



ROTORCRAFT FLIGHT MANUAL

SUPPLEMENT

SNOW BAFFLE KIT

230-706-502

**CERTIFIED
12 MARCH 1992**

This supplement shall be attached to Model 230 Flight Manual when Snow Baffle kit has been installed.

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

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REISSUE — 13 FEBRUARY 2006

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LOG OF REVISIONS

Original	0.....	12 MAR 92	Revision.....	2	17 JUN 94
Reissue	0.....	29 JUL 92	Reissue.....	0	13 FEB 06
Revision	1.....	22 APR 93			

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NOTE

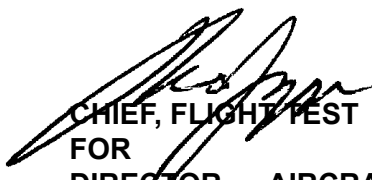
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LOG OF TC APPROVED REVISIONS

Original	0.....	12 MAR 92	Revision	2.....	17 JUN 94
Reissue	0.....	29 JUL 92	Reissue.....	0.....	13 FEB 06
Revision	1.....	22 APR 93			

APPROVED

DATE *17 Feb 06*



CHIEF, FLIGHT TEST
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LOG OF FAA APPROVED REVISIONS

Original	0.....	12 MAR 92	Revision	2	17 JUN 94
Reissue	0.....	29 JUL 92	Reissue.....	0	17 FEB 06
Revision	1.....	22 APR 93			

GENERAL INFORMATION

The Snow Baffles kit (230-706-502) consists of two deflectors that mount on either side of transmission fairing, just forward of engine air inlets.

Section 1

LIMITATIONS

1-2. TEMPERATURE LIMITATIONS

Snow baffles shall be removed for operations above +30°C (+86°F).

1-11. WEIGHT/CG LIMITATIONS

Weight change shall be determined after kit is installed and ballast readjusted, if necessary, to return empty weight CG to within allowable limits.

Section 2

NORMAL PROCEDURES

2-10. EXTERIOR CHECK

2-10-A. BEFORE EACH FLIGHT WHEN OPERATING IN SNOW CONDITIONS

Check thoroughly transmission fairing, snow baffles and engine inlet areas. All areas

inspected must be clean and free of accumulated snow, slush and ice before each flight.

Section 3

EMERGENCY/MALFUNCTION PROCEDURES

No change from basic manual.

Section 4

PERFORMANCE

4-2. POWER ASSURANCE CHECK

NOTE

Due to reduced performance at higher temperatures, it is recommended that snow baffles be removed above +20°C (+68°F).

Performance is reduced with snow baffles installed. Power assurance check charts (Figure 4-1) are provided to determine if engines can produce installed specification power. Instructions for chart use can be found on charts. Use chart that reflects helicopter configuration.

Refer to appropriate performance chart in BHT-230-FM-1 or BHT-230-FMS-11, as applicable. All twin engine rates of climb will be 130 feet/minute less than that shown.

OGE hover ceiling (performance) charts will be 135 pounds (61.2 kg) GW less than that shown. IGE hover ceiling (performance) charts will be 145 pounds (65.8 kg) GW less than that shown.

Performance charts are presented at $N_p = 100\%$, where indicated. There is no degradation in performance for continuous operations at $N_p = 101\%$.

**MODEL 230 POWER ASSURANCE CHECK - ROLLS ROYCE 250-C30G/2 ENGINE
BASIC INLET WITH SNOW BAFFLE KIT - GROUND / HOVER OPERATION**

COLLECTIVE - FULL DOWN

THROTTLES:

TEST ENGINE - FULL OPEN
OTHER ENGINE - SET NP
BETWEEN
92 AND 97%

COLLECTIVE - INCREASE UNTIL LIGHT ON SKIDS OR HOVER.
DO NOT EXCEED 86.4% ENGINE TORQUE, 767.8°C MGT OR 105% NG.

STABILIZE POWER 1 TO 4 MINUTES, THEN RECORD Hp, OAT,
TORQUE, MGT AND NG RPM.

ENTER CHART AT OBSERVED ENGINE TORQUE, MOVE VERTICALLY
DOWNWARD TO Hp, MOVE HORIZONTALLY TO RIGHT TO OBSERVED
OAT, DROP DOWN TO READ MAXIMUM ALLOWABLE MGT.

IF ACTUAL MGT IS EQUAL TO OR LESS THAN CHART MGT, ENGINE
PERFORMANCE EQUALS OR EXCEEDS MINIMUM SPECIFICATION AND
PERFORMANCE DATA CONTAINED IN THIS MANUAL CAN BE ACHIEVED.

IF ACTUAL MGT IS GREATER THAN CHART MGT, ENGINE PERFORMANCE
IS LESS THAN MINIMUM SPECIFICATION AND ALL PERFORMANCE DATA
CONTAINED IN THIS MANUAL CANNOT BE ACHIEVED. REFER TO
APPROPRIATE MAINTENANCE MANUAL TO DETERMINE CAUSE OF
LOW POWER.

