



INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

Beechcraft Super King Air
200/A200/B200 Series Airplanes
Equipped With Pratt & Whitney PT6A-52 Engines
Installed Per STC SA10824SC

Revision A

Document Number 200708-30

NOTICE

This document must be referenced on Block 8 of FAA form 337 and added to the aircraft permanent record as required by 14 CFR Part 91, §91.417 (a)(2)(vi) when the reference FAA-STC modification is accomplished on eligible aircraft. This document complies with the requirements of 14 CFR Part 23, §23.1529, in accordance with 14 CFR Part 23, Appendix G.

Aircraft Model Number _____

Aircraft Serial Number _____

Aircraft Registration Number _____



LIST OF EFFECTIVE REVISIONS

Always destroy superseded pages when you insert revised pages

REVISION	DATE	CHAPTERS AFFECTED
IR	February 2008	ALL
A	November 2012	1, 2, 5, 8, 11



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Instructions for Continued Airworthiness

Super King Air 200/A200/B200 Series Airplane
with Pratt & Whitney PT6A-52 Engines



1. INTRODUCTION:

This document provides instructions for the continued airworthiness (ICA) for Blackhawk Modifications, Inc. STC Number SA10824SC which installs two Pratt & Whitney PT6A-52 engines with either Hartzell HC-E4N-3G/D9390SK-1R or Hartzell/Raisbeck HC-D4N-3A/D9383K propellers on the following Super King Air aircraft.

Model	Serial Number
200	BB-2, BB-6 thru BB-733, BB-735 thru BB-792, BB-794 thru BB-828, BB-830 thru BB-853, BB-871 thru BB-873, BB-892, BB-893, BB-895, BB-912, BB-991.
200C	BL-1 thru BL-36
B200	BB-734, BB-793, BB-829, BB-854 thru BB-870, BB-874 thru BB-891, BB-894, BB-896 thru BB-911, BB-913 thru BB-990, BB-992 thru BB-1313, BB-1315 thru BB-1384, BB-1389 thru 1833, BB-1835 thru 1842.
B200, Proline 21 Equipped	BB1834, BB-1843 and after
B200C	BL-37 thru BL-147
B200C, Proline 21 Equipped	BL-148 and after
200T	BT-1 thru BT-22 and BT-28
200CT	BN-1
B200T	BB-1314, BT-23 thru BT-27, BT-29 thru BT-38, BT-44 thru BT-46
B200T, Proline 21 Equipped	BT-47 and after
B200CT	BN-2 and after

FAA Model	Military Model	Beechcraft Serial Number
A200	C-12A C-12C C-12A or C	BC-1 thru BC-61 (1) BC-62 and after BD-1 and after (1)
A200C	UC-12B	BJ-1 and after
A200CT	C-12D C-12F FWC-12D RC-12D RC-12G RC-12H	BP-1, BP-19, BP-22, BP-24, BP-51 BP-52 thru BP-63 BP-7 thru BP-11 GR-1 thru GR-12 FC-1 thru FC-3 GR-14 thru GR-19
B200C	C-12F C-12R	BP-64 and after BW-1 and after

Instructions for Continued Airworthiness
Super King Air 200/A200/B200 Series Airplane
with Pratt & Whitney PT6A-52 Engines



This document supplements or supersedes the basic and applicable Super King Air Model 200, A200, or B200 Series Maintenance Manual, only in those areas listed therein for the appropriate aircraft model and serial number.

2. DESCRIPTION:

The STC replaces the original engines with two Pratt & Whitney PT6A-52 engines and either 4-blade Hartzell HC-E4N-3G/D9390SK-1R or Hartzell/Raisbeck HC-D4N-3A/D9383K propellers in accordance with Blackhawk Modifications Master Drawing List 05210000.

See Blackhawk Document No. 200708EG, 200708EP, 200708R, 200708NR, 200708T or 200708M Aircraft Flight Manual Supplement for engine operating limits.

3. SPECIAL PROCEDURES:

Engine and propeller rigging procedures are found in Blackhawk document 06010109.

