

#### AIRBUS HELICOPTERS CANADA LIMITED

SUBJECT: INSTALLATION OF LH AND/ OR RH CARGO PODS P/N'S 350-200814/24 OR 350-201814/24 FOR THE AS 350, OR 355-200814/24 FOR THE AS 355.

This Flight Manual Supplement describes operation with the LH and / or RH Cargo Pods installed.

#### **APPLICABILITY:**

This Flight Manual Supplement shall be used when the LH and/or RH Cargo Pods are installed on the helicopter.

Department of Transport (Canada) Approved

# CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH MAY 1 9 2020 APPROVED BY CERTIFICATE NO. SH97-60 SH97-15 ISSUE NO. 4 5

#### **IMPORTANT NOTE**

THE INFORMATION AND DATA CONTAINED IN THIS DOCUMENT SUPERSEDE OR SUPPLEMENTS THAT CONTAINED IN THE BASIC APPROVED FLIGHT MANUAL FOR THE AS 350 OR AS 355 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.

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REV. 8 ACCEPTED (Civil A/W Authority)	SEESTAMP		TCCA
REV. 8 RELEASED BY:	P. Sharpe	MAY 1 9 2020	AHCA ENGINEERING
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# **AIRBUS HELICOPTERS CANADA LIMITED**

## **RECORD OF REVISIONS**

Rev.	<ul> <li>Pages at this revision</li> </ul> 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 3	Original Issue	H. Paulisch 14 March 1997	N/A	TCCA D. Phillips 4 April 1997	R. Walker 8 April 1997
1	1 through 3	Incorporated the AS 355 E, F, F1 and F2 information. (Pages 1 to 3)	H. Paulisch December 1997	N/A	TCCA E. Cheung 19 December 1997	R. Manson 8 January 1998
2	1 through 3	Addition of AS 350 C, D, D1, B and B3. (Pages 1 to 3)	H. Paulisch April 1998	N/A	TCCA T. Gretton 7 May 1998	R. Manson May 1998
3	1 through 8 Incorporated an Abbreviations chart in the GENERAL Section. Addition of weight limitations per pod in LIMITATIONS Section. (Pages 3 to 6)		D. Kerr 22 March 2012	C. Timmins 22 March 2012	TCCA G. David 3 April 2013	P. Sharpe 9 April 2013
4	1 through 8	Addition of AS 355 NP aircraft type. Section 2. Limitations and Section 5. Performance revised for the NP. (Pages 4 to 7)	D. Kerr 1 December 2014	C. Timmins 1 December 2014	TCCA G. David 2 March 2015	P. Sharpe 2 March 2015
5	1 through 8	Revised abbreviation chart. Removed the AS 355 NP reference from Section 2. Limitations. (Pages 5 & 6)	D. Kerr 27 January 2016	G. Krebs 28 January 2016	TCCA G. David 2 March 2016	P. Sharpe 4 March 2016
6	1 through 8 AS 350 part numbers to cover page.		D. Kerr 27 Jan. 2017	G. Krebs 27 January 2017	TCCA G. David 1 February 2017	P. Sharpe 3 February 2017
7	1 through 8	Addition of "N" model added to AS 355 aircraft type. "N" model added to Section 5. PERFORMANCE DATA (Pages 1 to 8)	D. Kerr 23 September 2018	G. Krebs 30 September 2019	TCCA G. David 16 October 2019	P. Sharpe 18 October 2019
8	1 through 8	Clerical correction. (Page 1)	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.

NOTE: Minor changes are released in accordance with TCCA - ACCEPTED CAR 521.154 procedures (ref. DAPM-E-0001).

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# **AIRBUS HELICOPTERS CANADA LIMITED**

FLIGHT MANUAL SUPPLEMENT INSTALLATION OF LH/RH CARGO PODS AS 350 B, BA, B1, B2, B3, D AS 355 E, F, F1, F2, N, NP

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# 1. **GENERAL** (unapproved)

The optional Cargo Pods are an enlargement of the LH and/or RH cargo compartments.

The volume of the normal baggage compartment with no cargo pods installed is 7.1 cubic feet on the right side with the battery in the basic helicopter configuration, and 8.3 cubic feet on the left side.

With installation of the Cargo Pods on each side, the baggage compartment volume is almost doubled (right side 14.1 cubic feet, left side 15.3 cubic feet). With the Cargo Pods installed, the RH cargo compartment can carry up to 175 kg (386 lb), and the LH cargo compartment can carry up to 195 kg (430 lb). They are constructed with a reinforced aluminium floor with no lip at the door for easier loading. The Cargo pod floor and top can be stood upon by maintenance personnel.

The Cargo Pods have large doors that are hinged to open in the forward direction, with gas struts to hold the door in the open position.

Additional RH Cargo Pod volume and weight capacity can be achieved with the additional installation of the TCCA approved Battery Relocation, STC number SH96-31.

Refer to Figure 1 for General Layout.