ENGINE TORQUE - PERCENT

40 45 50 55 60 65 70 75 80 85

GENERATOR LOAD 30 AMPS OR LESS
Np RPM 97%
ECS OFF
ANTI-ICE OFF

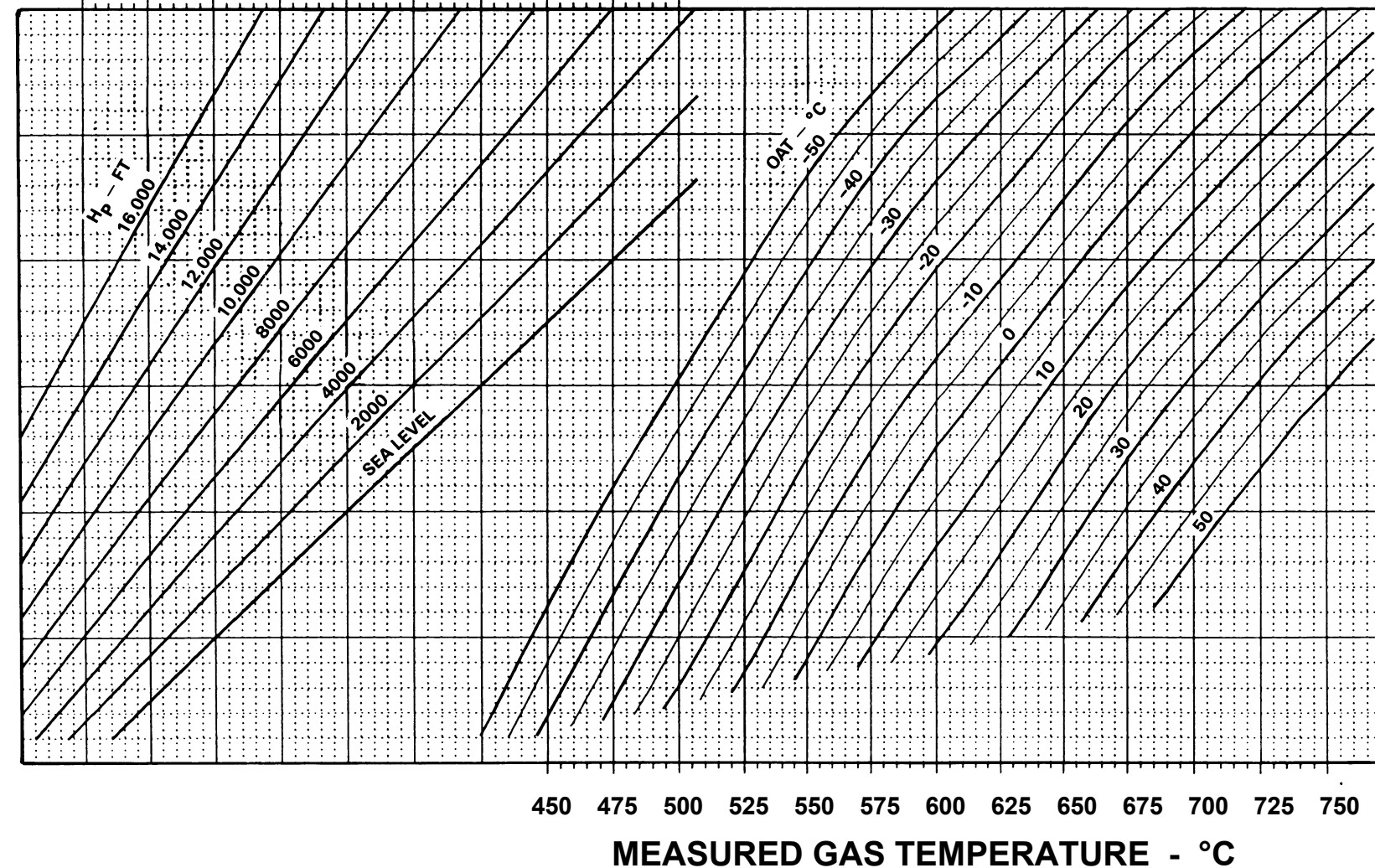


Figure 4-1. Power Assurance Check Chart (Sheet 1 of 2)

**MODEL 230 POWER ASSURANCE CHECK - ROLLS ROYCE 250-C30G/2 ENGINE
PARTICLE SEPARATOR & SNOW BAFFLE KIT - GROUND / HOVER OPERATION**

COLLECTIVE - FULL DOWN

THROTTLES:

TEST ENGINE - FULL OPEN

OTHER ENGINE - SET NP
BETWEEN
92 AND 97%

COLLECTIVE - INCREASE UNTIL LIGHT ON SKIDS OR HOVER.
DO NOT EXCEED 86.4% ENGINE TORQUE, 767.8°C MGT OR 105% NG.

