MODEL 206A, 206B

FLIGHT MANUAL SUPPLEMENT
FOR
WINDSHIELD DEFROSTER SYSTEM

206H-990

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The information contained in this document is FAA approved material, which must be carried in the basic Flight Manual, after the rotorcraft has been modified by installation of the windshield defroster system in accordance with Air Comm Corporation STC No. SH3887NM.

The information in this document supplements or supercedes the basic manual only in the items contained herein. For Limitations, Procedures, and Performance Data not contained in this supplement, consult the basic Flight Manual.

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MODEL 206A, 206B FLIGHT MANUAL

WINDSHIELD DEFROSTER SYSTEM

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WINDSHIELD DEFROSTER SYSTEM

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WINDSHIELD DEFROSTER SYSTEM

INTRODUCTION

ejector located in each defroster diffuser. plumbing, a bleed air valve, a defroster air type which consists of bleed air The windshield defroster system is a bleed

and exhausted to the windshield. ejectors, where it is mixed with cabin air The bleed air flows from the engine compressor through the bleed lines to the

seats. center console between the pilot-copilot The defroster control valve is mounted in

of each other. be operated simultaneously or independently dependently or in combination with the factory bleed air heater. The defroster system may be installed in-Both systems may

MARKINGS PLACARDS AND SECTION I FULL DEFROSTER OFF OPERATING LIMITATIONS

co-pilot seats. top surface of the console between pilot and Applicable to 206A and 206B. Located on the

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WINDSHIELD DEFROSTER SYSTEM

SECTION I (cont'd)

OPERATING LIMITATIONS

OFF FOR HEATER AND TAKEOFF HOVER LANDING DEFROSTER

Applicable aircraft with C-20 engine. Locate on instrument panel.

SECTION 2

ENGINE PRESTART CHECK Defroster Control - OFF.

BEFORE TAKEOFF

C-20R/2 engines: Defroster Control - as Aircraft with C-20 engine: Defroster control desired. - OFF. Aircraft with C-20B, C-20J or

NORMAL PROCEDURES

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WINDSHIELD DEFROSTER SYSTEM

SECTION 2 (cont'd)

IN FLIGHT OPERATIONS

perature limitation. operations. Note: TOT increases as desired. Observe with bleed air heater turbine outlet tem-Defroster Control

DESCENT AND LANDING

Aircraft with C-20B, C-20J Defroster Control - OFF. Aircraft with C-20 engine: or C-20R/2

WARNING

engine: Defroster Control

- as desired

aircraft equipped with C-20 engine. during take-off, hover and landing Flight with defroster operating is prohibited for

SECTION 3

EMERGENCY PROCEDURES

of the following emergencies: Operate defroster control to - OFF, for any Engine Failure

Insufficient Power Fuel Control and/or Governor Failure Engine Overtemperature

MALFUNCTION PROCEDURES

No change.

SECTION 4

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MODEL 206A, 206B FLIGHT MANUAL

SECTION 5 WINDSHIELD DEFROSTER SYSTEM

PERFORMANCE DATA

NOTICE

section is applicable when using the ACC Defroster System independently or The performance data presented in this installed bleed air heater. in combination with the factory

Applicable to aircraft with C-20 engine:

Rate of Climb

obtain R/C decrement. cally to intersect curve, then move left to Enter chart at gross weight and proceed verti-

Subtract $\triangle R/C$ decrement from Flight Manual or Supplement R/C chart to obtain R/C with heater operating.

Hover Ceiling

of 4500 feet. operated results in a hover ceiling decrement Flight operations with the defroster being

EXAMPLE:

decrement of 4500 feet equals 6500 feet to be the current condition. determine Gross Weight and Hovering Ceiling for chart is then used the same as previously, used as the chart entry pressure altitude. If pressure altitude is 2000 feet plus the t 0 The

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MODEL 206A, 206B FLIGHT MANUAL

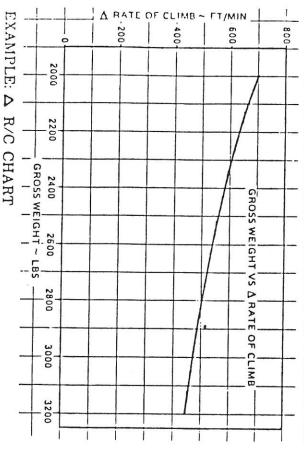
WINDSHIELD DEFROSTER SYSTEM

SECTION 5 (cont'd)

Applicable to aircraft with C-20 engine: PERFORMANCE DATA

TAKE-OFF POWER & MAX CONT POWER ALL CONFIGURATIONS **ALL TEMPERATURES** RATE OF CLIMB 100% RPM

ECS R/C = FM OR SUPPLEMENT R/C - DR/C



tically to intersect curve, then move left to obtain $\triangle R/C$ decrement. Subtract $\triangle R/C$ de-FAA APPROVED Nov. 2, Chart to obtain R/C with ECS operating. crement from Flight Manual or supplement R/C Enter Chart at gross weight and proceed ver-Manual or appropriate Supplement Chart. temperature and gross weight from Flight Determine rate of climb for desired altitude, 1990 8 of 23

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SECTION 5 WINDSHIELD DEFROSTER SYSTEM (cont'd) MODEL 206A, 206B FLIGHT MANUAL

PERFORMANCE DATA

Applicable to aircraft with C-20B, C-20J or C-20R/2 engines:

particle separator induction system. charts when the defroster is operating. accordance with the following data and/or manual or optional equipment supplement in Reduce the performance data in basic flight standard engine air inlet and for the Performance decrements are shown for the

be expected under the following conditions: gross weight loss in hover performance could due to the particle separator. Complete hover performance is presented herein the snow deflector, which includes losses EXAMPLE: What

