

HARTZELL

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

For

**HAWKER BEECHCRAFT BARON MODEL 58, 58A,
G58**

With

**HARTZELL PHC-J3YF-2UF/FC7391D(K)
PROPELLERS**

PER FAA STC SA10551SC

DOCUMENT NO. 20002-30

REV. A

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-PMA part is installed 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 Serial No. _____

Aircraft Registration No. _____

HARTZELL

REVISION LOG

REVISION	CHANGE DESCRIPTION	ENGINEER	DATE
IR	<u>INITIAL RELEASE</u>	Mitchell	01/03/2006
A	Updated company name on pages 1, 4, 5, 6, 8 & 9. Corrected page numbers on page 2. Corrected typographical error on page 4. Added references to Hartzell Manual 180 for Hartzell de-ice components on pages 5 through 7. Removed Section 3, page 5. Updated headings on page 8. Updated parts list, combined columns and corrected quantity error on page 9. Added references to Hartzell website and e-mail address on Page 10.	Meyer	08/17/2009

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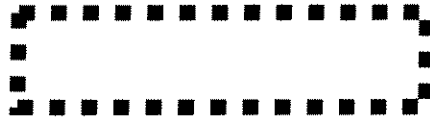
1. Introduction:

This document provides instructions for the continued airworthiness (ICA) for Hartzell Propeller, Inc. STC SA10551SC. This STC replaces the existing propellers on Hawker Beechcraft¹ Baron Model 58, 58A, and G58 aircraft powered by either Teledyne Continental Motors (TCM) IO-520-C, -CB or IO-550-C engines with Hartzell PHC-J3YF-2UF/FC7391D(K) propellers and either the C-3567-1(P) or C-3567-4(P) spinners.

Note 1: Hawker Beechcraft Corporation (HBC) is the current holder of the 58 Baron Type Certificate and this company name is used throughout this document. This STC also applies to aircraft previously produced under the Raytheon Aircraft Company and Beech Aircraft Company names.

NOTICE:

Section 15, titled "Airworthiness Limitations" and encircled by the following dash lined box 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 the applicable Hawker Beechcraft Baron Maintenance Manual only in those areas listed herein for the appropriate aircraft model and serial number.

2. Description:

This modification permits the replacement of the existing Hartzell or McCauley propellers with Hartzell model PHC-J3YF-2UF/FC7391D(K) propellers for Hawker Beechcraft Baron Model 58, 58A, and G58 aircraft. The new propellers require either Hartzell C-3567-1(P) or C-3567-4(P) spinners. The "-1(P)" spinners are used for aircraft without the factory air-conditioning system and the "-4(P)" spinners are installed on aircraft with the factory air-conditioning system to account for the air-conditioning compressor mounted at the front of the left hand engine.

Later serial number Baron 58, 58A & G58 aircraft (S/N TH-1231 and after), equipped with a de-ice system, may install propellers equipped with electro-thermal de-ice boots (designated with "K" suffix on blade number) in order to maintain flight into known icing approval. Airframe de-ice kits have been created for this STC installation to address all aircraft configurations.

Aircraft prior to S/N TH-1231 may use non-booted propellers only.

Propeller governors are unchanged for all models.

3. Special Procedures:

None.

4. Service And Special Inspection Requirements:

Follow the inspection procedures outlined in the applicable Hawker Beechcraft Baron Maintenance Manual and Hartzell *Propeller Owner's Manual* 115N, and:

For Goodrich de-ice components: Goodrich document ATA 30-60-02, *Prop De-Icing System Installation and Maintenance Manual for Electrothermal Propeller De-Icing Systems* and Goodrich document ATA 30-60-01, *Maintenance and Overhaul of Brush Assemblies for Electrothermal Propeller De-Icing Systems* for additional special procedures.

For Hartzell de-ice components: Hartzell Manual 180, ATA 30-61-80, *Propeller Ice Protection System Manual* for kit part numbers 103294-1 (propeller) and 103294-4 or 103294-5 (airframe).

5. Maintenance Instructions:

See applicable Hawker Beechcraft Baron Maintenance Manual, Hartzell *Propeller Owner's Manual* I 115N, and:

For Goodrich de-ice components: Goodrich document ATA 30-60-02, *Prop De-Icing System Installation and Maintenance Manual for Electrothermal Propeller De-Icing Systems* and Goodrich document ATA 30-60-01, *Maintenance and Overhaul of Brush Assemblies for Electrothermal Propeller De-Icing Systems* for additional special procedures.

