

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

SUBJECT: INSTALLATION OF LH AND / OR RH CARGO PODS ("SQUIRREL CHEEKS") P/N 350-200814/24 OR 355-200814/24

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) Approximate DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH
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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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RECORD OF REVISIONS

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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	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	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)	See page 1	See page 1	See page 1	See page 1
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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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1. GENERAL (unapproved)

The optional Cargo Pods ("SQUIRREL CHEEKS") 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 ("SQUIRREL CHEEKS") 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 ("SQUIRREL CHEEKS") 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.

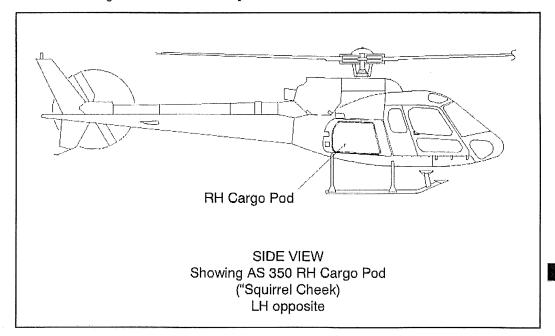


Figure 1 General Layout

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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/min	feet per minute
HOGE	Helicopter Out Of Ground Effect
ICA	Instructions for Continued Airworthiness
IGE	In Ground Effect
kg	kilogram
lb	pounds
LH	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
PAI	Aircraft Certification Division (Transport Canada)
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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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)

AS 355 NP

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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5.	PERF	ORMA	INCE D) ATAC	(continued)
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AS 355 E, F, F1, F2

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 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:

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:

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.