STABILIZE POWER 1 TO 4 MINUTES, THEN RECORD Hp, OAT,
TORQUE, MGT AND NG RPM.

ENTER CHART AT OBSERVED ENGINE TORQUE, MOVE VERTICALLY
DOWNWARD TO Hp, MOVE HORIZONTALLY TO RIGHT TO OBSERVED
OAT, DROP DOWN TO READ MAXIMUM ALLOWABLE MGT.

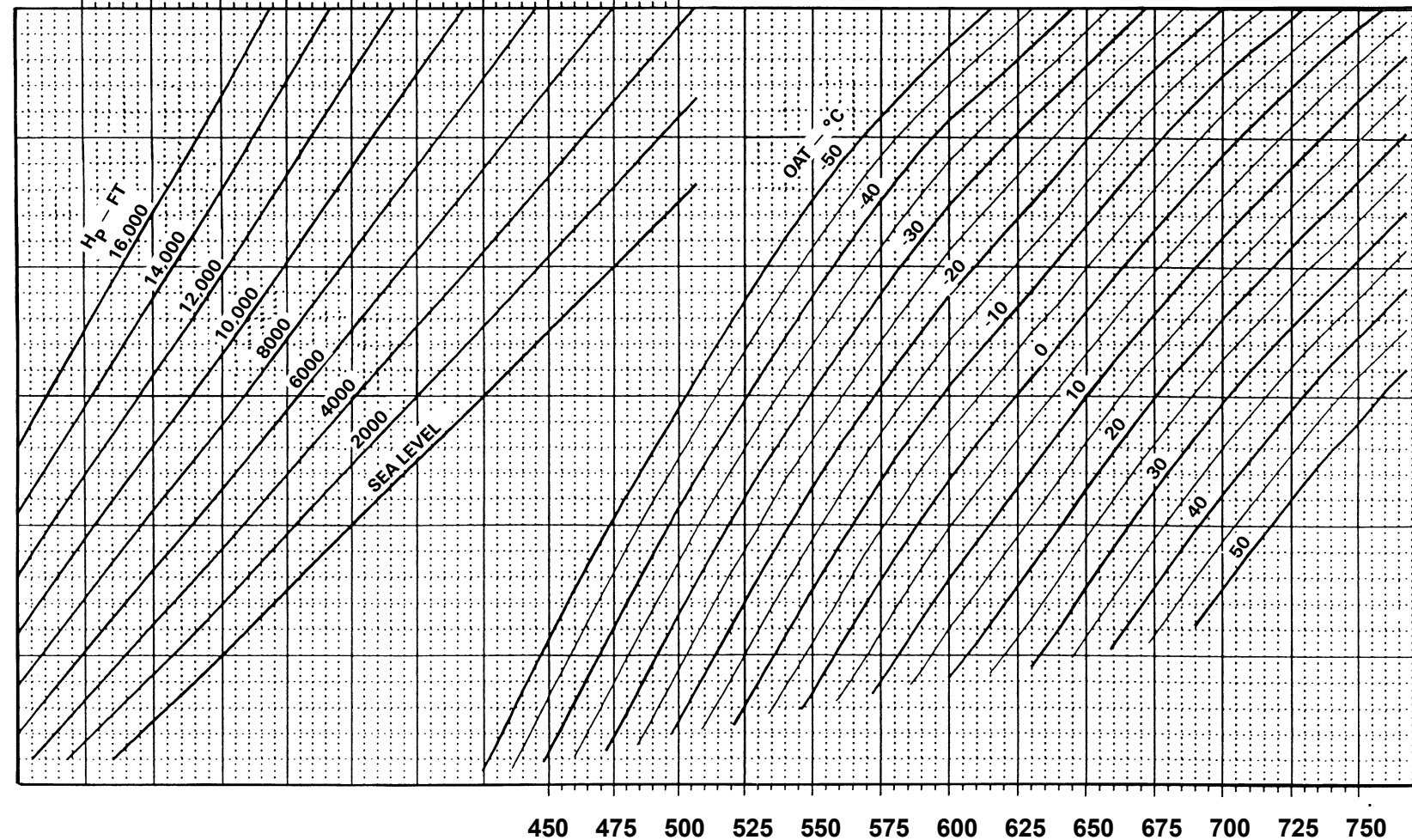
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APPROPRIATE MAINTENANCE MANUAL TO DETERMINE CAUSE OF
LOW POWER.

PURGE BLEED AIR OFF
GENERATOR LOAD 30 AMPS OR LESS
Np RPM 97%
ECS OFF
ANTI-ICE OFF

ENGINE TORQUE - PERCENT

40 45 50 55 60 65 70 75 80 85



450 475 500 525 550 575 600 625 650 675 700 725 750

MEASURED GAS TEMPERATURE - °C

Figure 4-1. Power Assurance Check Chart (Sheet 2 of 2)