4. SERVICING INFORMATION:

The total oil capacity and useable oil capacity remain unchanged. For more information on aircraft and/or engine servicing, refer to the following manuals:

- EnginesPratt & Whitney Maintenance Manual, P/N 3072862
- Airframe/CowlingsSuper King Air Model 200 & B200 Series Maintenance Manual, P/N 101-590010-19 or A200 Maintenance Manual P/N 92-37443-1B/2B
- PropellersSuper King Air Model 200 Series Maintenance Manual, P/N 101-590010-19 or Raisbeck Engineering Maintenance Manual, P/N 85-120
- De-IcingB.F. Goodrich Installation and Maintenance Manual for Prop De-Icing Systems, P/N ATA 30-60-02

5. MAINTENANCE INSTRUCTIONS:

A. For maintenance and scheduled inspection instructions, refer to the following manuals:

- EnginesPratt & Whitney Maintenance Manual, P/N 3072862
- Airframe/CowlingsSuper King Air Model 200 & B200 Series Maintenance Manual, P/N 101-590010-19 or A200 Maintenance Manual P/N 92-37443-1B/2B

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Super King Air 200/A200/B200 Series Airplane
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PropellersSuper King Air Model 200 Series Maintenance Manual,
P/N 101-590010-19 or Raisbeck Engineering
Maintenance Manual, P/N 85-120

De-IcingB.F. Goodrich Installation and Maintenance Manual for
Prop De-Icing Systems, P/N ATA 30-60-02

Proline 21 AvionicsRockwell Collins System Manual 523-0790063-15211A