Standard engine inlet Outside air temp = -15° Pressure altitude = 14,000 feet IGE Hover Anti-ice off Takeoff power Standard skid gear

obtain the gross weight loss to the weight chart in basic flight manual supplement. obtained from appropriate hover performance comes first), then proceed horizontally to altitude curve (or outermost curve, whichever Using the appropriate IGE chart, enter OAT (-15°C), move vertically to intersect pressure

pressure altitude curve. outside air temperature is to the left of the There is no loss in hover performance when the from sea level to 12,000 feet. -15°C there is no loss in IGE hover performance covering the above conditions that at It can be seen on the

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MODEL 206A, FLIGHT MANUAL 206B

SECTION 5 WINDSHIELD DEFROSTER SYSTEM

(cont'd) PERFORMANCE

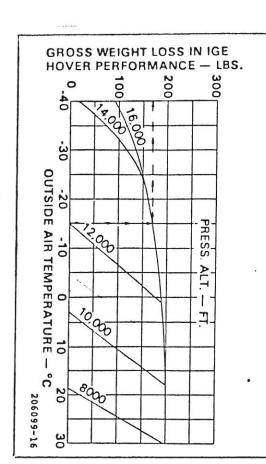
DATA

Applicable to aircraft with C-20B, C-20J or C-20R/2 engines:

STANDARD INLET WITH STANDARD SKID GEAR DUE TO BLEED AIR HEATER OPERATION **HOVER CEILING DECREASE**

IN GROUND EFFECT -40° TO 30°C TAKEOFF POWER

BASIC MANUAL OR APPROPRIATE SUPPLEMENT WITH ANTI-ICE ON APPLY ADDITIONAL DECREMENT FROM SKID HEIGHT 2.0 FT. (0.6 METER) **GENERATOR 22.3 AMPS ENGINE RPM 100% ANTI-ICE OFF**



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SECTION 5

WINDSHIELD DEFROSTER SYSTEM

PERFORMANCE DATA

Applicable to aircraft with C-20B, C-207J and C-20R/2 engines:

IN GROUND EFFECT STANDARD INLET WITH HIGH SKID OR ANY FLOAT GEAR **DUE TO BLEED AIR HEATER OPERATION** HOVER CEILING DECREASE TAKEOFF POWER

-40° TO 30°C

ANTI-ICE OFF

ENGINE RPM 100%

GENERATOR 22.3 AMPS SKID HEIGHT 3.0 FT. (0.9 METER) WITH ANTI-ICE ON APPLY ADDITIONAL DECREMENT FROM APPROPRIATE SUPPLEMENT

FAA APPROVED GROSS WEIGHT LOSS IN IGE HOVER PERFORMANCE - LBS. 100 14.000+ 200 40 Nov. -30 16,000 OUTSIDE AIR TEMPERATURE -2 12,000 1990 -10 10,00L

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WINDSHIELD DEFROSTER SYSTEM

SECTION 5

PERFORMANCE DATA

engines: Applicable to aircraft with C-20B, C-20J and C-20R/2

STANDARD INLET WITH ANY SKID OR FLOAT GEAR DUE TO BLEED AIR HEATER OPERATION HOVER CEILING DECREASE

OUT OF GROUND EFFECT -40° TO 30°C TAKEOFF POWER

SKID HEIGHT 40 FT. (12.2 METERS)

WITH ANTI-ICE ON APPLY ADDITIONAL DECREMENT FROM BASIC MANUAL OR APPROPRIATE SUPPLEMENT **GENERATOR 22.3 AMPS ENGINE RPM 100%** ANTI-ICE OFF

GROSS WEIGHT LOSS IN OGE HOVER PERFORMANCE - LBS. 300 200 100 40 12000 30 16,000 10,00 **OUTSIDE AIR TEMPERATURE —** -20 PRESS. ALT. -10 890 F 6000 0 8900 20 206099-18 30

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MODEL 206A, 206B

FLIGHT MANUAL

WINDSHIELD DEFROSTER SYSTEM

SECTION 5

SECTION 5

WINDSHIELD DEFROSTER SYSTEM

MODEL 206A, 206B,

FLIGHT MANUAL

Applicable to aircraft with C-20B, C-20J and C-20R/2

PERFORMANCE DATA

PERFROMANCE DATA

Applicable to aircraft with C-20B, C-20J and C-20R/2 engines:

PARTICLE SEP. WITH HIGH SKID OR ANY FLOAT GEAR DUE TO BLEED AIR HEATER OPERATION HOVER CEILING DECREASE

IN GROUND EFFECT -40° TO 30°C TAKEOFF POWER

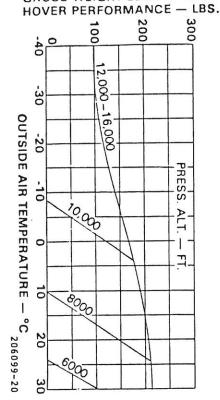
GENERATOR 22.3 AMPS SKID HEIGHT 3.0 FT.(0.9 METER) PARTICLE SEPARATOR SUPPLEMENT WITH ANTI-ICE ON APPLY ADDITIONAL DECREMENT FROM ANTI-ICE OFF ENGINE RPM 100%

SKID HEIGHT 2.0 FT. (0.6 METER) PARTICLE SEPARATOR SUPPLEMENT WITH ANTI-ICE ON APPLY ADDITIONAL DECREMENT FROM **GENERATOR 22.3 AMPS** IN GROUND EFFECT PARTICLE SEPARATOR WITH STANDARD SKID GEAR DUE TO BLEED AIR HEATER OPERATION HOVER CEILING DECREASE -40° TO 30°C TAKEOFF POWER **ENGINE RPM 100%** ANTI-ICE OFF

