

SUBJECT: AIRFRAME FUEL FILTER (P/N 350-600024)

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:

Department of Transport

This Flight Manual Supplement must be used when the Airframe Fuel Filter is installed on POST MOD 4305 AS 350 B3 helicopters with the Arriel 2D engine.

(C	anada) Approved
	CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH
	DEC 2 1 2012
	APPROVED By Smarid
	CERTIFICATE NO. SHO2-42
G	David

G. David Senior Engineer, Aircraft Certification Aircraft Certification (PAI) Ontario Region

IMPORTANT NOTE

THE INFORMATION AND DATA CONTAINED IN THIS DOCUMENT SUPERSEDE OR SUPPLEMENT THAT CONTAINED IN THE BASIC APPROVED FLIGHT MANUAL FOR THE AS 350 B3 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.

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.

THE INFORMATION CONTAINED IN THIS DOCUMENT SHALL BE TREATED AS THE PROPERTY OF EUROCOPTER CANADA LIMITED (ECL). THE RECIPIENT OF THIS DOCUMENT SHALL NOT DISCLOSE ANY INFORMATION CONTAINED HEREIN TO THIRD PARTIES WITHOUT THE WRITTEN PERMISSION OF ECL. AND SHALL NOT USE OR REPRODUCE THIS DOCUMENT IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN ITS ORIGINALLY INTENDED PURPOSE, OR TO EVALUATE ITS CONTENTS.

	NAME AND SIGNATURE	DATE	COMPANY DEPARTMENT
PREPARED BY:	D. Ken D. Kuu	21 Dec. 2012	ECL ENGINEERING
PREPARED BY:			
CHECKED BY:	C. Timmins	21 DEC, 2012	ECL ENGINEERING
CHECKED BY:		·	
APP'D / ACCEPTED (Civil A/W Authority)	(See TCCA Stamp) / Jimmus	21 Dec, 2012	TCCA
RELEASED BY:	R. Manson Manager	21 Devoir	ECL 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 10	Original Issue	D. Kerr 18 September 2012	C. Timmins 18 September 2012	N/A	R. Manson 5 November 2012
1	1 through 10	Additional abbreviations added. Reference to Jet B fuel removed. (pages 6 & 7)	D. Kerr 9 November 2012	C. Timmins 9 November 2012	TCCA G. David 19 December 2012	R. Manson 21 December 2012
2	1 through 10	Limitations section revised to reflect NORMAL and REPLACEMENT FUEL exceptions. (Page 7)	See page 1.	See page 1.	See page 1.	See page 1.

NOTE: Revisions to this document will be distributed to operators of this equipment by the STC holder.

NOTE: Revised portions of affected pages are identified by a vertical black line in the margin adjacent to the change.

Transport Canada - Approved

DEC 2 1 2012



CONTENTS

SECTION	TITLE	PAGE
1	GENERAL	4
2	LIMITATIONS	7
3	EMERGENCY PROCEDURES	8
4	NORMAL PROCEDURES	9
5	PERFORMANCE DATA	9
6	WEIGHT AND BALANCE	10

FIGURES

FIGURE	TITLE	PAGE
1	General Layout	4
2	Annunciator Light locations on Instrument Panel	5
3	Press to Test Button on the Instrument Panel	8

Transport Canada - Approved

DEC 2 1 2012

1. **GENERAL** (unapproved)

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

NOTE This document is only applicable to POST MOD 4305 AS 350 B3 helicopters equipped with the Arriel 2D engine. For PRE MOD 4305 AS 350 B3 helicopters equipped with the Arriel 2B or 2B1 engine, see Eurocopter Canada Limited FMS-ECL-15.

