



Instructions for Continued Airworthiness

FAA-STC SA4705SW

**Beechcraft King Air
Model 65-A90, B90 and C90 Aircraft
with PT6A-27/-28 Engines**

**DOCUMENT NO. : 200802-30
REV. IR**

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 No. _____

Aircraft Serial No. _____

Aircraft Registration No. _____



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LOG OF REVISIONS

Rev No.	Revision Date	Review	Affected Pages	Description of Revision
IR	August 29, 2008	MLM	All	Initial Release



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1. INTRODUCTION:

This document provides instructions for the continued airworthiness (ICA) for Blackhawk Modifications, Inc. FAA-STC SA4705SW.

This STC installs two PT6A-27/-28 engines with any of the following applicable propellers listed in Section 2 on Beechcraft King Air 65-A90, B90, and C90 aircraft serial numbers LJ-114 to LJ-1062. Engines can be either type certified Pratt and Whitney PT6A-27 or PT6A-28 engines, converted PT6A-27 or PT6A-28 engines from PT6A-21 engines in accordance with Atlantic Turbines International Inc. STC SE02290NY, or converted PT6A-27 or PT6A-28 engines from PT6A-11 engines in accordance with Atlantic Turbines International Inc. STC SE02501NY.

NOTICE:

Section 15, titled "Airworthiness Limitations" 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. To remain in compliance with the STC, the aircraft shall be maintained in accordance with these limitations.

This document supplements or supersedes any King Air 90 Series Maintenance Manual instruction or procedure, only in those areas listed herein for the appropriate aircraft model and serial number.

2. DESCRIPTION:

This STC installs two PT6A-27/-28 engines or with any of the following applicable propellers listed in Section 2 on Beechcraft King Air 65-A90, B90, and C90 aircraft serial numbers LJ-114 to LJ-1062. Engines can be either type certified Pratt and Whitney PT6A-27 or PT6A-28 engines, converted PT6A-27 or PT6A-28 engines from PT6A-21 engines in accordance with Atlantic Turbines International Inc. STC SE02290NY, or converted PT6A-27 or PT6A-28 engines from PT6A-11 engines in accordance with Atlantic Turbines International Inc. STC SE02501NY. See engine data plate for type of engine.

The following propellers may be reinstalled or newly installed as approved under the original type certificate for the applicable model.



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Aircraft	Propeller	Min. Dia. / Nominal Dia. (in.)
Originally equipped with Non-Reversing Prop (some Model 65-A90 & B90 aircraft)	HARTZELL 3-BLADED MODEL NO. HC-B3TN-2(B, M)/T10173(B,NB)-8	90-3/8" / 93 3/8"
Originally equipped with Reversing Prop (all Models)	HARTZELL 3-BLADED MODEL NO. HC-B3TN-3(B, M)/T10173(E,B,NB)-8	90-3/8" / 93 3/8"

3. SPECIAL PROCEDURES:

None

4. SERVICING INFORMATION:

Service the PT6A-27/-28 engines in accordance with Beech King Air 90 Series Maintenance Manual 90-590012-13B for the aircraft serial number being serviced and Pratt & Whitney PT6A-27/-28 Maintenance Manual 3013242.

5. MAINTENANCE INSTRUCTIONS:

Maintain the PT6A-27/-28 engines in accordance with Beech King Air 90 Series Maintenance Manual 90-590012-13B for the aircraft serial number being serviced and Pratt & Whitney PT6A-27/-28 Maintenance Manual 3013242.

6. TROUBLESHOOTING:

Troubleshooting guidance may be found in the documents listed in section 5. Otherwise, contact Blackhawk Modifications, Inc. for assistance.

7. REMOVAL AND REPLACEMENT:

Removal of new parts is the opposite of installation detailed in Blackhawk Installation Drawings 04-001 (for A90 & B90 aircraft) or 02-001 (for C90 aircraft). For replacement;

- Standard AN, MS, AE Parts listed with the installation can be obtained from appropriate and suitable vendor.
- Beechcraft parts listed with the installation can be obtained from Beechcraft (RAPID).



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- All other parts required for replacement should be fabricated or obtained per installation drawing listed using appropriate material as called out in material specification provided in list of materials. If you have any questions, contact Blackhawk Modifications, Inc. for assistance.

8. DIAGRAMS:

Refer to the latest FAA approved revision of Blackhawk Modifications installation Drawings 04-001 (for A90 & B90 aircraft) or 02-001 (for C90 aircraft).

Refer to Beech King Air 90 Series Maintenance Manual 90-590012-13B for control rigging diagrams, low pitch torque and ground power charts applicable to the PT6A-27/-28 engine.

9. SPECIAL INSPECTION REQUIREMENTS:

No additional special inspections are required with this modification beyond those currently required by the original airframe and engine manufacturer. Conduct routine, periodic and time required inspections on the PT6A-27/-28 engines in accordance with Beech King Air 90 Series Maintenance Manual 90-590012-13B for Serial Number being serviced and per Pratt & Whitney PT6A-27/-28 Maintenance Manual 3013242.

10. APPLICATION OF SPECIAL TREATMENTS:

None

11. DATA:

Refer to the latest FAA approved revision of Blackhawk Modifications installation drawings 04-001 (for A90 & B90 aircraft) or 02-001 (for C90 aircraft).

Refer to Beech King Air 90 Series Maintenance Manual 90-590012-13B for engine and propeller control rigging procedures and instructions.

12. SPECIAL TOOLS:

Refer to Beech King Air 90 Series Maintenance Manual 90-590012-13B for the aircraft serial number being serviced and Pratt & Whitney PT6A-27/-28 Maintenance Manual 3013242.



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13. ADDITIONAL INFORMATION FOR COMMUTER CATEGORY AIRCRAFT:

Not Applicable

14. RECOMMENDED OVERHAUL PERIOD:

Overhaul engine related airframe components as required in the Beech King Air 90 Series Maintenance Manual 90-590012-13B.

Overhaul the engine and engine components as required by the Pratt & Whitney PT6A-27/-28 Maintenance Manual 3013242.

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. To remain in compliance with the STC, the aircraft shall be maintained in accordance with these limitations.

There are no changes to the airworthiness limitations from those set by the original airframe, engine or propeller manufacturer. See Blackhawk Document No. 200802AB or 200802C, Aircraft Flight Manual Supplement, as applicable for engine operating limits

15. 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. This revision will include a new Log of Revisions page along with the revised pages. The lower right 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 outside margin of a page. Revision bars show only information changed within latest revision.



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16. ASSISTANCE:

For assistance with ICA issues not addressed herein, contact Blackhawk Modifications, Inc. at the following address or phone number.

Blackhawk Modifications, Inc.

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