Rev1

Proline 21 w/ Raisbeck Props.....Hawker Beech Engineering Report 200E261947
Rev3

B. Replacement Parts

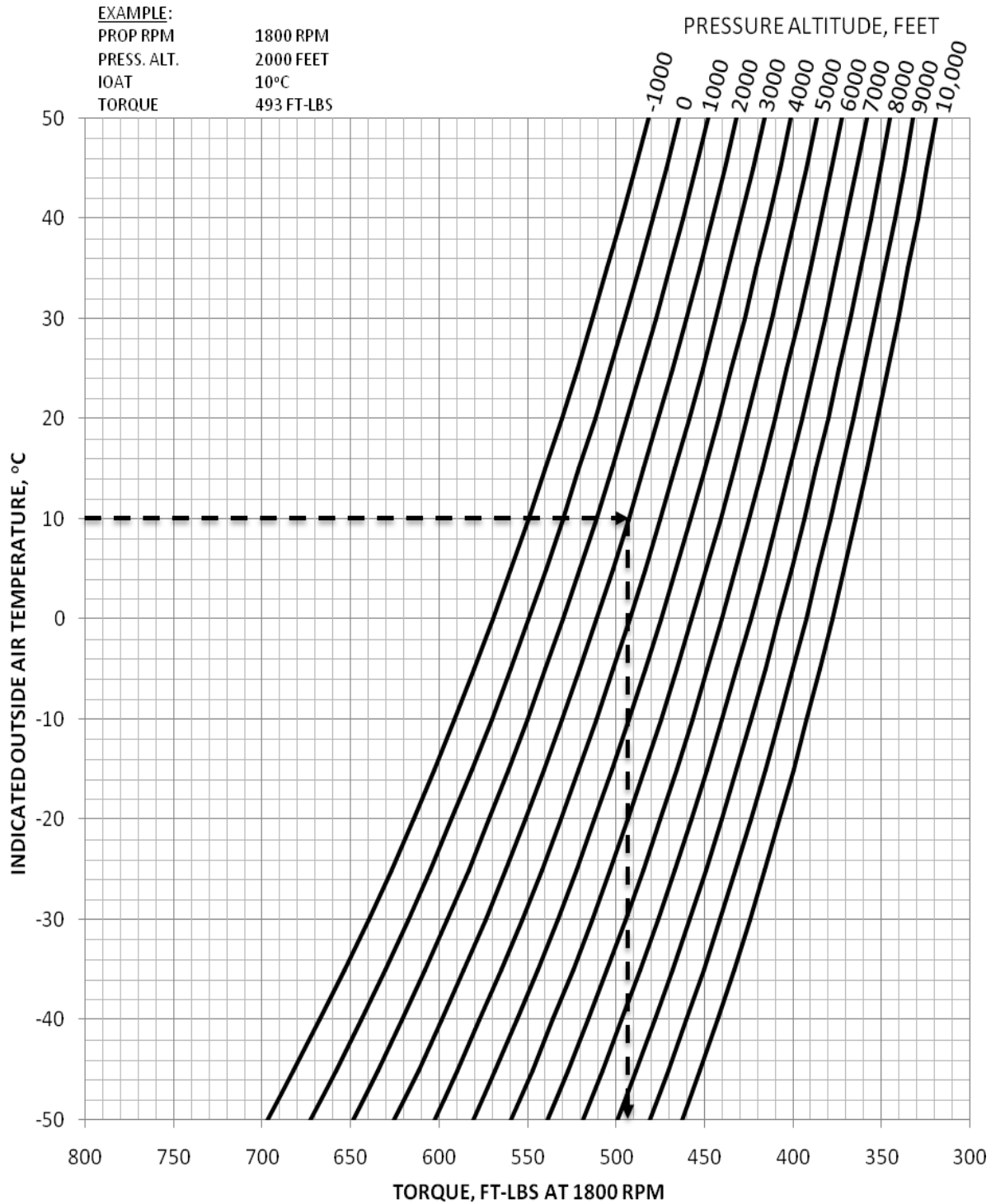
Qty.	Part Number	Nomenclature	Manufacturer & Notes
2	PT6A-52	Engine	Pratt & Whitney Canada
2	HC-E4N-3G/D9390SK-1R	Propeller	Hartzell
2	HC-D4N-3A/D9383K	Propeller	Hartzell (Raisbeck)
2	101-950022-1, -3 OR	Exhaust Stacks	See Beechcraft IPC for Eligible Serial Number aircraft or may be installed by Beechcraft SB.2372
2	101-950023-1, -3		
2	FA5726-17L, -18R OR	Alternate Exhaust Stacks (Frakes Aviation) STC SA8703SW	Alternate with Beechcraft SB.2372
2	FA5726-7L, -8R		Alternate without Beechcraft SB.2372
2	114-94002401	Bracket	Hawker Beechcraft
2	101-940001-15	Arm	Hawker Beechcraft
1	124F012B0360C270	Fuel Purge Hose Assembly, R/H	Stratoflex or TSO C53a type D equivalent
1	124F002-4CR-0310	Fuel Purge Hose Assembly, L/H	Stratoflex or TSO C53a type D equivalent
2	Existing	ITT Indicator	See drawing 05210001-01
2	Existing	Ng Indicator	See drawing 05210001-01
2	Existing	Oil Pressure/ Temperature Indicator	See drawing 05210001-01
2	822-1084-353	AFD3010 Flight Display	See Dwg 05210001-02 Proline 21 Equipped only
1	822-1753-353	AFD3010E Flight Display	See Dwg 05210001-02 Proline 21 Equipped only
4	822-1483-102	DCU/ECU 3001 Concentrator Unit	See Dwg 05210001-02 Proline 21 Equipped only