GROSS WEIGHT LOSS IN IGE HOVER PERFORMANCE - LBS. 300 200 100 40 14,000-16,000 -30 **OUTSIDE AIR TEMPERATURE —** 12,000 PRESS. -10 ALT. 70,00 四 10 ငိ 18000 20 206099-19 30

GROSS WEIGHT LOSS IN IGE

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WINDSHIELD DEFROSTER SYSTEM SECTION 5 FLIGHT MANUAL

PERFORMANCE DATA

MODEL 206A, 206B

Applicable to aircraft with C-20B, C-20J and C-20R/2 engines:

HOVER CEILING

IN GROUND EFFECT SNOW DEFLECTOR WITH STANDARD SKID GEAR 0° TO 30°C TAKEOFF POWER

WINDSHIELD DEFROSTER SYSTEM

MODEL 206A, 206B

FLIGHT MANUAL

SECTION 5

PERFORMANCE DATA

Applicable to aircraft with C-20B, C-20J and C-20R/2 engines:

WITH ANTI-ICE ON APPLY ADDITIONAL DECREMENT FROM

ENGINE RPM 100%

ANTI-ICE OFF

PARTICLE SEPARATOR SUPPLEMENT

SKID HEIGHT 40 FT. (12.2 METERS)

GENERATOR 22.3 AMPS

OUT OF GROUND EFFECT

-40° TO 30°C

TAKEOFF POWER

PARTICLE SEPARATOR WITH ANY SKID OR FLOAT GEAR

DUE TO BLEED AIR HEATER OPERATION

HOVER CEILING DECREASE

WITH ANTI-ICE ON GROSS WEIGHT IS 245 LBS (111.1 Kg) LESS SKID HEIGHT 2.0 FT. (0.6 METER) **GENERATOR 22.3 AMPS ENGINE RPM 100%** ANTI-ICE OFF

PARSSURE ALTITION 1000 éap -16,000 FT DEN. ALT OAT - °C - NOO 10 20 30 -HOT DAY 20 GROSS WEIGHT -AREA 24 AREA B 28 -10 -20 -30 9

-40 10,000 -16,000+ -30

GROSS WEIGHT LOSS IN OGE HOVER PERFORMANCE —

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OUTSIDE AIR TEMPERATURE -

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POUNDS (X100)

SECTION 5

PERFORMANCE DATA

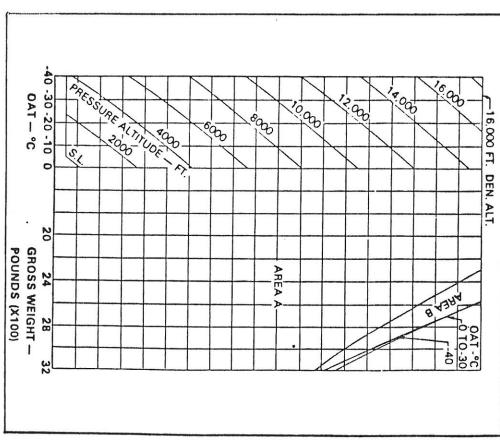
Applicable to aircraft with C-20B, C-20J & C-20R/2 engine

HOVER CEILING

IN GROUND EFFECT SNOW DEFLECTOR WITH STANDARD SKID GEAR 0° 10 -40°C TAKEOFF POWER

GENERATOR 22.3 AMPS ANTI-ICE OFF ENGINE RPM 100%

WITH ANTI-ICE ON GROSS WEIGHT IS 245 LBS (111.1 Kg) LESS SKID HEIGHT 2.0 FT. (0.6 METER)



WINDSHIELD DEFROSTER SYSTEMANUAL MODEL 206A, 206B

SECTION 5

PERFORMANCE DATA

Applicable to aircraft with C-20B, C-20J and C-20R/2 engines:

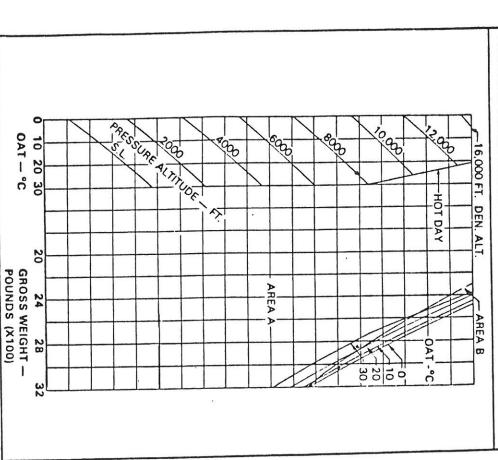
HOVER CEILING

SNOW DEFLECTOR WITH HIGH SKID OR ANY FLOAT GEAR IN GROUND EFFECT TAKEOFF POWER

0° TO 30°C

GENERATOR 22.3 AMPS

SKID HEIGHT 3.0 FT.(0.9 METER) WITH ANTI-ICE ON GROSS WEIGHT IS 225 LBS (102.1 Kg) LESS **ENGINE RPM 100%** ANTI-ICE OFF



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WINDSHIELD DEFROSTER SYSTEM SECTION 5 FLIGHT MANUAL

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PERFORMANCE DATA

Applicable to aircraft with C-20B, C-20J and C-20R/2 engines:

HOVER CEILING

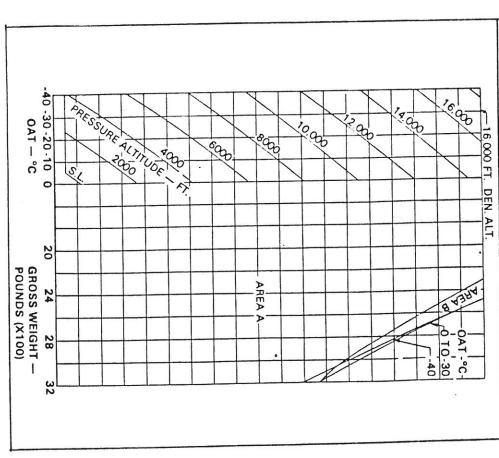
SNOW DEFLECTOR WITH HIGH SKID OR ANY FLOAT GEAR IN GROUND EFFECT TAKEOFF POWER

0° TO -40°C

SKID HEIGHT 3.0 FT.(0.9 METER) **GENERATOR 22.3 AMPS**

ENGINE RPM 100% ANTI-ICE OFF

WITH ANTI-ICE ON GROSS WEIGHT IS 225 LBS (102.1 Kg) LESS



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FLIGHT MANUAL

PERFORMANCE DATA

SECTION 5

WINDSHIELD DEFROSTER SYSTEM

Applicable to aircraft with C-20B, C-20J & C-20R/2 engines:

HOVER CEILING

OUT OF GROUND EFFECT SNOW DEFLECTOR WITH ANY SKID OR FLOAT GEAR 0° TO 30°C TAKEOFF POWER

SENERATOR 22.3 AMPS

SKID HEIGHT 40 FT. (12.2 METERS)

WITH ANTI-ICE ON GROSS WEIGHT IS 260 LBS (117.9 Kg) LESS ANTI-ICE OFF

PRESSURE ALTITUDE 10,00 % OAT - °C Pap. -16,000FT. DEN. ALT 10 20 30 HOT DAY 20 AREA GROSS WEIGHT -POUNDS (X100) AREA B OAT-°C 28 =20 -30 -10

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WINDSHIELD DEFROSTER SYSTEM PERFORMANCE DATA

Applicable to aircraft with C-20B, C-20J& C-20R/2 engine

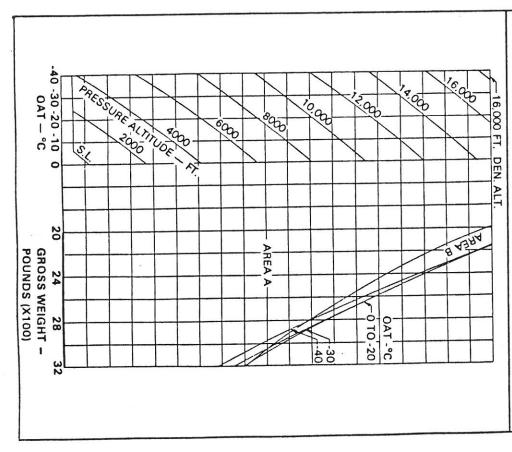
HOVER CEILING

OUT OF GROUND EFFECT SNOW DEFLECTOR WITH ANY SKID OR FLOAT GEAR TAKEOFF POWER

GENERATOR 22.3 AMPS 0° TO -40°C

ANTI-ICE OFF

SKID HEIGHT 40 FT. (12.2 METERS) ENGINE RPM 100% WITH ANTI-ICE ON GROSS WEIGHT IS 260 LBS (117.9 Kg) LESS



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WINDSHIELD DEFROSTER SYSTEM

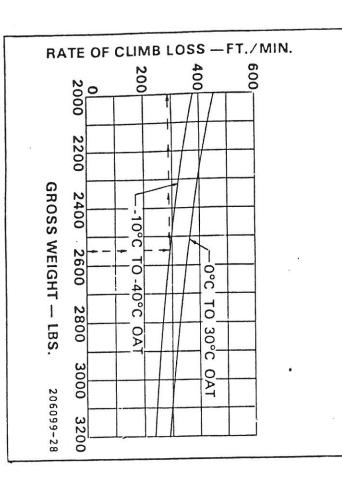
SECTION 5

PERFORMANCE DATA

Applicable to aircraft with C-20B, C-20J and C-20R/2engines:

DUE TO BLEED AIR HEATER OPERATION ANY INLET WITH ANY SKID OR FLOAT GEAR RATE OF CLIMB DECREASE **TAKEOFF POWER**

WITH ANTI-ICE ON APPLY ADDITIONAL DECREMENT FROM V IND 60 MPH (52 KNOTS) **GENERATOR 22.3 AMPS** BASIC MANUAL OR APPROPRIATE SUPPLEMENT. **ENGINE RPM 100%** ANTI-ICE OFF



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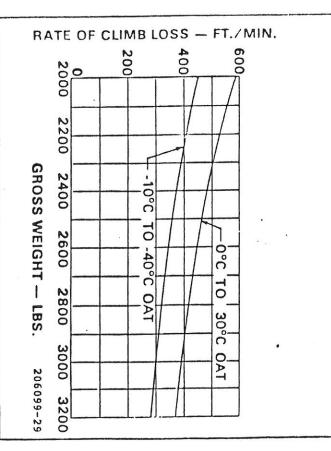
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SECTION 5

PERFORMANCE DATA

Applicable to aircraft with C-20B, C-20J and C-20R/2 engines:

RATE OF CLIMB DECREASE
DUE TO BLEED AIR HEATER OPERATION
ANY INLET WITH ANY SKID OR FLOAT GEAR
MAXIMUM CONTINUOUS POWER
GENERATOR 22.3 AMPS
VIND 60 MPH (52 KNOTS)
WITH ANTI-ICE ON APPLY ADDITIONAL DECREMENT FROM BASIC MANUAL OR APPROPRIATE SUPPLEMENT.