For Hartzell de-ice components: Hartzell Manual 180, ATA 30-61-80, *Propeller Ice Protection System Manual* for kit part numbers 103294-1 (propeller) and 103294-4 or 103294-5 (airframe).

6. Troubleshooting:

See applicable Hawker Beechcraft Baron Maintenance Manual, Hartzell *Propeller Owner's Manual* 115N, and:

For Goodrich de-ice components: Goodrich document ATA 30-60-02, *Prop De-Icing System Installation and Maintenance Manual for Electrothermal Propeller De-Icing Systems* and Goodrich document ATA 30-60-01, *Maintenance and Overhaul of Brush Assemblies for Electrothermal Propeller De-Icing Systems* for additional special procedures.

For Hartzell de-ice components: Hartzell Manual 180, ATA 30-61-80, *Propeller Ice Protection System Manual* for kit part numbers 103294-1 (propeller) and 103294-4 or 103294-5 (airframe).

7. Removal And Replacement:

Refer to applicable Hawker Beechcraft Baron Maintenance Manual, Hartzell *Propeller Owner's Manual* 115N, and:

For Goodrich de-ice components: Goodrich document ATA 30-60-02, *Prop De-Icing System Installation and Maintenance Manual for Electrothermal Propeller De-Icing Systems* and Goodrich document ATA 30-60-01, *Maintenance and Overhaul of Brush Assemblies for Electrothermal Propeller De-Icing Systems* for additional special procedures.

For Hartzell de-ice components: Hartzell Manual 180, ATA 30-61-80, *Propeller Ice Protection System Manual* for kit part numbers 103294-1 (propeller) and 103294-4 or 103294-5 (airframe).

8. Diagrams:

For de-ice wiring diagrams refer to Hawker Beechcraft Wiring Diagram applicable to aircraft S/N.

9. Application of Special Treatments:

See Hartzell *Propeller Owner's Manual* 115N, and:

For Goodrich de-ice components: Goodrich document ATA 30-60-02, *Prop De-Icing System Installation and Maintenance Manual for Electrothermal Propeller De-Icing Systems* and Goodrich document ATA 30-60-01, *Maintenance and Overhaul of Brush Assemblies for Electrothermal Propeller De-Icing Systems* for additional special procedures.

For Hartzell de-ice components: Hartzell Manual 180, ATA 30-61-80, *Propeller Ice Protection System Manual* for kit part numbers 103294-1 (propeller) and 103294-4 or 103294-5 (airframe).

10. Data:

None.

11. Special Tools:

See Hartzell *Propeller Owner's Manual* 115N, and:

For Goodrich de-ice components: Goodrich document ATA 30-60-02, *Prop De-Icing System Installation and Maintenance Manual for Electrothermal Propeller De-Icing Systems*, Goodrich document ATA 30-60-01, *Maintenance and Overhaul of Brush Assemblies for Electrothermal Propeller De-Icing*

Systems and Goodrich document ATA 30-60-07, *Removal and Installation Manual for Electrothermal Propeller De-Icers* for special tool requirements.

For Hartzell de-ice components: Hartzell Manual 180, ATA 30-61-80, *Propeller Ice Protection System Manual* for kit part numbers 103294-1 (propeller) and 103294-4 or 103294-5 (airframe).

12. Additional Information For Commuter Category Aircraft:

Not Applicable.

13. Recommended Overhaul Period:

Recommended Time-Between-Overhaul (TBO) limits for the STC may be found in Hartzell *Propeller Owner's Manual* 115N and Hartzell Service Letter 61. Propeller overhaul must be accomplished by an approved Propeller Repair Station.