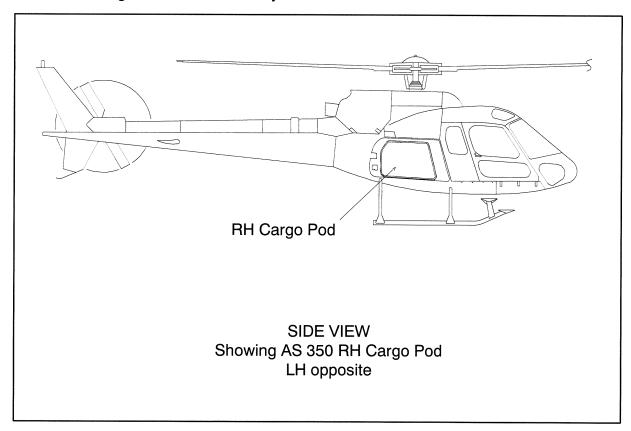


Figure 1 General Layout

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# 1. **GENERAL** (continued)

# Abbreviations and Definitions

ABBREVIATION	DEFINITION		
AEO	All Engines Operating		
Acc'd	Accepted		
AH	Airbus Helicopters (France)		
AHCA	Airbus Helicopters Canada Limited		
App'd	Approved		
A/W	Airworthiness		
CAR	Canadian Aviation Regulations		
DAPM	Design Approval Procedures Manual		
FMS	Flight Manual Supplement		
ft.	feet		
ft/min	feet per minute		
HOGE	Hover Out Of Ground Effect		
ICA	Instructions for Continued Airworthiness		
IGE	In Ground Effect		
kg	kilogram		
ng Ib			
LH	pounds Left Hand		
MDL			
	Master Drawing List		
MOD	Modified		
N/A	Not applicable		
OAT	Outside Air Temperature		
OEI	One Engine Inoperative		
OGE	Out Of Ground Effect		
Rev.	Revision		
RH	Right Hand		
STC	Supplemental Type Certificate		
TCCA	Transport Canada Civil Aviation		
VFR	Visual Flight Rules		
+	plus		
°C	degrees Celsius		

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#### FLIGHT MANUAL SUPPLEMENT INSTALLATION OF LH/RH CARGO PODS AS 350 B, BA, B1, B2, B3, D AS 355 E, F, F1, F2, N, NP

#### 2. LIMITATIONS

## **Weight Limitation**

Maximum weight limitation for the RH cargo compartment ...... 175 kg (386 lb) Maximum weight limitation for the LH cargo compartment ...... 195 kg (430 lb)

# **Operation**

Operation with the Cargo Pods Installed is limited to day and night VFR operation only.

# **Prohibited Operations**

Category "A" operations with both or one cargo pod installed is prohibited.

#### 3. EMERGENCY AND MALFUNCTION PROCEDURES

No change to existing approved Flight Manual.

#### 4. NORMAL PROCEDURES

No change to existing approved Flight Manual.

#### 5. PERFORMANCE DATA

The following performance data is equally applicable with LH, RH or both Cargo Pods installed:

#### AS 350 B, BA, B1, B2, B3, D

a. For hover IGE and OGE, use the standard performance charts in Section 5 of the Flight Manual but reduce the resulting helicopter weight by 30 kg.

NOTE: The HOGE chart in Section 5 may be extrapolated to 30 kg

above maximum weight for this calculation, but the maximum weight of the helicopter does not change.

- b. For Climb, use the standard performance chart in Section 5 of the Flight Manual, but reduce the resulting rate of climb by the following amount:
- for AS 350 B, BA, D: ...... 200 ft/min.
- for AS 350 B1, B2 and B3: ..... 250 ft/min.

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**AS 355 E, F, F1, F2, N** 

a. For hover IGE and OGE, use the standard performance charts in Section 5 of the Flight Manual but reduce the resulting helicopter weight by 60 kg.

**NOTE:** The HOGE chart in Section 5 may be extrapolated to 60 kg

above maximum weight for this calculation, but the maximum weight of the helicopter does not change.

- b. For Climb, use the standard performance chart in Section 5 of the Flight Manual, but reduce the resulting rate of climb by the following amount:
- for AS 355 E, F, F1, F2, N:

AEO ...... 150 ft/min.
OEI ..... 110 ft/min.

**NOTE:** At altitudes over 10,000 ft, the AEO climb performance

penalty given above is estimated only.

#### **AS 355 NP**

- a. No performance change in hover.
- b. For Climb, use the standard performance chart in Section 5 of the Flight Manual, but reduce the resulting rate of climb by the following amount:
- for AS 355 NP:

AEO ..... 50 ft/min.
OEI .... 50 ft/min.

**NOTE:** At altitudes over 10,000 ft, the AEO climb performance

penalty given above is estimated only.

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# 6. MASS AND BALANCE (removable items) (unapproved)

Total changes to weight and balance resulting from this modification are covered in this applicable Instructions for Continued Airworthiness (ICA).

Items that are removed between routine operations: Not applicable.

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