MODEL 206A, 206B BELL HELICOPTERS

WINDSHIELD DEFROSTER SYSTEM FLIGHT MANUAL SUPPLEMENT

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windshield defroster system in accordance with Air Comm Corporation STC No. SH3887NM. in the basic Flight Manual, after the rotor-craft has been modified by installation of the FAA approved material, which must be carried The information contained in this document is

Procedures, and Performance Data not contained or supercedes the basic manual only in the Manual. in this supplement, consult the basic Flight items contained herein. The information in this document supplements For Limitations,

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WINDSHIELD DEFROSTER SYSTEM

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WINDSHIELD DEFROSTER SYSTEM

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SUPPLEMENT

MODEL 206A, 206B FLIGHT MANUAL

WINDSHIELD DEFROSTER SYSTEM

INTRODUCTION

ejector located in each defroster diffuser. plumbing, a bleed air valve, a defroster air type which consists of bleed air The windshield defroster system is a bleed

pressor through the bleed lines to the ejectors, where it is mixed with cabin air and exhausted to the windshield. The bleed air flows from the engine com-

center console between the pilot-copilot The defroster control valve is mounted in the

of each other. The defroster system may be installed in-dependently or in combination with the be operated simultaneously or independently factory bleed air heater. Both systems may

MARKINGS SECTION I PLACARDS AND FULL DEFROSTER OFF OPERATING LIMITATIONS

co-pilot seats. Applicable to 206A and 206B. top surface of the console between pilot and Located on the

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MODEL 206A, 206B FLIGHT MANUAL

WINDSHIELD DEFROSTER SYSTEM

SECTION I (cont'd)

OPERATING LIMITATIONS

HEATER AND
DEFROSTER
OFF FOR
TAKEOFF
LANDING
HOVER

Applicable aircraft with C-20 engine. Locate on instrument panel.

SECTION 2

NORMAL PROCEDURES

ENGINE PRESTART CHECK
Defroster Control - OFF.

BEFORE TAKEOFF

Aircraft with C-20 engine: Defroster control - OFF. Aircraft with C-20B, C-20J or C-20R/2 engines: Defroster Control - as desired.

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MODEL 206A, 206B FLIGHT MANUAL

WINDSHIELD DEFROSTER SYSTEM

SECTION 2 (cont'd)

IN FLIGHT OPERATIONS

Note: TOT increases with bleed air heater operations. Observe turbine outlet temperature limitation. Defroster Control - as desired.

DESCENT AND LANDING
Aircraft with C-20 engine:
Defroster Control - OFF.
Aircraft with C-20B, C-20J or C-20R/2

WARNING

engine:

Defroster Control

- as desired.

Flight with defroster operating is prohibited during take-off, hover and landing for aircraft equipped with C-20 engine.

SECTION 3

EMERGENCY PROCEDURES

Operate defroster control to - OFF, for any of the following emergencies:
Engine Failure

Engine Overtemperature Fuel Control and/or Governor Failure Insufficient Power

SECTION 4

MALFUNCTION PROCEDURES

No change.

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MODEL 206A, 206B
FLIGHT MANUAL
WINDSHIELD DEFROSTER SYSTEM
SECTION 5
PERF

PERFORMANCE DATA

NOTICE

The performance data presented in this section is applicable when using the ACC Defroster System independently or in combination with the factory installed bleed air heater.

Applicable to aircraft with C-20 engine:

Rate of Climb

Enter chart at gross weight and proceed vertically to intersect curve, then move left to obtain R/C decrement.

Subtract $\triangle R/C$ decrement from Flight Manual or Supplement R/C chart to obtain R/C with heater operating.

Hover Ceiling

Flight operations with the defroster being operated results in a hover ceiling decrement of 4500 feet.

EXAMPLE:

If pressure altitude is 2000 feet plus the decrement of 4500 feet equals 6500 feet to be used as the chart entry pressure altitude. The chart is then used the same as previously, to determine Gross Weight and Hovering Ceiling for the current condition.

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WINDSHIELD DEFROSTER SYSTEM

SECTION 5 (cont'd)

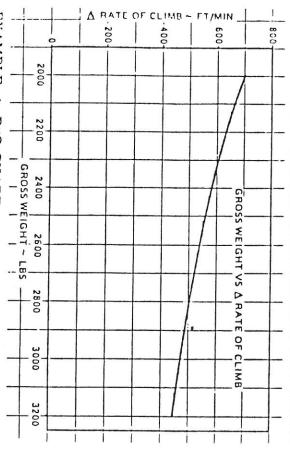
Applicable to aircraft with C-20 engine:

DATA

RATE OF CLIMB

TAKE-OFF POWER & MAX CONT POWER ALL TEMPERATURES
ALL CONFIGURATIONS
100% RPM

ECS R/C = FM OR SUPPLEMENT R/C - △R/C



EXAMPLE: A R/C CHART

Determine rate of climb for desired altitude, temperature and gross weight from Flight Manual or appropriate Supplement Chart.

Enter Chart at gross weight and proceed vertically to intersect curve, then move left to obtain $\triangle R/C$ decrement. Subtract $\triangle R/C$ decrement from Flight Manual or supplement R/C Chart to obtain R/C with ECS operating.

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MODEL 206A, 206B FLIGHT MANUAL

WINDSHIELD DEFROSTER SYSTEM PER SECTION 5 (cont'd)

PERFORMANCE DATA

Applicable to aircraft with C-20B, C-20J or C-20R/2 engines:

Reduce the performance data in basic flight manual or optional equipment supplement in accordance with the following data and/or charts when the defroster is operating. Performance decrements are shown for the standard engine air inlet and for the particle separator induction system.

