

**FAA APPROVED
ROTORCRAFT FLIGHT MANUAL SUPPLEMENT
for the
BELL 206L1, L3, L4
EQUIPPED WITH INTEC ENGINE FILTER SYSTEM**

REG. NO. _____
SERIAL NO. _____

This supplement must be attached to the FAA Approved Rotorcraft Flight Manual (RFM) appropriate to the specific model, when the INTEC Engine Filter System is installed in accordance with STC SR00180SE.

The information contained herein supplements information of the basic Flight Manual. For limitations, Procedures, and Performance Data not contained in this supplement, consult the basic Flight Manual.

FAA APPROVED:  _____
Manager
Seattle Aircraft Certification Office

APR 5 2002
DATE: _____

LOG OF PAGES

Pages	Rev.	Revision	FAA Approval
ALL	IR	Initial Release	11/04/99
ALL	A	ADDED MODELS 206L-1, MODIFIED PER STC SH5695SW OR STC SH296NM, TO LIST OF APPLICABLE HELICOPTERS. REVISED PERFORMANCE SECTION TO COVER ALL MODELS.	APR 5 2002

GENERAL INFORMATION

This supplement provides the changes in the normal operating procedures unique to the Bell 206L1, L3, L4 rotorcraft with the INTEC Engine Filter System installed. The Engine Filter System consists of a filter element, duct, alternate air door, low inlet pressure warning system, and hardware required to complete the installation.

Eligible Bell 206L models for the installation of the Filter System:

<u>Model</u>	<u>Engine</u>	<u>Installation</u>
L1	Allison 250-C28B	Factory
L1	Allison 250-C30P	STC SH5695SW
L1	Allison 250-C30P	STC SH296NM
L3	Allison 250-C30P	Factory
L4	Allison 250-C30P	Factory

For applicable performance affects due to the filter system installation, reference the applicable Bell Rotorcraft Flight Manual Supplements as listed below and refer to Section 4 of this Supplement.

Model	Particle Separator RFMS	Snow Deflector RFMS
206L1	Refer to Basic RFM BHT-206L1-FM-1	BHT-206L1-FMS-4
206L1 per STC SH5695SW	Refer to PHI ¹ RFM 206L-1/C30P and allow for the reductions indicated in Section 4 of this Supplement.	BHT-206L1 Supplement for Snow Deflector Kit #206-706-208
206L1 per STC SH296NM	Refer to ASI ² RFMS ASI-206L-C30P-FMS-3	Refer to ASI ² RFMS ASI-206L-30P-FMS-7
206L3	BHT-206L3-FMS-3	BHT-206L3-FMS-7
206L4	BHT-206L4-FMS-3	BHT-206L4-FMS-7

¹ STC SH5695SW: Petroleum Helicopters, Inc. Lafayette, Louisiana

² STC SH296NM: Air Services International, Inc. Scottsdale, Arizona

SECTION 1 - LIMITATIONS

GENERAL

The Life Limit on the filter elements is 1000 hr. of engine operating time or when the fabric is significantly penetrated.

TYPE OF OPERATION

The Engine Snow Deflector Kit (206-706-208) shall be installed in conjunction with the Engine Filter System when conducting flight operations in **falling and/or blowing snow**. Refer to Snow Deflector Kit RFMS for specific limitations when installed.

TAKEOFF

Takeoff with LOW INLET PRESSURE annunciator light illuminated..... **PROHIBITED**

SECTION 2 - NORMAL PROCEDURES

EXTERIOR CHECK

Thoroughly check the air plenum chamber and filter system through the inlet. The area must be free of accumulated debris, snow, ice, slush, etc., before each flight. Verify filter material is in good condition. Verify filter bypass door is closed.

INTERIOR & ENGINE PRESTART CHECK

Engine Alternate Air switch in the **CLOSE** position.

ENGINE RUNUP

During engine run up, assure "**LOW INLET PRESSURE**" light does not illuminate.

SECTION 3 - EMERGENCY & MALFUNCTION PROCEDURES

WARNING LIGHT (RED)

LOW INLET PRESSURE annunciator **ON** and/or unexplained increase in Engine TOT.

FAULT: FILTER DIRTY/BLOCKED

ACTION: ENGINE ALTERNATE AIR SWITCH - **OPEN**

- a. If warning light remains **ON**, land as soon as possible.
- b. If warning light goes out, land as soon as practical. Related engine parameters should be monitored frequently until rotorcraft is landed. Service filter prior to next flight.

SECTION 4 - PERFORMANCE

Helicopter performance is slightly reduced with the Intec Engine Filter System installed. This reduction in performance increases as the filter becomes contaminated.

- For helicopter models 206L1, 206L3, 206L4 and 206L1 modified per STC SH296NM, refer to Particle Separator Flight Manual Supplement³ (Purge ON) for applicable Hover Ceiling and Rate of Climb performance charts.
- For helicopter model 206L1 modified per STC SH5695SW, refer to the applicable performance data presented in the basic flight manual and allow for the reductions indicated below:

IGE and OGE Hover Ceiling charts:

When operating in AREA A, no reduction necessary.

When operating in AREA B, reduce allowable Gross Weight by 150 lbs (68 kg).

Rate of Climb charts:

Reduce Rate of Climb chart data by 100 ft/min.

Engine Power Check (All models)

Perform periodic power assurance check as specified in basic flight manual to monitor engine performance. From torque derived from this chart, subtract a constant 5% torque when operating with the Intec Filter System installed.

NOTE

Clean Filter prior to performing power assurance check.

- a. If actual torque indication is the same or greater than the required chart torque (reduced by 5% constant torque), then engine power equals or exceeds minimum performance specification and performance data presented can be achieved.
- b. If actual torque indication is the less than the required chart torque (reduced by 5% constant torque), then engine power is less than minimum specification and performance data presented cannot be achieved.

If power assurance torque cannot be achieved with a clean filter, refer to appropriate rotorcraft maintenance manual to determine cause of low power.

³ For 206L1, refer to basic flight manual.