14. Replacement Parts:

For replacement parts contact the following suppliers:

Propeller and De-ice System Parts:

Hartzell Propeller, Inc.
One Propeller Place
Piqua, OH 45356-2634
1 (937) 778-4200

De-Ice System Parts:

Goodrich De-Icing and Specialty Systems
1555 Corporate Woods Pkwy
Uniontown, Ohio 44685-8799
330-374-3743

Airframe Parts:

Hawker Beechcraft Corporation
P.O. Box 85
Wichita, KS 67201-0085
RAPID
888-727-4344
316-676-3100

Replacement Parts List

Part No.	Description	Vendor	Qty	Qty
	INST. W/ ORIGINAL HARTZELL PROP OR FACTORY INSTALLATION W/O FACTORY AIR CONDITIONING		•	
	INST. W/ ORIGINAL HARTZELL PROP OR FACTORY INSTALLATION W/ FACTORY AIR CONDITIONING			•
	INST. W/ ORIGINAL McCAULEY PROP W/O FACTORY AIR CONDITIONING		•	
	INST. W/ ORIGINAL McCAULEY PROP W/ FACTORY AIR CONDITIONING			•
D-3285-7	HUB UNIT	HARTZELL	2	2
FC7391D	BLADE UNIT, W/O DE-ICE BOOT	HARTZELL	6	6
FC7391DK	BLADE UNIT, W/ DE-ICE BOOT	HARTZELL	6	6
C-3317-228	O-RING	HARTZELL	2	2
A-1381	WASHER	HARTZELL	12	12
A-2044	NUT, SELF LOCKING	HARTZELL	12	12
A-2476-17	SPINNER MOUNTING KIT	HARTZELL	2	2
C-3567-4P	SPINNER ASSY	HARTZELL		2
C-3567-1P	SPINNER ASSY	HARTZELL	2	

Aircraft without De-ice OMIT the Following (for required Goodrich hardware ref. Goodrich dwg. 5E2793):

5E2793-1	PROP DE-ICER KIT	GOODRICH	2	2
4E2271-15	PROP DE-ICER	GOODRICH	6	6
3E2050	DE-ICER WIRE HARNESS	GOODRICH	6	6
3E2113	SLIP RING WIRE HARNESS	GOODRICH	6	6
3E1271-2	LEAD CLIP	GOODRICH	6	6
2E1260	BUSHING	GOODRICH	24	24
5E2793-2	AIRFRAME DE-ICER KIT	GOODRICH	1	
5E2793-3	AIRFRAME DE-ICER KIT	GOODRICH		1
5E2793-4	AIRFRAME DE-ICER KIT	GOODRICH	1	
5E2793-5	AIRFRAME DE-ICER KIT	GOODRICH		1
3E1951	MOUNTING PLATE	GOODRICH	2	2
4E3422-1	SLIP RING ASSY	GOODRICH	2	1
4E2377-1	SLIP RING ASSY	GOODRICH		1
4E1817-1	BRUSH ASSY MOUNTING BRACKET	GOODRICH	2	2
1E1211	SPACER	GOODRICH	8	8
2E1212	SHIM	GOODRICH	2	2
3E2071	MODULAR BRUSH ASSY	GOODRICH	1	1
3E1964-3	TIMER	GOODRICH	1	1
90-380007-11	AMMETER	HBC	1	1
101-389017-11	AMMETER	HBC	ALT	ALT
35-380132-7	CIRCUIT BREAKER SWITCH	HBC	1	1
35-380132-67	CIRCUIT BREAKER SWITCH	HBC	ALT	ALT
90-380008-1	SHUNT	HBC	1	1

Aircraft with Hartzell De-ice use the following Kits:

103294-1	PROPELLER DE-ICER KIT	HARTZELL	2	2
103294-4	AIRFRAME DE-ICER KIT	HARTZELL	1	
103294-5	AIRFRAME DE-ICER KIT	HARTZELL		1

15. Airworthiness Limitations:

There are no life-limited components used in the STC installation.

The Airworthiness Limitations section is FAA approved and specifies maintenance required under Secs. 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

16. Revision:

Each time this ICA is revised or reissued, the revised ICA will be made available to operators on the Hartzell Propeller, Inc website at www.hartzellprop.com under "Top Prop STCs". This revision will include a new Log of Revisions page along with the revised pages. The upper 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 inside margin of a page. Revision bars show only information changed within latest revision.

17. Assistance:

For assistance with ICA issues not addressed herein, contact Hartzell Propeller, Inc. at the following address, phone number, or e-mail.

Hartzell Propeller, Inc.
One Propeller Place
Piqua, OH 45356-2634

1 (937) 778-4379

techsupport@hartzellprop.com