Complete hover performance is presented herein for the snow deflector, which includes losses due to the particle separator. EXAMPLE: What gross weight loss in hover performance could be expected under the following conditions: Standard engine inlet Standard skid gear IGE Hover Outside air temp = -15° Anti-ice off Pressure altitude = 14,000 feet

Using the appropriate IGE chart, enter OAT (-15°C), move vertically to intersect pressure altitude curve (or outermost curve, whichever comes first), then proceed horizontally to obtain the gross weight loss to the weight obtained from appropriate hover performance chart in basic flight manual supplement.

There is no loss in hover performance when the outside air temperature is to the left of the pressure altitude curve. It can be seen on the chart covering the above conditions that at -15°C there is no loss in IGE hover performance from sea level to 12,000 feet.

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SECTION 5 (cont'd) PERFORMANCE DATA

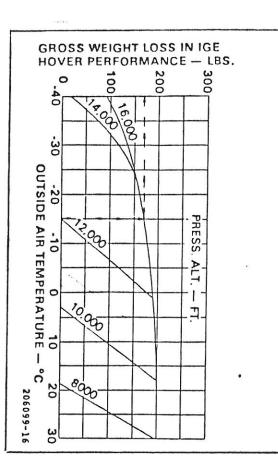
Applicable to aircraft with C-20B, C-20J or C-20R/2 engines:

HOVER CEILING DECREASE
DUE TO BLEED AIR HEATER OPERATION
STANDARD INLET WITH STANDARD SKID GEAR

IN GROUND EFFECT TAKEOFF POWER

-40° TO 30°C

ANTI-ICE OFF SKID HEIGHT 2.0 FT. (0.6 METER)
WITH ANTI-ICE ON APPLY ADDITIONAL DECREMENT FROM BASIC MANUAL OR APPROPRIATE SUPPLEMENT



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SECTION 5

WINDSHIELD DEFROSTER SYSTEM

PERFORMANCE DATA

Applicable to aircraft with C-20B, C-207J and C-20 $\mathrm{R}/2$ engines:

IN GROUND EFFECT STANDARD INLET WITH HIGH SKID OR ANY FLOAT GEAR HOVER CEILING DECREASE
DUE TO BLEED AIR HEATER OPERATION -40° TO 30°C TAKEOFF POWER

SKID HEIGHT 3.0 FT. (0.9 METER) WITH ANTI-ICE ON APPLY ADDITIONAL DECREMENT FROM **GENERATOR 22.3 AMPS**

ENGINE RPM 100%

APPROPRIATE SUPPLEMENT

ANTI-ICE OFF

GROSS WEIGHT LOSS IN IGE HOVER PERFORMANCE 100-14.000 300 200 40 ä -1,16,000 OUTSIDE AIR TEMPERATURE 12.00 PRESS. -10 ALT. +10,00b 1 F 10 800 1 ငိ 206099-17

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> > MODEL 206A, 206B FLIGHT MANUAL

> > > SUPPLEMENT FAA APPROVED

WINDSHIELD DEFROSTER SYSTEM

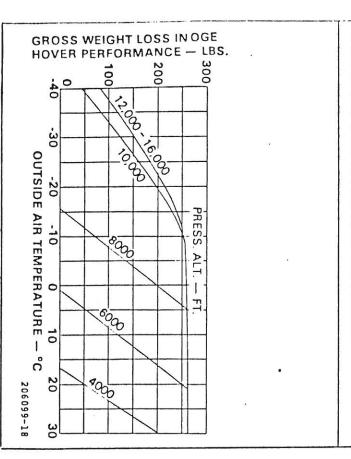
SECTION

PERFORMANCE DATA

engines: Applicable to aircraft with C-20B, C-20J and C-20R/2

DUE TO BLEED AIR HEATER OPERATION HOVER CEILING DECREASE

SKID HEIGHT 40 FT. (12.2 METERS) BASIC MANUAL OR APPROPRIATE SUPPLEMENT WITH ANTI-ICE ON APPLY ADDITIONAL DECREMENT FROM GENERATOR 22.3 AMPS OUT OF GROUND EFFECT STANDARD INLET WITH ANY SKID OR FLOAT GEAR -40° TO 30°C TAKEOFF POWER **ENGINE RPM 100%** ANTI-ICE OFF



MODEL 206A, 206B, FLIGHT MANUAL

SECTION 5 WINDSHIELD DEFROSTER SYSTEM

PERFORMANCE DATA

engines: Applicable to aircraft with C-20B, C-20J and C-20R/2

IN GROUND EFFECT PARTICLE SEPARATOR WITH STANDARD SKID GEAR **DUE TO BLEED AIR HEATER OPERATION** HOVER CEILING DECREASE -40° TO 30°C TAKEOFF POWER

WITH ANTI-ICE ON APPLY ADDITIONAL DECREMENT FROM SKID HEIGHT 2.0 FT. (0.6 METER) **GENERATOR 22.3 AMPS** PARTICLE SEPARATOR SUPPLEMENT **ENGINE RPM 100%** ANTI-ICE OFF

GROSS WEIGHT LOSS IN IGE HOVER PERFORMANCE - LBS. 300 200 100 40 14,000-16! မ် **OUTSIDE AIR TEMPERATURE** 8 12:00 PRESS. ALT. — -10 70,00 10 1 800 20 206099-19

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MODEL 206A, 206B FLIGHT MANUAL