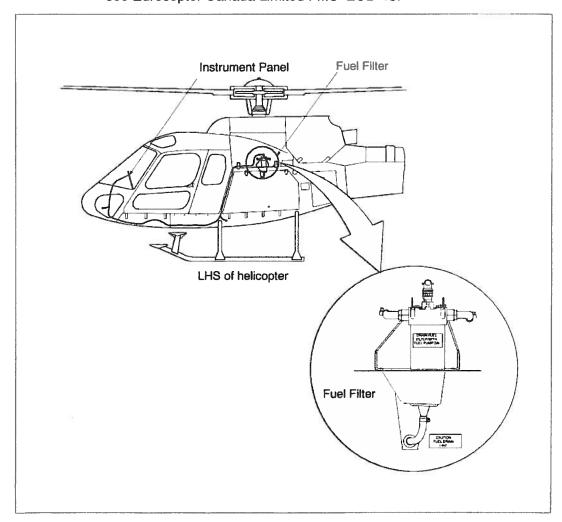


Figure 1 General Layout

Transport Canada - Unapproved

Rev. 2 Page 4 of 10 FMS-ECL-154

1. GENERAL (unapproved) (continued)

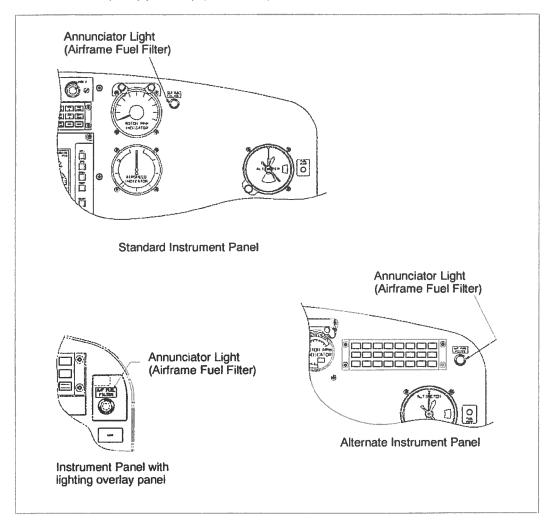


Figure 2 Annunciator Light locations on Instrument Panel

Transport Canada - Unapproved

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

Abbreviations and Definitions

ABBREVIATION	DEFINITION	
A/F	Airframe	
A/W	Airworthiness	
Acc'd	Accepted	
App'd	Approved	
°C	Degrees Celsius	
EC	Eurocopter France	
ECL	Eurocopter Canada Limited	
FILT	Filter	
FMS	Flight Manual Supplement	
ft.	feet	
Нр	Pressure Altitude	
ISA	International Standard Atmosphere	
LHS	Left Hand Side	
MOD	Modification	
N1	Engine Gas Generator Speed	
PAI	Aircraft Certification Division	
P/N	Part Number	
RHS	Right Hand Side	
RPM	Revolutions Per Minute	
STC	Supplemental Type Certificate	
TCCA	Transport Canada Civil Aviation	



2. LIMITATIONS

a. Approved Fuels

For approved fuels, section 2.5.1 of the Flight Manual Supplement applies, with the following exceptions:

Operation with NORMAL FUELS is limited to Hp = 15,000 ft.

Operation with REPLACEMENT FUELS is prohibited.

b. Additives

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

When an operating Ferry Flight Fuel Tank is installed, anti-ice additives must be used at temperatures below -20°C.

c. Placards

There is one placard associated with the Airframe Fuel Filter Installation.

1) Placard:

A/F FUEL FILTER

<u>Location</u>: Located on the RHS of the Rotor RPM Indicator on the Standard Instrument Panel.

Located on the RHS of the Annunciator Panel Instrument Panel on the Alternate Instrument Panel or on the lighting overlay panel. All locations are in view of the pilot. Refer to Figure 2.

3. EMERGENCY PROCEDURES

FUEL FILT LIGHT ON

OF

A/F FUEL FILTER LIGHT ON

FUEL FILT LIGHT ON

AND

A/F FUEL FILTER LIGHT CONTINUOUSLY ON

- Follow basic Flight Manual procedures for FUEL FILT LIGHT ON.
- Land as soon as possible
- Monitor N1; if oscillations occur, land immediately.

NOTE If annunciator light illuminates during flight it may indicate an impending bypass of the filter.

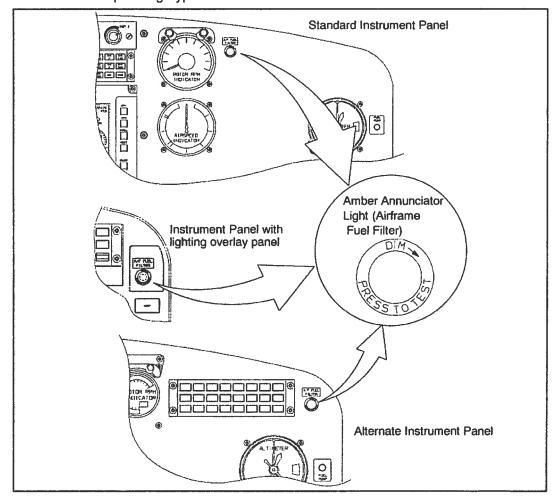


Figure 3 Press to Test / Annunciator Light on the Instrument Panel

Transport Canada - Approved N

DEC 2 1 2012



4. NORMAL PROCEDURES

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

b. Pre-Flight Check

- ON **Battery**

Press A/F FUEL FILTER by-pass

"press to test" caution light

- Caution light illuminates

5. PERFORMANCE DATA

No Change.

Transport Canada - Approved DEC 2 1 2012



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

Transport Canada - Unapproved