



US Department
of Transportation
Federal Aviation
Administration

MAJOR REPAIR AND ALTERATION
(Airframe, Powerplant, Propeller, or Appliance)

Form Approved
OMB No. 2120-0020
2/28/2011

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark N6240K	Serial No. 443	
	Make Republic	Model RC-3	Series
2. Owner	Name (As shown on registration certificate) HARLAN ASSOCIATES OF SPRUCE CREEK	Address (As shown on registration certificate) Address 3511 Silverside Rd Ste 105	
		City Wilmington	State DE
		Zip 19810-4902	Country USA

3. For FAA Use Only

"The alteration (or repair) identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized in FAR Part 43, Section 43.7."

This approval is only for this aircraft make, model and serial number.

DATE 9-17-09 APPROVING INSPECTOR

Edward J. Dick

AEA-FSDO-23
EDWARD J. DICK
AIRWORTHINESS INSPECTOR

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME		(As described in Item 1 above)	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	POWERPLANT	Franklin	6A8-215-B9F	23996
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER			
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type Manufacturer		

6. Conformity Statement

A. Agency's Name and Address		B. Kind of Agency	
Name Ray Chapin		<input checked="" type="checkbox"/> U. S. Certified Mechanic	Manufacturer
Address 4669 West Lake Rd.		<input type="checkbox"/> Foreign Certified Mechanic	C. Certificate No.
City Geneva	State NY	<input type="checkbox"/> Certified Repair Station	3179397
Zip 14456	Country USA	<input type="checkbox"/> Certified Maintenance Organization	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Extended range fuel
per 14 CFR Part 43
App. B ☐

Signature/Date of Authorized Individual

Ray Ch 9/17/09

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ Approved ☐ Rejected

BY	FAA Flt. Standards Inspector	Manufacturer	Maintenance Organization	Persons Approved by Canadian Department of Transport
	FAA Designee	Repair Station	<input checked="" type="checkbox"/> Inspection Authorization	

Certificate or Designation No.

3179397

Signature/Date of Authorized Individual

Ray Ch 9/17/09

NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. Description of Work Accomplished

(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

N6240K

9/15/2009

Nationality and Registration Mark

Date

Removed:

The original Franklin battery ignition system from the engine's right side. The original left magneto system remains intact.

Installed:

Electroair EIS-2-kit electronic ignition system. Installation manual EA-008, no revision number.

Electroair, Inc.

Ph. 248-666-3002

www.electroair.net

The kit consists of an EIS controller, 6 cylinder coil pack, timing housing, and spark plug wires. The direct fire system does not use a distributor and fires directly from the coil pack to the spark plug. The timing housing was installed in the original distributor location for timing of the coil packs. The original aircraft spark plugs were used and re-gapped to .030-.035" as recommended by the installation manual. The EIS-2 controller advances timing from 0 degrees at start to the original 32 degrees before top dead center above 400 RPM and up to operating speed.

The EIS controller was mounted to the aft side of the aft cabin bulkhead using standard hardware. The coil packs were mounted to the right side of the propeller shaft housing. The controller was wired to the bus through a 2 amp circuit breaker. The coil packs were wired to the bus through a 10 amp circuit breaker. The wiring harnesses were fabricated and supplied by Electroair. All work was done in accordance with the above referenced installation manual. AC 43.13-1B chapter 11 and AC43.13-2B Chapter 1 was also used as a reference.

An electrical load analysis was done and was found not to exceed 80% of total capacity. The weight and balance and equipment list were updated to show the change. A copy of the EA-008 installation manual was attached to the maintenance manual.

Instructions for Continued Airworthiness:

1. Introduction: See above info.
2. Description: See above info.
3. Control, operation information: A supplement was added to the aircraft flight manual and operators checklist.
4. Servicing information: To be accomplished as per the Electroair EA-008 installation manual current revision.
5. Maintenance Instructions: System shall be inspected during routine 100 hour or annual inspections, as applicable. The system shall be inspected for security and condition of components and wiring.
6. Troubleshooting information: Special troubleshooting instructions are found in the EA-008 Installation Instructions.
7. Removal and replacement information: Replacement components shall be obtained from Electroair.
- 8.-13. Not applicable.
14. Overhaul limits: No additional overhaul time limitations.
15. Not Applicable.
16. This ICA may be revised by submitting a letter with a copy of the revised FAA 337 form and ICA. The FAA accepts the change by signing block 3 of the revised FAA 337 form. Once revised, a maintenance record entry will be made identifying the revision, its location, and date of the 337 form.

☐ Additional Sheets Are Attached