WINDSHIELD DEFROSTER SYSTEM

SECTION 5

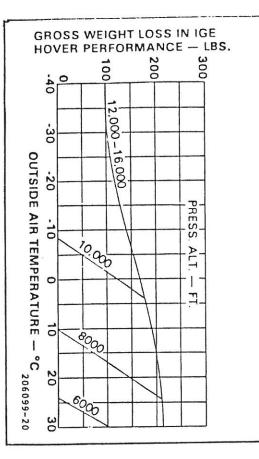
PERFROMANCE DATA

Applicable engines: to aircraft with C-20B, C-20J and C-20R/2

PARTICLE SEP. WITH HIGH SKID OR ANY FLOAT GEAR DUE TO BLEED AIR HEATER OPERATION HOVER CEILING DECREASE

IN GROUND EFFECT TAKEOFF POWER

GENERATOR 22.3 AMPS SKID HEIGHT 3.0 FT.(0.9 METER) PARTICLE SEPARATOR SUPPLEMENT WITH ANTI-ICE ON APPLY ADDITIONAL DECREMENT FROM -40° TO 30°C **ENGINE RPM 100%** ANTI-ICE OFF



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MODEL 206A, 206B FLIGHT MANUAL

WINDSHIELD DEFROSTER SYSTEM

PERFORMANCE DATA

SECTION 5

Applicable to aircraft with C-20B, C-20J and C-20R/2 engines:

SKID HEIGHT 40 FT. (12.2 METERS) GENERATOR 22.3 AMPS OUT OF GROUND EFFECT PARTICLE SEPARATOR WITH ANY SKID OR FLOAT GEAR DUE TO BLEED AIR HEATER OPERATION HOVER CEILING DECREASE -40° TO 30°C TAKEOFF POWER **ENGINE RPM 100% ANTI-ICE OFF**

PARTICLE SEPARATOR SUPPLEMENT WITH ANTI-ICE ON APPLY ADDITIONAL DECREMENT FROM

GROSS WEIGHT LOSS IN OGE HOVER PERFORMANCE — 300 200 100 40 10,000 -30 10 000 OUTSIDE AIR TEMPERATURE --20 600 PRESS. ALT. --10 , coo 口 0 189g ငိ 20 206099-21 30

> SECTION 5 WINDSHIELD DEFROSTER SYSTEM MODEL 206A, 206B FLIGHT MANUAL

PERFORMANCE DATA

SUPPLEMENT

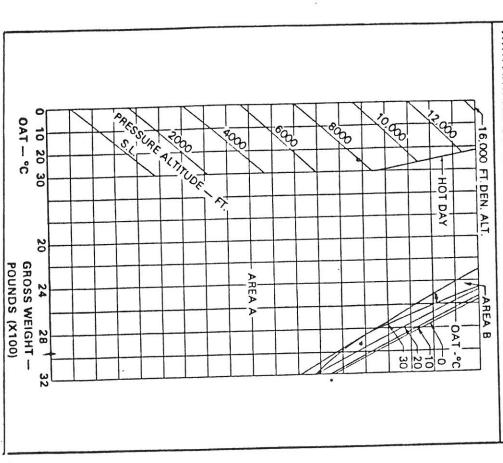
Applicable to aircraft with C-20B, C-20J and C-20R/2 engines:

IN GROUND EFFECT SNOW DEFLECTOR WITH STANDARD SKID GEAR HOVER CEILING TAKEOFF POWER

0° TO 30°C

GENERATOR 22.3 AMPS ANTI-ICE OFF

SKID HEIGHT 2.0 FT. (0.6 METER) WITH ANTI-ICE ON GROSS WEIGHT IS 245 LBS (111.1 Kg) LESS **ENGINE RPM 100%**



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SECTION 5

PERFORMANCE DATA

Applicable to aircraft with C-20B, C-20J & C-20R/2 engine

IN GROUND EFFECT SNOW DEFLECTOR WITH STANDARD SKID GEAR HOVER CEILING

GENERATOR 22.3 AMPS 0° 10 -40°C

TAKEOFF POWER

ANTI-ICE OFF

SKID HEIGHT 2.0 FT. (0.6 METER)

WITH ANTI-ICE ON GROSS WEIGHT IS 245 LBS (111.1 Kg) LESS

PRESSURE ALTITUDE TO 40 -30 -20 -10 75,000 1400 OAT - °C 10,00 3 -16,000 FT. DEN. ALT. -100 890 20 GROSS WEIGHT -POUNDS (X100) AREA ABRA 8 28 0AT -°C 40

SKID HEIGHT 3.0 FT.(0.9 METER) WITH ANTI-ICE ON GROSS WEIGHT IS 225 LBS (102.1 Kg) LESS PARSUAR 1000 - 400 **E** -16,000 FT. DEN. ALT 9 ALTITUDE HOT DAY 4 20 AREA

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> WINDSHIELD DEFROSTER LJOHN MANUAL MODEL 206A, 206B

SECTION 5

PERFORMANCE DATA

Applicable to aircraft with C-20B, C-20J and C-20R/2 engines:

HOVER CEILING

SNOW DEFLECTOR WITH HIGH SKID OR ANY FLOAT GEAR IN GROUND EFFECT TAKEOFF POWER

0° 10 30°C

GENERATOR 22.3 AMPS

ENGINE RPM 100% ANTI-ICE OFF

10 20 30 OAT - °C OAT -POUNDS (X100) GROSS WEIGHT -28 OAT 30 10

WINDSHILLD DEFROSTER SYSTEM SECTION 5 FLIGHT MANUAL

FAA APPROVED SUPPLEMENT

PERFORMANCE DATA

Applicable engines: to aircraft with C-20B, C-20J and C-20R/2

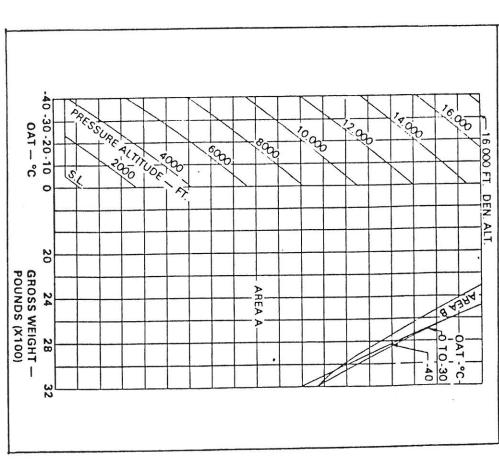
IN GROUND EFFECT SNOW DEFLECTOR WITH HIGH SKID OR ANY FLOAT GEAR HOVER CEILING TAKEOFF POWER

0° TO -40°C

GENERATOR 22.3 AMPS SKID HEIGHT 3.0 FT.(0.9 METER)

ANTI-ICE OFF ENGINE RPM 100%

WITH ANTI-ICE ON GROSS WEIGHT IS 225 LBS (102.1 Kg) LESS



MODEL 206A, 206B.

