

**FAA APPROVED
ROTORCRAFT FLIGHT MANUAL SUPPLEMENT
for the
MD HELICOPTER MODEL 600N SERIES**

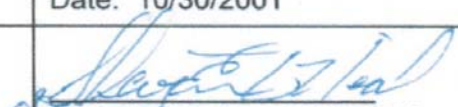
REG. NO. _____
SERIAL NO. _____

This supplement must be attached to the FAA Approved Rotorcraft Flight Manual (RFM) appropriate to the specific model, when the FDC/aerofilter Inlet Barrier Filter System is installed in accordance with STC SR00877SE.

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

FAA APPROVED:  DATE: 13 SEP 2011
sd Manager, Flight Test Branch, ANM-160S
FAA Seattle Aircraft Certification Office

LOG OF REVISIONS

Pages	Rev.	Revision	FAA Approval
ALL	IR	INITIAL RELEASE.	Thomas E. Archer II Mgr. Flt Test Br., ANM-160S FAA Seattle ACO Transport Airplane Directorate Date: 10/30/2001
ALL	A	<ul style="list-style-type: none">• REVISED HEADER• ADDED LOG OF REVISIONS• REMOVED ALL REFERENCES TO INTEC• §2: DELETED "GENERAL" SUB-SECTION	 Mgr. Flt Test Br., ANM-160S FAA Seattle ACO Transport Airplane Directorate Date: <u>13 SEP 2011</u>

SECTION 1 - GENERAL

This supplement provides the changes in the limitations, procedures and performance unique to the MD Helicopters, Inc. Model 600N series rotorcraft with the FDC/aerofilter Inlet Barrier Filter System installed. The Inlet Barrier Filter System consists of three filter elements and a housing assembly installed using the same arrangement as the basic inlet screen assembly or the optional particle separator. No changes to the air filter bypass system, differential pressure sensor or cockpit controls/indications are made with the incorporation of the filter.

Incorporation of the Filter System does not relieve basic rotorcraft limitations for operation in icing and/or falling and blowing snow.

SECTION 2 - LIMITATIONS**TAKEOFF**

Takeoff with AIR FILTER CLOGGED annunciator light illuminated..... **PROHIBITED**

SECTION 3 - EMERGENCY & MALFUNCTION PROCEDURES**CAUTION LIGHT (AMBER)**

AIR FILTER CLOGGED annunciator **ON** and/or unexplained increase in Engine TOT.

PROBABLE FAULTS: FILTERS DIRTY/BLOCKED, ENGINE BLEED VALVE FAILURE,
LOW EFFICIENCY ENGINE POWER TURBINE.

ACTION: FILTER BYPASS control handle - **OPEN**

- a. If Filter Clogged light goes out, continue mission and service filters prior to next flight. Likely fault is partially blocked filters. (Avoid operating in dust/grass/debris environment).
- b. If Filter Clogged 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 stuck bypass door, leaking bleed valve or low efficiency power turbine. Repair as required.
- c. If Filter Clogged 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.

SECTION 4 - NORMAL PROCEDURES**EXTERIOR CHECK**

Thoroughly check the filter surfaces and system. The area must be free of accumulated debris, snow, ice, slush, etc., before each flight. Verify filter material is in good condition. Cycle bypass door system to verify freedom of motion. Prior to starting engines verify filter bypass door is closed.

INTERIOR & ENGINE PRESTART CHECK

FILTER BYPASS control handle - **CLOSE**

ENGINE RUNUP

During engine run up, assure “**AIR FILTER CLOGGED**” light does not illuminate.

OPERATION IN FALLING SNOW**CAUTION**

In the event of AIR FILTER CLOGGED annunciator **ON** and/or unexplained increase in Engine TOT refer to Section 3. Possible cause of caution is accumulation of snow and/or ice on the filters.

SECTION 5 - PERFORMANCE

Helicopter performance is slightly reduced with the Inlet Barrier Filter System installed as compared to no inlet protection. This reduction in performance increases as the filters become contaminated. This reduction is the same as the Particle Separator affects which are accounted for in the basic Flight Manual. Therefore, refer to performance charts in the basic Flight Manual as applicable for the Engine Air Particle Separator Inlet when operating with the Inlet Barrier Filter System installed.

Perform periodic power assurance check as specified in basic flight manual to monitor engine performance. Select the Power Check Chart as applicable for the Engine Air Particle Separator Inlet when operating with the Inlet Barrier Filter System. Compare the specification TOT from the chart with the TOT observed during flight.

NOTE

Clean Filters prior to performing power assurance check.

- a. If 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 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 cannot be achieved. If engine power cannot be achieved with clean filters, refer to appropriate rotorcraft maintenance manual to determine cause of low power.