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C. Low Pitch Torque Graph for Hartzell HC-E4N-3G/D9390SK-1R Propeller

Replace the basic maintenance manual with this chart.

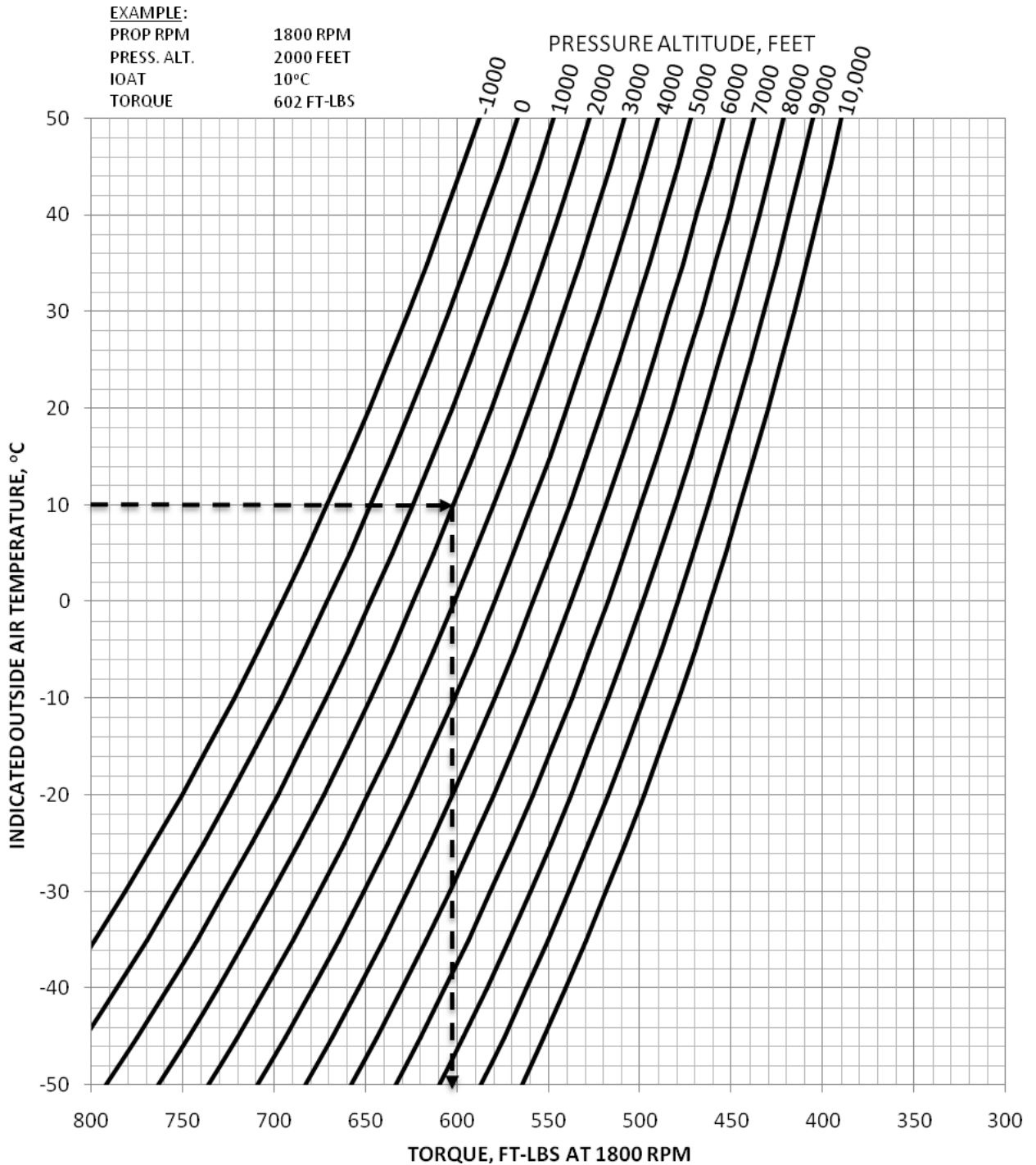


Instructions for Continued Airworthiness
Super King Air 200/A200/B200 Series Airplane
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D. Low Pitch Torque Graph for Raisbeck HC-D4N-3A/D9383K Propeller

Replace the basic maintenance manual with this chart.





E. Ground Performance Check

This chart may be used as a performance history to compare with new engine installation results with future ground test runs or to evaluate the effects of component replacement, inaccuracies in the engine instruments or progressive hot section deterioration; but, such data should never be used as the sole criterion for determining the airworthiness of an engine. Refer to the MINIMUM TAKEOFF POWER chart and procedures in the appropriate Airplane Flight Manual Supplement to determine if the engines are producing sufficient power for airworthy operation.

Prior to performing the following checks, the engine cowling must be in place in order to ensure consistency of engine check parameters, F.O.D. screens must not be installed.

1. Record indicated outside air temperature (IOAT) in degrees Celsius in Table 1.
2. Record pressure altitude which is the value of pilot's altimeter with 29.92 set in Kollsman window in Table 1.
3. Using this IOAT and Pressure Altitude from Table 1, determine target torque and ITT, fuel flow, and N_1 limits from Chart 1 and record in Table 1 on the next page.
4. Start the engines as outlined by procedures in the appropriate Pilot's Operating Handbook and FAA Approved Airplane Flight Manual.
5. Position the airplane crosswind (90° to the wind direction to eliminate variation in parameters due to changing wind velocity).
6. Turn on avionics and inverters (as required) to power engine instruments.
7. Ensure that the air-conditioning, bleed air and generator are all off on the engine being checked.
8. Position the ice vanes in the retracted position (Engine Anti-Ice is OFF).
9. Verify that the propeller levers are in the high rpm mode.
10. Bring the power levers forward to establish a torque indication equal to the target torque value determined in Step 3.

Note: Do not exceed torque redline limitations or any other engine limitations such as ITT or N_1 speed of the engine.

11. Verify that the engine propeller is governing at approximately 2,000 rpm. DO NOT exceed limitations.
12. Record actual fuel flow, N_1 and ITT indications in Table 1 for engine being checked.
13. Compare the actual values recorded with the limit values as determined from Step 3. If any of the actual values exceed the limit ITT, fuel flow, and N_1 values troubleshoot in accordance with the P&WC Maintenance Manual § 72-00-00.