SUPPLEMENT

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WINDSHIELD DEFROSTER SYSTEM

SECTION 5 PERFORMANCE DATA

Applicable to aircraft with C-20B, C-20J&C-20R/2 engines:

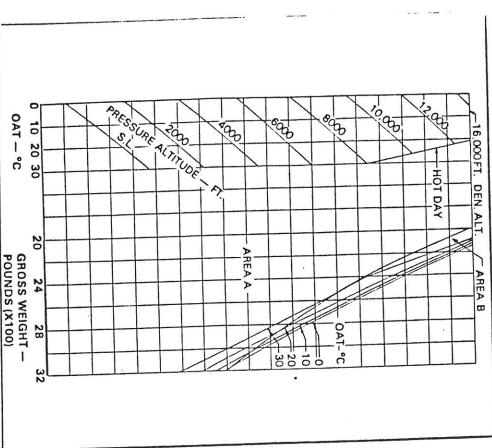
HOVER CEILING

OUT OF GROUND EFFECT SNOW DEFLECTOR WITH ANY SKID OR FLOAT GEAR TAKEOFF POWER

0° TO 30°C

ENERATOR 22.3 AMPS ANTI-ICE OFF

EKID HEIGHT 40 FT. (12.2 METERS) ENGINE RPM 100% UTTH ANTI-ICE ON GROSS WEIGHT IS 260 LBS (117.9 Kg) LESS



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FLIGHT MANUAL

SUPPLEMENT FAA APPROVED

WINDSHIELD DEFROSTER SYSTEM SECTION 5 PERFORMANCE DATA

Applicable to aircraft with C-20B, C-20J & C-20R/2 engine

HOVER CEILING

OUT OF GROUND EFFECT SNOW DEFLECTOR WITH ANY SKID OR FLOAT GEAR TAKEOFF POWER

GENERATOR 22.3 AMPS 0° TO -40°C

ANTI-ICE OFF

WITH ANTI-ICE ON GROSS WEIGHT IS 260 LBS (117.9 Kg) LESS SKID HEIGHT 40 FT. (12.2 METERS) **ENGINE RPM 100%**

40 -30 -20 -10 PAESSURE ALTITUDE. 160 180to 70,00 29 OAT - °C 16,000 FT. DEN. ALT. 300 E CO 20 4394 AREA POUNDS (X100) GROSS WEIGHT --0 TO -20 28 OAT -°C -40 32

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SUPPLEMENT

MODEL 206A, FLIGHT MANUAL , 206B

WINDSHIELD DEFROSTER SYSTEM

SECTION 5

PERFORMANCE DATA

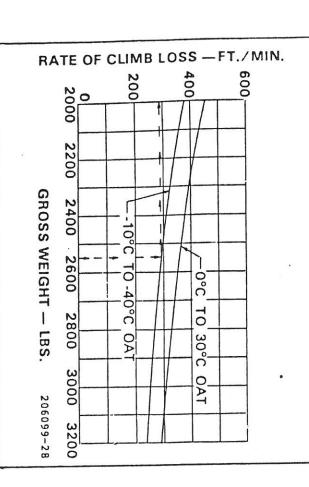
Applicable engines: to aircraft with C-20B, C-20J and C-20R/2

DUE TO BLEED AIR HEATER OPERATION ANY INLET WITH ANY SKID OR FLOAT GEAR RATE OF CLIMB DECREASE

TAKEOFF POWER

V IND 60 MPH (52 KNOTS)

WITH ANTI-ICE ON APPLY ADDITIONAL DECREMENT FROM BASIC MANUAL OR APPROPRIATE SUPPLEMENT **GENERATOR 22.3 AMPS ENGINE RPM 100%** ANTI-ICE OFF



MODEL 206A, 206B FLIGHT MANUAL

WIMDSHIELD DEFROSTER SYSTEM

SECTION 5

PERFORMANCE DATA

Applicable to aircraft with C-20B, C-20J and C-20R/2 engines:

RATE OF CLIMB DECREASE
DUE TO BLEED AIR HEATER OPERATION
ANY INLET WITH ANY SKID OR FLOAT GEAR
MAXIMUM CONTINUOUS POWER
GENERATOR 22.3 AMPS
VIND 60 MPH (52 KNOTS)
WITH ANTI-ICE ON APPLY ADDITIONAL DECREMENT FROM BASIC MANUAL OR APPROPRIATE SUPPLEMENT.

RATE OF CLIMB LOSS - FT./MIN. 400 600p 200 2000 2200 GROSS WEIGHT - LBS. 2400 -10°C 0 2600 000 -40°C 10 2800 OAT 30°C 3000 OAT 206099-29 3200

AIR COMM CORPORATION 3300 Airport Road Boulder, CO 80301

Report CR-206H-102M

Flight Manual Supplement
Bell 206A/B Windshield Defroster

Norm Steiner September 12, 1990

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