
|                         |   | - Limited to + 43° C |

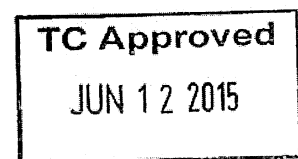
Fuel Additives

Anti-ice additives are not required when operating with the standard fuel system.

**b. Annunciator Light**

An annunciator light is located on the instrument panel in clear view of the pilot, adjacent to other caution or warning lights. The position may vary depending on other optional equipment installed. Refer to Figure 2.

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**3. EMERGENCY PROCEDURES**

- |   |   |
|---|---|
| <p>FUEL FILT LIGHT ON<br/><u>OR</u><br/>A/F FUEL FILTER LIGHT ON</p>  | <ul style="list-style-type: none"> <li>- Follow basic Flight Manual procedures for FUEL FILT LIGHT ON.</li> </ul>   |
| <p>FUEL FILT LIGHT ON<br/><u>AND</u><br/>A/F FUEL FILTER LIGHT ON</p> | <ul style="list-style-type: none"> <li>- Land as soon as possible</li> <li>- Monitor Ng; if oscillations occur, land immediately and apply autorotation procedure.</li> </ul> |

**NOTE** If the A/F Fuel Filter annunciator light illuminates during flight it may indicate an impending bypass of the filter.

**NOTE** Limit maneuvering when the A/F Fuel Filter annunciator light is illuminated.

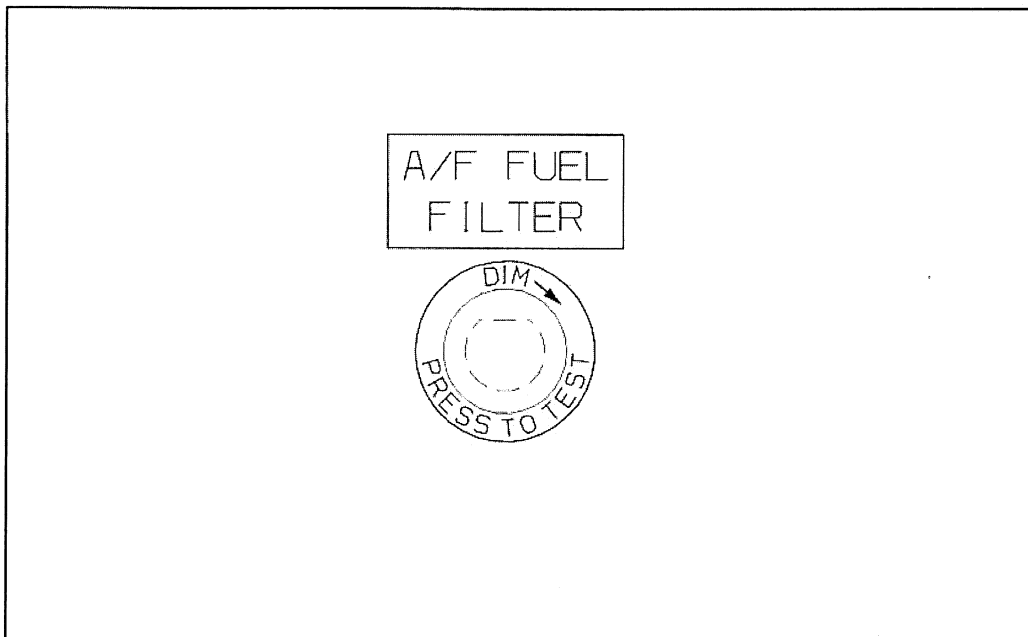


Figure 2 Press to Test / Annunciator Light

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**4. NORMAL PROCEDURES**

**NOTE** Cover must be removed to access drain valve.

**a. Before the first flight of each day**

- |                                  |  |
|----------------------------------|--|
| Battery                          | - ON   |
| Fuel pump                        | - ON   |
| Fuel filter and lines            | - Open drain valve, purge any air or water from the system. Close drain valve. |
| Drain valve and fuel filter      | - Check for leaks  |
| Fuel pump                        | - OFF  |
| Battery                          | - OFF  |
| Fuel drain and transmission deck | - No debris on fuel drain and /or transmission deck                            |
| Airframe fuel filter enclosure   | - Secured  |

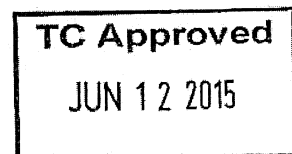
**b. Pre-Flight Check**

- |  |                             |
|--|-----------------------------|
| Battery  | - ON                        |
| Press A/F FUEL FILTER by-pass<br>"press to test" caution light | - Caution light illuminates |

**5. PERFORMANCE DATA**

No Change.

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## 6. WEIGHT AND BALANCE (UNAPPROVED)

Total changes to weight and balance resulting from this modification are covered in the applicable instructions for continued airworthiness.

Items that are removed between routine operations: Not applicable

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