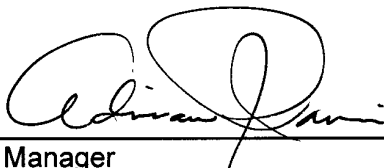


FAA APPROVED
ROTORCRAFT FLIGHT MANUAL SUPPLEMENT
for the
MD HELICOPTER MODELS 369HM, HS, HE, D, E, F, FF

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 Inlet Barrier Filter System is installed in accordance with STC SR00877SE.

The information contained herein supplements information of the basic Flight Manual. For Limitations, Emergency and Malfunction Procedures, Normal Procedures and Performance Data not contained in this supplement, refer the basic Flight Manual.

FAA APPROVED:  _____
Manager
Seattle Aircraft Certification Office

DATE: June 4, 2003

FAA APPROVED DATE: JUN 4 2003

SECTION 1 - GENERAL

This supplement provides the changes in the limitations, procedures and performance unique to the MD Helicopters, Inc. Model 369 series rotorcraft with the Intec Engine Filter System installed. The Engine Filter System consists of two filter elements, a housing assembly, alternate air door system, an Engine Alternate Air switch, a cockpit Low Inlet Pressure annunciator light, an Engine Alternate Air circuit breaker and hardware required to complete the installation.

For all operations not covered in this supplement (including cold weather operations) refer to the basic Rotorcraft Flight Manual. Incorporation of the Intec Filter System does not relieve basic rotorcraft limitations for operation in icing and/or falling and blowing snow.

SECTION 2 - LIMITATIONS**GENERAL**

The Life Limit on the filter elements is 1500 hr. of engine operating time or when the fabric is significantly penetrated.

TAKEOFF

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

OPERATION IN FALLING AND/OR BLOWING SNOW

Observe the following limitations:

- Visibility is greater than 5000ft (0.81 NM):
Flight in falling/blowing snow is authorized.
- Visibility is 2500 to 5000ft (0.43 to 0.81 NM):
Flight time in continuous falling/blowing snow is limited to 10 minutes. After this time, the helicopter must be landed and the filter system checked for snow accumulation prior to next flight.
- Visibility is less than 2500ft (0.43 NM):
Flight in falling/blowing snow is prohibited.

SECTION 3 - EMERGENCY & MALFUNCTION PROCEDURES

CAUTION LIGHT (AMBER)

NORMAL OPERATIONS

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

PROBABLE FAULTS: FILTERS CONTAMINATED, ENGINE BLEED VALVE FAILURE,
LOW EFFICIENCY ENGINE POWER TURBINE.

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

- a. If Low Inlet Pressure light goes out, continue mission and service filters prior to next flight. Likely fault is partially blocked filters.
- b. If Low Inlet Pressure light remains **ON**, monitor engine instruments to assure full power can be attained within engine limits (red lines). If power can be achieved within the red lines, continue the mission. Service the filters and conduct a power assurance check on the next flight. Likely cause of the caution is a leaking bleed valve or low efficiency power turbine. Repair as required.
- c. If Low Inlet Pressure light remains **ON**, monitor engine instruments and if power cannot be maintained within the red lines, land as soon as practical. Service the filters and conduct a power assurance check on the next flight. Likely cause of the caution is a low efficiency power turbine. Repair as required.

OPERATION IN FALLING AND/OR BLOWING SNOW

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

PROBABLE FAULTS: BUILD UP OF SNOW ON FILTER ELEMENT.

ACTION: LAND AS SOON AS PRACTICAL

Clean snow accumulation from filter elements prior to next flight.

CAUTION

Do not open bypass system if
snow contamination is suspected.

SECTION 4 - NORMAL PROCEDURES

EXTERIOR CHECK

Thoroughly check the filter surfaces and system for damage and security. The surface and surrounding area must be free of accumulated debris, snow, ice, slush, etc., before each flight. Verify filter material is in good condition. Prior to starting engine verify filter bypass system is closed.

INTERIOR & ENGINE PRESTART CHECK

- Engine Alternate Air circuit breaker..... **SET**
- Engine Alternate Air push button.....**CLOSED** (lights OFF)

ENGINE RUNUP

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

SECTION 5 - PERFORMANCE

Helicopter performance is slightly reduced with the Intec Inlet Barrier Filter System installed compared to no inlet protection. As the filters become contaminated, this reduction in performance increases. However, performance with the filter system installed is always equal to or better than that with the Particle Separator as presented in the basic Flight Manual. Therefore, refer to performance charts in the basic Flight Manual as applicable for the Engine Air Particle Separator Filter (Bleeds OFF) when operating with the Intec Inlet Engine Filters System installed.

Perform periodic power assurance check as specified in basic flight manual to monitor engine performance. Select the Power Check Chart with the Particle Separator Inlet (Mist Eliminator not installed) when operating with the Intec Inlet Barrier Filter System. Increase observed TOT by 6°C. Compare the specification TOT from the chart with the TOT observed during flight.

- a. If corrected observed TOT is lower than the specification TOT, then engine power equals or exceeds minimum performance specification and performance data contained in the Basic Flight Manual applicable for the Air Particle Separator Filter can be achieved.
- b. If the corrected observed TOT is higher than the specification TOT, then engine power is less than minimum specification and performance data contained in the Basic Flight Manual applicable for the Air Particle Separator Filter may not be achieved. Clean filter elements and repeat power assurance check. If engine power cannot be achieved with clean filters, refer to appropriate rotorcraft maintenance manual to determine cause of low power.