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IOAT (°C): _____		Target		Actual - Left		Actual - Right	
Pressure Altitude: _____							
Target Torque – Tq							
Limit ITT – TT5 °C							
Target Prop RPM – Np		2000					
Limit Gas Gen Speed – Ng %							
Limit Fuel Flow							
Oil Press	Oil Temp	--	--				

Table 1. Ground Performance Worksheet

Instructions for Continued Airworthiness
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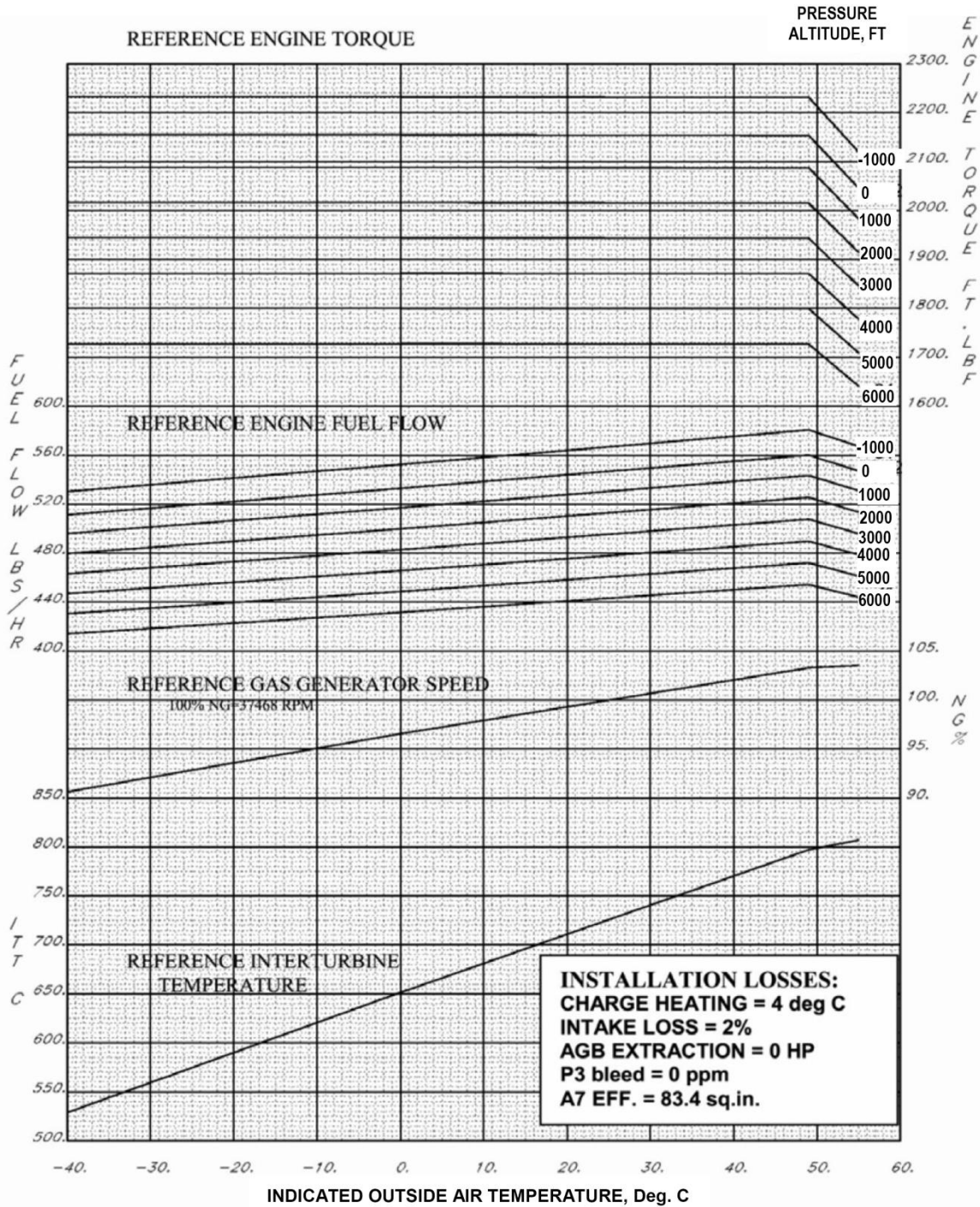


Chart 1. Ground Performance Chart - PT6A-52 Engine



6. TROUBLESHOOTING:

Troubleshooting guidance may be found in the documents listed in Section 5. Otherwise, contact Blackhawk for Assistance.

