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FAA APPROVED ROTORCRAFT FLIGHT MANUAL SUPPLEMENT TO THE

MD HELICOPTERS, INC. (MDHI) **MODEL MD900** ROTORCRAFT FLIGHT MANUAL FOR THE **INLET BARRIER FILTER SYSTEM** INSTALLATION

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This supplement must be attached to applicable FAA Approved Rotorcraft Flight Manual, when the rotorcraft is modified by the installation of the AFS Inlet Barrier Filter (IBF) System in accordance with STC No. SR02526CH .

The information contained herein supplements or supersedes the basic manual only in those areas listed herein. For limitations, procedures, and performance information not contained in this supplement, consult the basic Rotorcraft Flight Manual.

FAA Approved

Acting Manager, Systems and Flight Test, ACE-117C

Federal Aviation Administration

Des Plaines, IL 60018

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LOG OF REVISIONS

Revision No.	Revision Description	Pages Effected	FAA Approved:	Date:
IR	Initial Release	All	J. Miess	17 Dec 07
А	Changed Section 4 to Section 5 (pg 4 & 5) Changed recommending filter service to require filter service. (pg 6) Changed basic performance charts to IPS performance charts. (pg8)	4,5,6, 8	Thiess	21 Julog
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NOTE

Revised text from previous revision is indicated by a black vertical line in the right border.

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GENERAL

GENERAL INFORMATION

The Inlet Barrier Filter (IBF) STC kit (114001-101) consists of two filter assemblies mounted over the right and left engine air inlets in lieu of the Inlet Particle Separator (IPS).

The IBF system is designed to prevent dirt, debris, and FOD from entering the engine through the air inlet. The filters are designed to be removable for cleaning and or replacement.

Operation of the aircraft with the IBF system installed requires use of the IPS performance charts information and other applicable performance information as required in the Rotorcraft Flight Manual (RFM) for all operations as defined in Section 5 of this supplement. Therefore no new performance charts are required for installation and operation of the IBF system.

LIMITATIONS

INSTRUMENT MARKINGS AND PLACARDS

Operation of the aircraft with the IBF system installed requires use of the IPS performance charts information and other applicable performance information as required in the Rotorcraft Flight Manual (RFM) for all operations as defined in Section 5 of this supplement.

Flight into falling or blowing snow is permitted with the IBF system installed when the NACA inlet switch is in the closed position. The switch shall remain in the closed position for the duration of the flight, even after leaving the falling or blowing snow conditions.

EMERGENCY/MALFUNCTION PROCEDURES

NO CHANGE

Advisory (white) lights

Advisory (white) lights							
PANEL WORDING	FAULT CONDITION	CORRECTIVE ACTION					
WORDING	FAULT CONDITION	CORRECTIVE ACTION					
IPS BYPASS	Display of the message "IPS BYPASS" on the IIDS indicates that both bypass doors are open.	After Landing close bypass doors. Service filters (left and right) prior to next flight.					
	NOTE This message is advisory in nature only.	NOTE If IPS BYPASS message is displayed during take-off, service the filters before continuing flight.					
		CAUTION					
		TO PREVENT COMPRESSOR EROSION AVOID OPERATION IN A DIRTY OR DUSTY ENVIRONMENT WITH THE IPS BYPASS DOORS OPEN.					

NORMAL PROCEDURES

FUSELAGE – CENTER

- 1. Ensure the IBF environmental protective covers (left and right) are removed (if installed).
- 2. Perform a visual check to verify that the filters are secure and in good condition.
- 3. Perform a visual check to verify that the bypass doors are in the closed position.

BEFORE FLIGHT WHEN OPERATING IN SNOW CONDITIONS

- Thoroughly check cabin roof, transmission cowling, and filter areas. All areas checked shall be clean and free of accumulated snow, slush, and ice before each flight.
- Ensure that the filters, by-pass doors, and intake cowlings are thoroughly clear of snow, slush, or ice before each flight.

PERFORMANCE DATA

When the Inlet Barrier Filter (IBF) system STC is installed, use the same IPS performance information and/or charts as required in the Rotorcraft Flight Manual (RFM).

CAUTION

Helicopter performance is reduced as the IBF becomes contaminated with dirt, dust and debris. pilot/operator is responsible to utilize the PAC to determine if the engine can produce installed power. If does engine not pass published performance cannot be achieved. The frequency at which PACs are conducted are conducted is up to the discretion of the operator based on the operating environment, (i.e. temperature, altitude, airborne contaminate) and the requirements of the Flight Manual or applicable Flight Manual Supplement. Contact maintenance for appropriate trouble shooting procedures as outlined in applicable Instructions for Continued Airworthiness Maintenance or Manuals.

WEIGHT AND BALANCE DATA

NO CHANGE