Blackhawk Modifications, Inc.

7601 Karl May Drive
Waco, Texas 76708

Phone: (254) 755-6711

7. REMOVAL AND REPLACEMENT:

Remove and replace the engine as specified in Blackhawk Modifications, Inc. Installation Instructions 05210001 Rev. IR, dated Nov. 15, 2007 or later FAA approved revision. For replacement parts, see Table 1 or contact Blackhawk at the following address:

Blackhawk Modifications, Inc.

7601 Karl May Drive
Waco, Texas 76708

Phone: (254) 755-6711

8. DIAGRAMS:

For Proline 21 Avionics refer to Hawker Beech Wire Diagram Manual 101-590010-433

9. SPECIAL INSPECTION REQUIREMENTS:

Conduct routine inspections at the recommended intervals and in accordance with the instructions contained in the following manuals:

EnginesPratt & Whitney Maintenance Manual, P/N 3072862
Refer to Section 72-00-00

Airframe/CowlingsSuper King Air Model 200 & B200 Series Maintenance
Manual, P/N 101-590010-19 or A200 Maintenance
Manual P/N 92-37443-1B/2B Refer to Section 05-00-00

PropellersSuper King Air Model 200 Series Maintenance Manual,
P/N 101-590010-19 and Raisbeck Engineering
Maintenance Manual, P/N 85-120

De-IcingB.F. Goodrich Installation and Maintenance Manual for
Prop De-Icing Systems, P/N ATA 30-60-02



10. APPLICATION OF SPECIAL TREATMENTS:

None

11. DATA:

For component installation sequence and torque values, refer to the following manuals:

- EnginesPratt & Whitney Maintenance Manual, P/N 3072862
- Airframe.....Super King Air Model 200 & B200 Series Maintenance Manual, P/N 101-590010-19 or A200 Maintenance Manual P/N 92-37443-1B/2B
- Propellers.....Super King Air Model 200 Series Maintenance Manual, P/N 101-590010-19 or Raisbeck Engineering Maintenance Manual, P/N 85-120
- DrawingsBlackhawk Modifications, Inc. Master Drawing List 05210050
- Rigging Procedure..... Blackhawk Modifications, Inc. document 06010109
- Proline 21 Functional CheckBlackhawk Modifications, Inc. document 201204-05

12. SPECIAL TOOLS:

None

13. ADDITIONAL INFORMATION FOR COMMUTER CATEGORY AIRCRAFT:

None

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14. RECOMMENDED OVERHAUL PERIOD:

EnginesPratt & Whitney Service Bulletin SB 13303 R9 or later revision

PropellersHartzell Service Letter HC-SL-61-61Y or later revision

15. AIRWORTHINESS LIMITATIONS:

NOTICE:

This section is FAA approved and specifies maintenance required under §§43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

There are no changes to the airworthiness limitations of those listed in the following manuals:

EnginesPratt & Whitney Maintenance Manual, P/N 3072862

Airframe.....Super King Air Model 200 Series Airworthiness Limitations Manual, P/N 101-590010-453B or A200 Maintenance Manual P/N 92-37443-1B/2B

PropellersSuper King Air Model 200 Series Maintenance Manual, P/N 101-590010-19 and Raisbeck Engineering Maintenance Manual, P/N 85-120

De-Icing.....B.F. Goodrich Installation and Maintenance Manual for Prop De-Icing Systems, P/N ATA 30-60-02

See Blackhawk Document No. 200708EG, 200708EP, 200708R, 200708NR, 200708T or 200708M Aircraft Flight Manual Supplement for engine operating limits.



16. REVISION:

Each time this ICA is revised or reissued, the revised ICA will be distributed to operators using a Service Letter/Bulletin by Blackhawk Modifications, Inc. This revision will include a new Log of Revisions page along with the revised pages. The upper left hand corner of each revised page will reflect the revision letter. That portion of text or an illustration, which has been revised by the addition of, or change in, information is denoted by a solid revision bar located adjacent to the area of change, and placed along the inside margin of a page. Revision bars show only the information changed within the latest revision.

17. ASSISTANCE:

For assistance with ICA issues not addressed herein, contact Blackhawk at the following address:

Blackhawk Modifications, Inc.

7601 Karl May Drive

Waco, Texas 76708

Phone: (254) 755-6711